University Courses
DEPARTMENT CHAIR
Betty Chavis

DEPARTMENT OFFICE
Steven G. Mihaylo Hall 4313

DEPARTMENT WEBSITE
www.business.fullerton.edu/accounting

PROGRAMS OFFERED
Bachelor of Arts in Business Administration
Concentration in Accounting
Joint Emphasis in Accounting and Finance
Master of Science in Accountancy
Master of Science in Taxation
Master of Business Administration
Concentration in Accounting

FACULTY
Fatima Alali, Betty Chavis, Paul Foote, C. Terry Grant, Gerry H. Grant, Mahamood Hassan, A. Jay Hirsch, Gerald Hoth, Wei Jiang, Vijay Karan, K. J. Kim, Andrew Luzi, Vivek Mande, Robert Miller, Jose Miranda-Lopez, Christopher Petruzzi, Mohsen Sharifi, Myungsoo Son, Kim Tarantino, Kathleen Wright

ADVISERS
The Undergraduate Business Advising Center in Steven G. Mihaylo Hall 1201 and the Graduate Programs Advising Center in Steven G. Mihaylo Hall 3280 provide information on admissions, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, the Department of Accounting faculty and chair provide advising on curriculum content and career opportunities in Accounting, the CPA Examination and Taxation.

MISSION STATEMENT
Our mission is to offer high quality accounting educational programs that are relevant to a diverse group of undergraduate and graduate students. The Department of Accounting recognizes its role in society by assisting students as they prepare for successful careers in the accounting profession. The Department of Accounting also strives to advance accounting education and knowledge through basic, applied and pedagogical research and other scholarly activities, and promote valuable associations with business and professional communities.

DEPARTMENT OBJECTIVES
Undergraduate Education
To provide a competency-based education in accounting that qualifies accounting majors for entry-level accounting positions in private industry, government, public accounting or not-for-profit organizations. The undergraduate education also will provide a foundation for advancement through professional certification and success in graduate studies.

Graduate Education
To provide advanced professional education that strengthens the skills of graduate students in both general and technical competencies and enhances the student’s ability to enter or continue in leadership roles and to develop increased professional responsibilities in private industry, government, public accounting or not-for-profit organizations. The fifth year of graduate education also fulfills the AICPA 150-hour requirement.

Educational Support
To serve the educational needs of the Mihaylo College of Business and Economics, as well as other colleges and departments of the university by teaching various accounting courses that may be required or requested within the resource constraints of the Department.

Enhanced Intellectual Capital
To enhance the intellectual growth of its faculty by encouraging and supporting fundamental and applied research, as well as faculty development activities. This includes support of active participation and leadership in local, regional and national academic and professional accounting organizations.

Community Outreach
To support student and alumni activities, and encourage outreach activities that address accounting needs of the local, regional and global communities. This support includes developing strong ongoing relationships with local and regional employers, community colleges and other community organizations.
International Learning Opportunities in Accounting

The Department of Accounting includes an integrated international perspective in its courses at both the undergraduate and graduate levels. In addition, a graduate class in international accounting is offered for all interested students.

Ethics

The Department recognizes that numerous ethical decisions must be made in today’s business environment. Therefore, our accounting classes use cases and problems to help students develop an ability to evaluate ethical situations.

INTRODUCTION

Accounting is often referred to as “the language of business.” Very generally, the accounting process is concerned with recording, classifying, reporting and interpreting the economic data of an organization. These data are important to users, who may include managers, investors and other interested groups. Accounting helps in decision-making processes by showing how resources have been used and where commitments have been made, by judging performance, by showing the implications of following different courses of action, by determining the effects of taxation and by providing a level of assurance to investors. Reliable information in a dynamic business environment is necessary for sound decisions concerning the allocation of scarce resources. Thus, accounting plays a very significant role in our social and economic systems.

Programs in accounting are designed for students who are interested in careers in public accounting, corporate financial management, industry, government or service organizations, and for students who intend to work for advanced degrees in accounting in preparation for teaching and research.

Teacher Credential Program Information

The Department of Accounting offers courses that may be included in the Single Subject Waiver Program in Business. Further information on the requirements for teaching credentials is contained in the Teacher Credential Programs section of this catalog.

Department Awards in Accounting

Accounting Society Award
Achievement Awards
Beta Alpha Psi Award
GPA Award
International Student Awards
Leadership Award
Outstanding Graduate Student Award
Outstanding Role Model Award
Other Scholarship Awards
Accounting Alumni Association Award
AICPA Students Scholarship
American Society of Women Accountants, Orange County Chapter
Amy Vanasse Memorial Award
Becker CPA Review Award
California Society of CPAs, Orange County Chapter
Charles B. Shellenberger Accounting Scholarship
Cynthia A. Brown Memorial Scholarship
Deloitte & Touche, LLP Scholarship Awards
Ernst & Young Scholarship Awards
Federation of Schools of Accountancy Award
Financial Executives International, Orange County Chapter
Institute of Internal Auditors Award
Kenneth W. Gucherean Scholarship Award
KPMG Scholarship Awards
Lambers CPA Review Award
Moss Adams, LLP Scholar
Moore Stephens Wurth Frazer & Torbert, LLP Awards
PricewaterhouseCoopers Scholarship Awards
RSM McGladrey, Inc. Awards
Tax Executives Institute, Inc., Award

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION

See “Business Administration Degrees, Accounting Concentration.”

MASTER OF SCIENCE IN ACCOUNTANCY

The Master of Science in Accountancy program provides the conceptual understanding and technical competence for a career in professional accounting. Employment opportunities include public accounting, corporate financial management, industrial accounting, assurance services, government reporting and education. The program encompasses both a theoretical foundation and technical skills. Emphasis is placed on the development of a professional attitude and the capacity to deal with accounting policy and ethics issues. Graduates should be prepared for entry-level positions and for potential advancement in the profession.

The M.S. in Accountancy program is designed to accommodate students who are employed full time. Courses are offered during the late afternoon and evening hours. Students may enroll on a part-time basis.

The curriculum is designed for students with an undergraduate degree in business administration with a concentration in accounting. In addition to nine (9) units of required accounting courses, there are nine (9) units of accounting electives, nine (9) units in an area other than accounting, and a terminal research-project course. Students not holding an undergraduate degree in accounting or business are welcome to apply but will have additional requirements to satisfy as described below in the Curriculum section.

Cal State Fullerton has the only accounting program in Orange County separately accredited by the AACSB International at the undergraduate and graduate level. This assures a rigorous program, a well-qualified faculty, high standards for students and access to an...
extensive library system and computing facilities. The qualifications of the M.S. in Accountancy faculty include advanced degrees in accounting, taxation and law; practical experience; and professional standing as CPAs, CMAs, and attorneys.

Most graduate courses in the Mihaylo College of Business and Economics require “classified MCBE status” and are open only to students with classified standing in the MBA, M.S. in Accountancy, M.S. in Taxation, M.S. in Information Systems, or M.A. in Economics programs.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (www.csumentor.edu). Mailed applications should be postmarked by the same deadlines; however, deadlines may be changed based upon enrollment projections.

Admission Requirements

Admission is competitive. Applicants will be evaluated based on the following:

1. Acceptable bachelor's degree from an appropriately accredited institution
2. Minimum grade point average (GPA) of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended
3. Satisfactory score on the Graduate Management Admission Test (GMAT). Students must score in the top 50 percent on the verbal, quantitative and analytical writing areas
4. A bachelor's degree with a major in business administration and a concentration in accounting (equivalent to the degree and concentration as offered at CSUF) with at least an overall cumulative GPA of 3.0 (B). The degree must include calculus and software applications equivalent to passing Mathematics 135, Business Calculus, and ISDS 265, Introduction to Information Systems and Applications, with grades of at least "C" (2.0). Courses in the major are to be no more than seven years old, and courses in the accounting concentration no more than five years old. Courses in the major (including the accounting concentration) must have at least a 3.0 (B) GPA, and courses with grades lower than "C" (2.0) must be repeated. Applicants who have a bachelor's degree in a field other than Business Administration with a concentration in accounting may be considered for admission. If admitted, such students will be required to complete additional courses or demonstrate proficiency as described in the next section (Curriculum).
5. For international students, a minimum score of 570 on the paper exam, 230 on the computer-based, or 90 on the internet based (iBT) TOEFL is required
6. Recommendation from the Accountancy Admissions Committee based upon a review of the above requirements, the student's "Statement of Purpose" and prior work experience

Additional coursework may be required of admitted students who holistically satisfy the criteria but are weak in one of the above areas.

M.S. ACCOUNTANCY CURRICULUM

Students admitted without a bachelor's degree in Business Administration (with a concentration in accounting) will be required to satisfy the following requirements either prior to or during their residency at CSUF:

1. All students admitted with a business degree with a concentration other than accounting must complete the following accounting prerequisite courses: Accounting 301A, 301B, 302, 307 and 308. These accounting prerequisite courses must be completed with at least a 3.0 (B) GPA, with a "C" (2.0) or better for each individual course. Courses with grades lower than "C" must be repeated. These requirements are in addition to the Study Plan as described below.

2. All students admitted with a bachelor's degree in a field other than Business Administration will be required to take (or demonstrate proficiency in) the following courses/academic topics either prior to or during their residency at CSUF: Mathematics 135 and InfoSys/DecSci 265; business foundation courses (Accounting 510, Economics 515, and Management 339); and accounting prerequisite courses (Accounting 301A, 301B, 302, 307, and 308). These courses must be completed with at least a 3.0 (B) GPA, with a "C" (2.0) or better for each individual course. Courses with grades lower than "C" must be repeated. These requirements are in addition to the Study Plan as described next.

Study Plan

The study plan requires 30 semester units of coursework beyond the baccalaureate degree. At least 24 of the 30 units required for the degree must be at the 500 level. A 3.0 ("B") GPA is required in study plan courses. Any study plan course with a grade lower than "C" (2.0) must be repeated.

Required Courses (9 units)

Accounting 502 Seminar in Accounting Theory (3)
Accounting 505 Seminar in Auditing (3)
OR Accounting 521 Seminar in Management Control Systems (3)
Accounting 506 Seminar in Professional Accounting Communications (3)

Electives in Accounting (9 units)**

Three courses (9 units) to be selected in consultation with and approved by the student's program adviser. At least one course, but not more than two, must be tax-related (denoted by an asterisk in the list below) for a maximum of six units in tax-related courses.

Accounting 503 Seminar in Contemporary Accounting Problems (3)
Accounting 505 Seminar in Auditing (3)
Accounting 507 Seminar in Accounting Information Systems (3)
The curriculum is designed for students with an undergraduate degree in business administration or accounting. Students not holding such degrees are welcome to apply but will have to satisfy additional requirements as described below in the Curriculum section.

The M.S. in Taxation program is designed to accommodate students who are employed full time. Courses are offered during the late afternoon and evening hours and most students enroll on a part-time basis. This program is offered at the main campus in Fullerton and as a fee-based program on the Irvine campus.

The curriculum is designed for students with an undergraduate degree in business administration or accounting. Students not holding such degrees are welcome to apply but will have to satisfy additional requirements as described below in the Curriculum section.

Cal State Fullerton has the only Accounting program in Orange County that is separately accredited by the AACSB International at the undergraduate and graduate level. This assures a rigorous program, a well-qualified faculty, high standards for students, and access to an extensive library system and computing facilities. The qualifications of the M.S. in Taxation faculty include advanced degrees in taxation, accounting, and law; practical tax experience; and professional standing as CPAs and attorneys.

Most graduate courses in the Mihaylo College of Business and Economics require "classified MCBE status" and are open only to students with classified standing in the MBA, M.S. in Accountancy, M.S. in Taxation, M.S. in Information Systems, or M.A. in Economics programs.

**Application Deadlines**

The deadlines for completing online applications are March 1 for the fall semester and Oct 1 for the spring semester (www.csumentor.edu). Mailed applications should be postmarked by the same deadlines; deadlines may be changed based upon enrollment projections.

**Admission Requirements**

Admission is competitive. Applicants will be evaluated based on the following:

1. Acceptable bachelor’s degree from an appropriately accredited institution
2. Minimum GPA of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended
3. Satisfactory score on the Graduate Management Admission Test (GMAT). Students must score in the top 50 percent on the verbal, quantitative and analytical writing areas
4. A bachelor’s degree with a major in business administration equivalent to the degree as offered at CSUF with at least an overall cumulative GPA of 3.0 (B) and Accounting 308, Concepts of Federal Income Tax Accounting (or an equivalent course or work experience). The degree must include calculus and software applications equivalent to passing Mathematics 135, Business Calculus, and InfoSys/DecSci 265, Introduction to Information Systems and Applications, with grades of at least "C" (2.0). Courses in the major are to be no more than seven years old. Courses in the major must have at least a 3.0 (B) GPA, and courses with grades lower than "C" (2.0) must be repeated.

Applicants with a bachelor’s degree in a field other than Business Administration may be considered for admission. If admitted, such students will be required to complete additional courses or demonstrate proficiency as described in the next section (Curriculum).

5. For international students, a minimum score of 570 on the paper exam, 230 on the computer-based, or 90 on the internet based (IBT) TOEFL is required
6. Recommendation from the MS Taxation Admission Committee based upon a review of the above requirements, the student’s “Statement of Purpose,” and prior work experience

Additional coursework may be required of admitted students who holistically satisfy the criteria but are weak in one of the above areas.

**MAJOR OF BUSINESS ADMINISTRATION**

See "Business Administration Degrees, MBA."

**MAJOR OF SCIENCE IN TAXATION**

The Master of Science in Taxation program provides the conceptual understanding and technical competence for a career in taxation. Employment opportunities include the tax departments of CPA and law firms, as well as corporations and government tax agencies. For those already employed in this field, the M.S. in Taxation program should meet the continuing education requirements of professional associations and licensing boards.

The M.S. in Taxation program is designed to accommodate students who are employed full time. Courses are offered during the late afternoon and evening hours and most students enroll on a part-time basis. This program is offered at the main campus in Fullerton and as a fee-based program on the Irvine campus.

The curriculum is designed for students with an undergraduate degree in business administration or accounting. Students not holding such degrees are welcome to apply but will have to satisfy additional requirements as described below in the Curriculum section.

Cal State Fullerton has the only Accounting program in Orange County that is separately accredited by the AACSB International at the undergraduate and graduate level. This assures a rigorous program, a well-qualified faculty, high standards for students, and access to an extensive library system and computing facilities. The qualifications of the M.S. in Taxation faculty include advanced degrees in taxation, accounting, and law; practical tax experience; and professional standing as CPAs and attorneys.

Most graduate courses in the Mihaylo College of Business and Economics require "classified MCBE status" and are open only to students with classified standing in the MBA, M.S. in Accountancy, M.S. in Taxation, M.S. in Information Systems, or M.A. in Economics programs.

**Application Deadlines**

The deadlines for completing online applications are March 1 for the fall semester and Oct 1 for the spring semester (www.csumentor.edu). Mailed applications should be postmarked by the same deadlines; deadlines may be changed based upon enrollment projections.

**Admission Requirements**

Admission is competitive. Applicants will be evaluated based on the following:

1. Acceptable bachelor’s degree from an appropriately accredited institution
2. Minimum GPA of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended
3. Satisfactory score on the Graduate Management Admission Test (GMAT). Students must score in the top 50 percent on the verbal, quantitative and analytical writing areas
4. A bachelor’s degree with a major in business administration equivalent to the degree as offered at CSUF with at least an overall cumulative GPA of 3.0 (B) and Accounting 308, Concepts of Federal Income Tax Accounting (or an equivalent course or work experience). The degree must include calculus and software applications equivalent to passing Mathematics 135, Business Calculus, and InfoSys/DecSci 265, Introduction to Information Systems and Applications, with grades of at least "C" (2.0). Courses in the major are to be no more than seven years old. Courses in the major must have at least a 3.0 (B) GPA, and courses with grades lower than "C" (2.0) must be repeated.

Applicants with a bachelor’s degree in a field other than Business Administration may be considered for admission. If admitted, such students will be required to complete additional courses or demonstrate proficiency as described in the next section (Curriculum).

5. For international students, a minimum score of 570 on the paper exam, 230 on the computer-based, or 90 on the internet based (IBT) TOEFL is required
6. Recommendation from the MS Taxation Admission Committee based upon a review of the above requirements, the student’s “Statement of Purpose,” and prior work experience

Additional coursework may be required of admitted students who holistically satisfy the criteria but are weak in one of the above areas.
M.S. TAXATION CURRICULUM

Students admitted with a bachelor’s degree in a field other than business administration and without equivalent prior coursework will be required to complete Mathematics 135, InfoSys/DecSci 265, and Accounting 308, with grades of at least "C" (2.0); and also the following business foundation courses: Accounting 510; Economics 515, Finance 320 or 517, and Management 515. These courses must be completed with at least a 3.0 (B) GPA, with a grade of “C” (2.0) or better for each individual course. These requirements are in addition to the Study Plan as described next.

Study Plan

The curriculum requires 30 semester units of coursework beyond the baccalaureate degree. At least 21 of the 30 units required for the degree must be at the 500 level. A 3.0 (“B”) GPA is required in study plan courses and over-all applicable coursework. Any study plan course with a grade lower than “C” (2.0) must be repeated with at least a “C” (2.0) grade.

Required Tax Course (3 units)
Accounting 470 Tax Research, Practice and Procedures (3)

Electives in Taxation and Related Fields (15 units)

Five courses (15 units) to be selected in consultation with, and approved by, the student’s program adviser. Available courses include but are not limited to:

Accounting 408 Problems in Taxation (3)
Accounting 508 Seminar in Tax Planning (3)
Accounting 572 Seminar in Taxation of Corporations and Shareholders (3)
Accounting 573 Seminar in Taxation of Property Transactions (3)
Accounting 574 Seminar in Taxation of International Business Operations (3)
Accounting 575 Seminar in Estate, Gift, Inheritance Taxes and Estate Planning (3)
Accounting 576 Seminar in State and Local Taxation (3)
Accounting 577 Seminar in Taxation of Employee Compensation (3)
Accounting 578 Seminar in Taxation of Partnerships (3)

Other Electives (9 units)

Courses are to be selected in consultation with, and approved by, the student’s adviser.

One course (3 units) in either economics or political science and two courses (6 units) in either business or non-business fields.

Terminal Evaluation (3 units)
Accounting 597 Project (3)

ACCOUNTING COURSES

Courses are designated as ACCT in the class schedule.

201A Financial Accounting (3)

Accounting concepts and techniques essential to the administration of a business enterprise; analyzing and recording financial transactions; accounting valuation and allocation practices; preparation, analysis and interpretation of financial statements; international accounting issues.

201B Managerial Accounting (3)

Prerequisite: Accounting 201A with a grade of at least “C” (2.0). Introduction to managerial accounting; product costing; budgetary control and responsibility accounting; analysis and techniques for aiding management planning and control decisions; basic income tax concepts for planning business transactions.

301A Intermediate Accounting (3)

Prerequisites: Accounting 201B and completion of all lower-division business administration core courses with grades of at least “C” (2.0) in each course. Corequisite: Business Admin 301. Accounting theory; preparation of income statements, balance sheets and statements of accounting theory; preparation of income statement, balance sheets and statements of cash flows, and comprehensive income; IFRS (International Financial Reporting Standards); present value concepts; assets, liabilities and stockholders’ equity; revenue recognition and investments.

301B Intermediate Accounting (3)

Prerequisite: a grade of “C” (2.0) or better in Accounting 301A and Business Admin 301. Accounting theory; IFRS (International Financial Reporting Standards); present value concepts; assets, liabilities and stockholders equity; pensions; leases; earnings per share; financial statement analysis; accounting changes and error analysis.

302 Cost Accounting (3)

Prerequisites: Accounting 201B and completion of all lower-division business administration core courses with grades of at least “C” (2.0) in each course. Corequisite: Business Admin 301. Accounting information for management of manufacturing and service enterprises; cost records; cost behavior and allocation; product costing and inventory valuation; flexible budgeting; standard costs; responsibility accounting; cost planning and control; and operating decision analysis.

307 Accounting Information Systems (3)

Prerequisites: Accounting 201B and completion of all lower-division business administration core courses with a grade of “C” (2.0) or better in each course. Corequisite: Business Admin 301. Organization and implementation of information technology for the collection, organization, and presentation of accounting information with an emphasis on enterprise resource planning systems.

308 Concepts of Federal Income Tax Accounting (3)

Prerequisites: Accounting 201B and completion of all lower-division business administration core courses with grades of at least “C” (2.0) in each course. Corequisite: Business Admin 301. Provisions, legislative history and implications of the federal income tax.
and contrast many of the unique differences in the industry’s associa-
ted with media-dependent and live entertainment. Compare and contrast many of the unique differences in the industry’s accounting and tax practices to standard industry practices. (No credit for accounting majors)

364 Entertainment Accounting (3)
Prerequisite: Accounting 201B. Accounting and tax issues associated with media-dependent and live entertainment. Compare and contrast many of the unique differences in the industry’s accounting and tax practices to standard industry practices. (No credit for accounting majors)

401 Advanced Accounting (3)
Prerequisites: Accounting 301B with a grade of “C” (2.0) or better, Business Admin 301. Business combinations; meaning, usefulness and methodology of consolidated financial statements; investments in non-subsidiary affiliates and corporate joint ventures; consolidated financial statements for overseas units of U.S.-based multinational companies; translations of foreign currencies, derivatives.

402 Auditing (3)
Prerequisites: Accounting 301B, 302 and 307, with grades of “C” (2.0) or better, and Business Admin 301. Auditing standards and procedures used by financial and operational auditors. Management information and computer systems, internal control, audit evidence, professional responsibilities and legal liabilities, standards of reporting financial information.

403 Accounting for Governmental & Nonprofit Entities (3)
Prerequisites: Accounting 301B with grade of “C” (2.0) or better and Business Admin 301. Fund accounting as applied to governmental and nonprofit entities; state and federal governments, municipalities, hospitals and universities. Budgets, tax levies, revenues and appropriations, expenditures and encumbrances, various types of funds, and accounting statements.

405 Fraud Detection (3)
Prerequisites: Accounting 307 and 301B with a grade of “C” (2.0) or better. Methods to prevent and detect fraud. Current cases dealing with accounting fraud, and appropriate methods to prevent or detect fraudulent behavior.

408 Problems in Taxation (3)
Prerequisites: Accounting 308 with a grade of “C” (2.0) or better and Business Admin 301. Federal income tax as it applies to corporations, partnerships, fiduciaries, and federal estate and gift taxes as they apply to taxable transfers.

420 Advanced Cost Accounting (3)
Prerequisite: Accounting 302 with a grade of “C” (2.0) or better. Advanced topics in accounting: strategic profitability analysis; cost allocation and resources; quality and Just-In Time Inventory; and investment decisions and management control.

422 Internal Audit and Control (3)
Prerequisite: senior standing for accounting majors; departmental permission for other undergraduates and all graduate students. Survey of internal auditing principles and concepts. Intended for students who are interested in internal auditing.

460 Seminar in Financial Statement Analysis (3)
Prerequisite: Accounting 301B. Analysis of demand and supply forces underlying the provision of financial statements; distributional, cross-sectional and time series properties of financial statement numbers; financial decision-making processes and the uses of financial statement information for decision making.

463 Financial Controls for Entrepreneurs (3)
Prerequisites: entrepreneurship concentration only. Accounting 201B and Finance 320. Accounting system design for new ventures, including budgeting, purchasing, collections, payroll taxes, safeguards against error and embezzlement, financial reports, cash management, and banking relationships. Casework, research and fieldwork with selected local businesses. Not applicable for graduate degree credit.

470 Tax Research, Practice and Procedures (3)
Prerequisites: Accounting 308 with a grade of “C” (2.0) or better and Business Admin 301. Methodology of tax research, including case studies; the management of a tax practice; administration procedures governing tax controversies; rights and obligations of taxpayers and tax practitioners.

495 Internship (1-3)
Prerequisites: Accounting 301A, 302, and Business Admin 301, each with a grade of “C” (2.0) or better, a concentration in accounting, consent of the department internship adviser, 2.5 GPA and one semester in residence at the university. Planned and supervised fieldwork with selected local businesses. Not applicable for graduate degree credit.

499 Independent Study (1-3)
Prerequisites: Business Admin 301, senior standing and approval of department chair. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

502 Seminar in Accounting Theory (3)
Prerequisites: Accounting 301B, classified MCBE status. Effects of professional, governmental, business and social forces on the evolution of accounting theory.

503 Seminar in Contemporary Accounting Problems (3)
Prerequisite: classified MCBE status. Current issues in financial reporting, including pronouncements by the Financial Accounting Standards Board and the Securities and Exchange Commission. Topics will change as new issues in accounting emerge.
505 Seminar in Auditing (3)
Prerequisites: Accounting 402 and classified MCBE status. Auditing theory and practices; professional ethics; auditing standards; Securities and Exchange Commission and stock exchange regulations; auditor’s legal liability; statement trends and techniques.

506 Seminar in Professional Accounting Communications (3)
Prerequisite: classified MCBE status. Compilation and composition of accounting reports and client presentations relating to accountants’ working papers, client engagement letters, management advisory reports and prospectuses.

507 Seminar in Accounting Information Systems (3)
Prerequisites: Accounting 307 or equivalent and classified MCBE status. Case studies of computer-based accounting systems used by organizations such as universities, banks, industrial corporations and CPA firms. Accounting information, reports and internal controls.

508 Seminar in Tax Planning (3)
Prerequisites: Accounting 308 and classified MCBE status. Substantive provisions of federal law; tax planning from a corporate viewpoint; case studies of the effect of federal tax law on business decisions.

509 Accounting for Information Technology (3)
Prerequisite: classified MCBE standing. Information processing procedures to support financial and managerial accounting processes, concepts and standards; preparation of financial statements and management reports; use of financial information for management decision making.

510 Financial Accounting (3)
Prerequisite: classified MCBE status. Accumulation, organization and interpretation of financial and quantitative data relevant to the activities of corporate business enterprises; analysis of financial reports; current regulatory reporting requirements with attention to business ethics and an understanding of global reporting issues.

511 Seminar in Managerial Accounting (3)
Prerequisites: Accounting 201B or 510 and classified MCBE status. Design and development of cost accounting systems; contemporary cost management concepts; measurement, analysis and use of accounting information for management decisions, with attention to ethical, global and environmental issues in today’s corporate governance. Measurement, analysis and use of information contained in standard and various other cost systems for industry sectors such as manufacturing, distribution, service and retail.

518 Seminar in International Accounting (3)
Prerequisites: Accounting 201B or 510 and classified MCBE status. Comparative analysis of accounting principles and practices outside the United States; international financial accounting standards; current problems of international financial reporting, accounting planning and control for international operations; multinational companies.

521 Seminar in Management Control Systems (3)
Prerequisites: Accounting 302 or 511 and classified MCBE status. Integrative aspects of accounting, financial and quantitative data for managerial decision-making; long-term, short-term profit planning; budgetary control; cost analysis; financial analysis and planning; taxation; and transfer pricing.

572 Seminar in Taxation of Corporations and Shareholders (3)
Prerequisites: Accounting 308 and classified MCBE status. Federal taxation relating to corporations; organizing, distributions, liquidations and reorganizations.

573 Seminar in Taxation of Property Transactions (3)
Prerequisites: Accounting 308 and classified MCBE status. Federal taxation relating to sales, exchanges and other transfers.

574 Seminar in Taxation of International Business Operations (3)
Prerequisites: Accounting 308 and classified MCBE status. Federal taxation relating to U.S. citizens and corporations with foreign source income and of foreign persons with U.S. source income; planning for foreign operations.

575 Seminar in Estate, Gift, Inheritance Taxes and Estate Planning (3)
Prerequisites: Accounting 308 and classified MCBE status. Federal and California death taxes and the planning of personal estates.

576 Seminar in State and Local Taxation (3)
Prerequisites: Accounting 308 and classified MCBE status. Application of interstate income allocations; multi-state tax compact; separate apportionment accounting; foreign country sourced income. California taxes as applied to businesses and individuals.

577 Seminar in Taxation of Employee Compensation (3)
Prerequisites: Accounting 308 and classified MCBE status. Federal taxation relating to employee compensation including pensions and profit sharing, stock options, ESOPs, IRAs, Keoghs, maximum tax 5-year averaging, death benefits, group term life, etc.

578 Seminar in Taxation of Partnerships (3)
Prerequisites: Accounting 308 and classified MCBE status. Federal taxation relating to partnerships, estates, trusts and other special entities.

597 Project (3)
Prerequisite: classified MCBE status. Directed independent inquiry. Not open to students on academic probation.

599 Independent Graduate Research (1-3)
Prerequisites: classified MCBE status, approval of department chair and Associate Dean. May be repeated for credit. Not open to students on academic probation.
INTRODUCTION

Afro-Ethnic Studies is a multidisciplinary approach to understanding the black experience as it relates to life in America as part of a world community. In addition to degree programs in Afro-Ethnic Studies, the department provides coursework in Ethnic Studies in general (e.g., Intercultural Socialization) and other specific ethnic groups (e.g., American Indian). The B.A. in Ethnic Studies (Afro-Ethnic Studies) requires a minimum of 120 units, which includes courses for the option General Education, all-university requirements and free electives. The option consists of 30 units: 101 or 107, 190 and a minimum of 24 units in upper-division courses. Students majoring in the Afro-Ethnic Studies program acquire a special preparation in, and sensitivity to, life in America and the world community. The program is multidisciplinary in nature, since aspects of Afro-Ethnic Studies affect and are affected by other programs.

Graduates from the Afro-Ethnic Studies program go into careers in teaching, corrections, community development, community leadership, social work, urban research, law, civil service, industrial relations and a variety of comparable fields. Many go into graduate work in this field and some enter more traditional disciplines where a general knowledge of social sciences and humanities is a prerequisite.

INTERNATIONAL LEARNING OPPORTUNITIES IN AFRO-ETHNIC STUDIES

The major in Afro-Ethnic Studies includes courses that examine broad African and non-African issues. Such courses include Introduction to Ethnic Studies, Intracultural Socialization Patterns and History of Racism. Additionally, students are encouraged to participate in the California State University International Program (CSUIP).

BACHELOR OF ARTS IN ETHNIC STUDIES
(OPTION IN AFRO-ETHNIC STUDIES)

Lower-Division Courses (6 units required)

Afro 101 Introduction to Ethnic Studies (3) and/or
Afro 107 Introduction to Afro-American Studies (3) and/or
Afro 190 Survey of American History with Emphasis on Ethnic Minorities (3)

Upper-Division Courses (24 units minimum)

Core Courses (15 units required), selected from the following:

Afro 304 The Black Family (3)
Afro 311 Intracultural Socialization Patterns (3)
Afro 317 Black Politics (3)
Afro 320 Black Political Thought (3)
Afro 322 Psychology of African Americans (3)
Afro 324 Afro-American Literature (3)
Afro 335 History of Racism (3)
Afro 346 African Experience (3)
Afro 381 African Literature (3)
Upper-Division Electives (9 units minimum)
Three additional Afro courses to be selected in consultation with departmental adviser.

Upper-Division Writing Requirement (3 units)
Afro 307 Research and Writing in Ethnic Studies (3)
OR English 301 Advanced College Writing (3)

MINOR IN AFRO-ETHNIC STUDIES
Students interested in the Afro-Ethnic Studies minor are required to take a minimum of 21 units. This includes six units of lower-division courses and 15 units of upper-division courses.

Lower-Division Courses (6 units)
Afro 101 Introduction to Ethnic Studies (3) and/or
Afro 107 Introduction to Afro-American Studies (3) and/or
Afro 190 Survey of American History with Emphasis on Ethnic Minorities (3)

Upper-Division Courses (15 units)
The remaining 15 units of coursework are to be selected in consultation with the student's academic adviser.

AFRO-ETHNIC STUDIES COURSES
Courses are designated as AFRO in the class schedule.

101 Introduction to Ethnic Studies (3)
Prerequisite: completion of General Education (G. E.) Category III.C.1. Perspective through which people of color have come to see themselves in terms of their own heroes, culture and contributions to societies in which they live, and world society in general. (Same as Asian American Studies 101, Chicana/o Studies 101, Women's Studies 101)

107 Introduction to Afro-American Studies (3)
Prerequisite: completion of G. E. Category III.C.1. Aims and objectives of Afro-American studies. Basic terms and references that give substance to Afro-Ethnic studies.

108 Linguistics and Minority Dialects (3)
(Same as Linguistics 108)

190 Survey of American History with Emphasis on Ethnic Minorities (3)
(Same as History 190, Chicana/o Studies 190, and Asian Amer Studies 190)

210 Introduction To Hip Hop (3)
Origins and influences of hip hop on culture, fashion, movies, television, advertising, attitude, music, dancing and slang among African Americans. The impact of the hip hop culture phenomenon on American and global societies.

301 African-American Culture (3)
African cultural characteristics in the New World and contemporary events, including art, ideas, dance and literature.

304 The Black Family (3)
Prerequisite: Sociology 101 or completion of G. E. Category III.C.1. American social conditions that shaped the black family from the African cultural patterns to the family that exists today. Roles of poverty, racism and discrimination. (Same as Sociology 304)

306 American Indian Women (3)
Prerequisite: completion of G. E. Category III.C.1. Female role in American Indian tribal lifestyles. Labor divisions, leadership, political and social activities from a number of tribes. Historical and contemporary issues as they affect American Indian women. (Same as Women's Studies 306)

307 Research and Writing in Ethnic Studies (formerly 400) (3)
(Same as Asian American 307 and Chicana/o 307)

308 African American Males in American Social Systems (3)
Prerequisite: completion of G. E. Category III.C.1. Critical examination of the significant life experiences of African American males. Emphasizes family, community, school and broader social systems that affect African American males' functioning within legal, educational, economic and social environments.

310 Black Women in America (3)
Prerequisite: completion of G. E. Category III.C.1. Issues in the study of black women in America, including social, political, economic and intellectual development. Historical and contemporary issues as they affect black American women. (Same as Women's Studies 310)

311 Intracultural Socialization Patterns (3)
Prerequisite: completion of G. E. Category III.C.1. Patterns of role learning as they vary within subpopulations; changes over time in the values, attitudes and goals of the general culture and of subcultures; stereotypes and realities; understanding and dealing with cultural variation, as well as cultural "norms." One or more sections offered online. (Same as Human Services 311)

314 Pan-African Dance and Movement (3)

317 Black Politics (3)
Prerequisite: Political Science 100. Blacks' struggle for political equality and relief from political oppression. Public policies concerning blacks' freedoms, liberties and property rights. (Same as Political Science 317)

320 Black Political Thought (3)
Prerequisite: completion of the G. E. Category III.B.2. Black American intellectual from slavery to contemporary times, with special emphasis on black contributions to American political and social thought, as well as their contributions in America's social development.
321 Grassroots Planning and Community Development Planning in Minority Communities (3)
Planning and community development trends in minority communities in urban, suburban and rural areas. Theoretical perspectives and practices embraced by grassroots planners. Public and private sector approaches. Topics include neighborhood planning, community development, economic development and grassroots organizing.

322 Psychology of African Americans (3)
Prerequisite: completion of G. E. Category III.C.1. Uses psychological principles and practices to guide students’ comprehension of life as an African American. Introduction to a holistic perspective that expands ways of conceptualizing psychology from an African American world view. (Same as Psychology 322)

324 African-American Literature (3)
Prerequisite: completion of G. E. Category III.B.2. Literary contributions by major black American authors. Contemporary black writers and the recurring themes of protest and quest for identity. Not available for graduate degree credit. (Same as English 324)

325 African-American Religions and Spirituality (3)
Prerequisite: completion of General Education Category III.C.1. African-American belief systems and denominations. Folk beliefs among Blacks, African-American religious groups, and the role of the Black Church in politics and social change in the Black community. (Same as Comparative Religion 325)

335 History of Racism (3)
Prerequisite: completion of G. E. Category III.C.1. Historical roots and current expressions of racism. How racism manifests itself through individual, social, political, economic and religious institutions and proposes methods of combating it.

337 American Indian Religions and Philosophy (3)
Prerequisite: completion of the G. E. Category III.B.2. American Indian religious and philosophic perspectives. Religious interpretations and thought in various facets of belief, ranging from traditional Indian religion to Christianity. Highlights contemporary religious activities. Not available for graduate degree credit. (Same as Comparative Religion 337)

346 The African Experience (3)
Prerequisite: completion of G. E. Category III.C.1. African history from the origin of the black man and traditional African civilization through the African diaspora to the institutional realities of Africa today. Not available for credit to students who have completed History 355.

356 African-American Music Appreciation (3)
Prerequisite: junior/senior standing. Black music in America; the sociological conditions that help produce various forms of black music. One or more sections offered online. (Same as Music 356)

357 Blacks in the Performing Arts (3)
Prerequisite: completion of G. E. Category III.B.1. African-American culture through the performing arts. Examines Blacks in the entertainment industry as a means of understanding and revealing important aspects of African-American culture. (Same as Music 357 and Theatre 357)

370 Development of African American Children and Youth (3)
(Same as Children/Adolescent Studies 370)

381 African Literature (3)
(Same as English 381 and Comparative Literature 381)

405 Hollywood v. History: An Interpretive History of Blacks through Film (3)
Prerequisite: Afro 107. Critical study of black images in motion pictures, past and present. Explores the tension between historical Black consciousness, authenticity, imitation and alternative adaptation.

430 A Social Psychological Study in Ethnic Minority Behavior (3)
Prerequisites: Afro 101 or 107; or Psych 101. Central role of culture, race and ethnicity in the human condition. Social psychological theory and research provides the context of the course. Cultural pluralism and diversity. Course offered online. (Same as Psych 430)

450 African History Since 1935 (3)
(Same as History 450)

457 West African and the African Diaspora (3)
(Same as History 457)

458 Southern Africa in the 20th Century (3)
(Same as History 458)

485 Schools, Education and Ethnic Minority Groups (formerly 385) (3)
Prerequisite: completion of G. E. Category III.C.2. Ways in which the constraints of formal schooling affect the behaviors and attitudes of ethnic minority group members. Role of the community and family in school readiness and the psychological consequences of schooling. One or more sections offered online.

490 Senior Research Seminar (3)
Prerequisites: completion of G. E. Categories III.B.1, III.B.2, III.C.2, and IV; completion of Afro Ethnic Studies core requirements. Development of foundational theoretical knowledge in race relations and practical application in social organization and empowerment that is transformative regarding the human experience in general and the African American perspective in particular.

499 Independent Study (1-3)
Prerequisites: junior/senior standing and acceptance of the subject by department chair and instructor directing the study.
INTRODUCTION
American Studies gives students a thorough understanding of the past and present nature of American civilization. Three central features of our approach are: (1) an emphasis on the analysis of culture – that shared system of beliefs, behaviors, symbols and material objects through which Americans give meaning to their lives; (2) examination of dominant culture patterns as well as the diversity of cultures in America; and (3) an interdisciplinary perspective that uses both the social sciences and humanities.

Besides providing a rich liberal arts education, training in the major develops skills in writing and analysis and strengthens the ability to recognize connections among complex materials and diverse phenomena. American studies graduates enter careers in business, communications, government service, law, social services and teaching. The major is also a fine background for graduate work in the field or in related fields.

Teaching Credential
Because American Studies is interdisciplinary, the major may be effectively combined with subject matter studies necessary for either the multiple subject teaching credential (K-8) or single subject credential (7-12) in History/Social Science. Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

Awards in American Studies
The David Jon Vaca Memorial Scholarship of $500 is awarded every semester to an undergraduate major in American studies based on need and academic achievement. The Susan Flinkingshelt Memorial Award is given annually in recognition of outstanding services to the American Studies Department and student association. The Earl James Weaver Graduate Student Essay Prize of $250 is awarded annually for the best graduate paper in American Studies. The Margarete Liebe Sekhon Graduate Scholarship in American Studies annually provides an award in the fall semester to a new student enrolled in the graduate program at CSUF. The Outstanding Reentry Student Award is given every year to a graduating senior who either began or returned to college at least a decade after high school graduation.

BACHELOR OF ARTS IN AMERICAN STUDIES
The American Studies degree requires a minimum of 120 units that includes courses for the major, General Education, all University requirements and free electives. The major consists of 36 units: 12 units in the core program and 24 units of electives following either Plan A or B.
Core Program (12 units required of all majors)
- 201 Introduction to American Studies (3)
- 301 American Character (3)
- 350 Seminar in Theory and Method of American Studies (3)
- 401T Proseminar in American Studies (3)

Electives (24 upper-division units)
Elective coursework must be approved by the major adviser following either Plan A or B:

Plan A
Students may take all eight electives in American Studies courses or they may include up to four courses from other departments such as Afro-ethnic studies, anthropology, Chicano studies, communications, criminal justice, English, history, geography, political science, psychology or sociology.

Plan B
Coursework pursuing a particular theme or subject, such as: law and society, sex roles, the visual arts, ethnicity, urbanization, regionalism, the child and the family, or popular culture.

DOUBLE MAJOR IN AMERICAN STUDIES
The American Studies major serves as a rewarding complement to many other majors, often providing a broad and useful perspective on work done in other fields. Having two majors is not only intellectually stimulating, but can be a distinct advantage in seeking employment after graduation.

A double major is often simple to arrange, since the American Studies major allows for up to 12 units of coursework in the department of the other major to be used to complete the requirements of our major.

MINOR IN AMERICAN STUDIES
The minor in American Studies requires 21 units: American Studies 201, 301 or 345, and 401T, plus 12 units of electives. Six units may be lower-division and three units may be taken in a related department upon approval of an American Studies Department adviser.

MASTER OF ARTS IN AMERICAN STUDIES
The graduate program is grounded in a thorough understanding of the concept of culture. It examines the creative tension between unity and diversity in the American experience, seeking ultimately to provide a full vision of our complex pluralistic culture. The program is interdisciplinary, requiring graduate students to integrate knowledge from the humanities and social sciences. It stresses the process of cultural change, requiring students to trace the past sources of contemporary issues. It develops advanced research, writing and analytical skills. Particular areas of faculty specialization within the department include: gender and sexuality; ethnicity; literature, film, art and architecture as cultural expression; American regions; popular culture; and cultural radicalism.

Application Deadlines
Applications are accepted only for the fall semester. Online applications must be completed by March 1 for the following fall semester (see http://www.csumentor.edu); mailed applications must be postmarked by the same date. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified
A student must meet the all university requirements for admission. (Please consult the appropriate section of this catalog for complete information.) In addition, a student must: (1) hold a bachelor’s degree with a major, or its equivalent, in American studies or in an appropriate discipline of the humanities or social sciences; (2) have a grade-point average of at least 3.0 in upper-division major courses; and (3) submit two satisfactory letters of recommendation from instructors in upper-division major courses.

Students whose undergraduate program indicates certain limited subject, grade or breadth deficiencies may be considered for admission, at the discretion of the graduate adviser, with approval of the department’s graduate committee. In such cases, a student must make up deficiencies, in consultation with the graduate adviser, and must complete all required courses with at least a "B" (3.0) average before classified graduate standing may be considered.

Graduate Standing: Classified
Students will be classified upon fulfillment of the above requisites and after development of an approved study plan.

STUDY PLAN
The program requires 30 units of graduate study: 21 units in the discipline of American Studies, six units in other disciplines and three units in the development of an appropriate research skill.

American Studies (21 units)
A. Required courses
American Studies 501 Theory and Methods (3)
American Studies 502T Seminar: Selected Topics (3)
(May be repeated for credit with different topic)

B. Electives
Additional upper-division or graduate level coursework in American studies (12)

Choose either C or D as follows:
C. American Studies 598 Thesis (3) should be taken in the semester immediately preceding graduation from the program.
D. An additional American Studies graduate level elective, i.e., American Studies 599 or American Studies 502T, plus successful completion of a three-part take home comprehensive examination based on the department’s core reading list.

Other Disciplines (6 units)
Graduate-level seminars in anthropology, art, communications, comparative literature, English, geography, history, political
science or sociology. Pedagogical and productions skill seminars are excluded. Students should select outside discipline seminars in consultation with the graduate advisor.

**Elective Skill (3 units)**

A student must demonstrate proficiency in a methodological skill appropriate to his or her scholarly interests. In consultation with an adviser, the student will select the skill to be developed. Proficiency in a foreign language, quantitative methods or linguistics would, for example, be appropriate. If prerequisite work is necessary before a student can develop proficiency through three units of coursework, that preliminary work will not be counted toward the 30 units required for the M.A. degree.

For further information, consult graduate program adviser.

**AMERICAN STUDIES COURSES**

Courses are designated as AMST in the class schedule.

**101 Introduction to American Culture Studies (3)**

Concepts of interdisciplinary culture studies, focusing on analysis of cultural change in complex, literate society. American culture, including cross-cultural comparisons. Topics include popular culture, subcultures, regionalism, myths and symbols, and culture and personality. One or more sections offered online.

**201 Introduction to American Studies (3)**

With the concept of culture as a unifying principle, focus is on four separate time periods in order to provide the framework for an understanding of American civilization. Several different kinds of documents will be used to illustrate the nature and advantages of an interdisciplinary approach.

**300 Introduction to American Popular Culture (3)**

Prerequisite: completion of General Education (G.E.) Category III.C.1. Historical exploration of popular culture in America as it both reflects and contributes to the search for meaning in everyday life. Themes include heroes, myths of success, symbols of power, images of romance, consumerism, race and sexual identity.

**301 American Character (3)**

Prerequisite: completion of the G.E. Category III.C.1. Cultural environment and personality. The extent to which there have been and continue to be distinctly American patterns of belief and behavior. Similarities, as well as class, ethnic, sex and regional differences among Americans. One or more sections offered online.

**312 Multicultural Identities and Women’s Experience (3)**

Diversity of women’s experiences, focusing on both historical and contemporary analysis of African American, Asian American, Latina and white ethnic women. Course materials include autobiography, fiction, visual and popular arts, and feminist cultural criticism. (Same as Women’s Studies 312)

**318 Hollywood and America: Using Film as a Cultural Document (3)**

Hollywood as a cultural institution. Concentrating on the films of selected periods, the course analyzes Hollywood’s ability to create and transmit symbols and myths, and legitimate new values and patterns of behavior.

**320 Women in American Society (3)**

Socio-cultural history of women and women’s movements in American society. Emphasis on 19th and 20th centuries. Cultural models of American womanhood – maternal, domestic, sexual, social – their development and recent changes.

**345 The American Dream (3)**

Interdisciplinary analysis, in settings both historical and contemporary, of the myth and reality surrounding the notion of America as a land of unparalleled and unlimited possibilities, especially in the achievement of personal material success.

**346 American Culture Through Spectator Sports (3)**

Shifting meaning of organized sports in changing American society. Includes analysis of sports rituals, symbols and heroes. Focuses on the cultural significance of amateur and professional football, baseball and basketball.

**350 Seminar in Theory and Method of American Studies (3)**

Prerequisites: American Studies 201 and 301. Provides an understanding and appreciation of methodology, theories of society and images of humanity as they affect American studies contributions to scholarship. Fulfills the course requirement of the university upper-division baccalaureate writing requirement for American studies majors.

**377 Prejudice and American Culture (3)**

Prerequisite: upper-division standing. Concepts and methods of American culture studies as tools for better understanding the origins and appeal of intolerance, past and present. Particular focus on racism, ethnic and religious bias, sexism and homophobia.

**395 California Cultures (3)**

Prerequisite: completion of G.E. Category III.C.1. How various cultures – Native American, European, Latino, Asian, African-American – have interacted in California’s past and present. Topics include: cultural diversity in frontiers and borderlands; shifting meanings of gender; function of regional and racial myths.

**401T Proseminar in American Studies (3)**

Prerequisites: American Studies 201 and 301. Relationship between theory and application. Analytic readings and research. Check the class schedule for topics being considered. May be repeated for credit.
402 Religion and American Culture (3)
Prerequisite: upper division standing. Interdisciplinary analysis of the religious dimensions of American core culture from colonial settlement to the present. Topics include: Puritanism; rationalization, secularization and feminization; the conversion experience, revivification, and revitalization; fundamentalism and modernism; and civil religion.

405 Images of Crime and Violence in American Culture (3)
Prerequisite: American Studies 201 or completion of G. E. section on American history, institutions and values. Cultural analysis of meanings ascribed to law and order, authority, violence and punishment in the American past and present. Examined in selected symbols, images, traditions and realities.

407 American Humor (3)
Prerequisite: American Studies 201 or completion of G. E. section on American history, institutions and values. Analyzes the cultural significance of various types of American humor in past and present settings. How humor reinforces existing culture and also serves as an index and agent of cultural change. Humor’s relationship to ethnicity, region, social class and sex.

413 The Shifting Role & Image of the American Male (3)
Effect of economic, social, political and cultural changes on American males. Emphasizes the 19th and 20th centuries.

416 Southern California Culture: A Study of American Regionalism (3)
Regionalism as a concept and as a fact of American life. Theories of regionalism measured against a study of Southern California and one other distinct American region.

419 Love in America (3)
Prerequisite: upper-division standing. Changes in the emotional lives of American men and women from the 17th century to the present. Concentrates on enduring and innovative views on the nature of love and the cultural forces that shape its legitimate and illegitimate expression.

420 Childhood and Family in American Culture (3)
Historical and contemporary culture study of childhood and family in America. The idea of childhood, changing concepts of child-rearing, growing up in the American past, the impact of modernization, mother and home as dominant cultural symbols.

423 The Search for Community (3)
Prerequisite: upper-division standing. Examining the historical transformation and modern reformulation of community in America, the course emphasizes the relationship of the individual to the larger social group. Topics include: freedom, need to belong, alienation and search for identity.

433 Visual Arts in Contemporary America (3)
Prerequisite: American Studies 201 or completion of G. E. section on American history, institutions and values. Visual phenomena in America as they reveal changes in recent American culture. Areas covered include: the “high” arts (painting, sculpture) as contrasted with the “low” arts (advertising, television); the artist as innovator; alienation; the business world; and American values in art.

438 American Minds: Images of Sickness and Health (3)
Prerequisite: upper-division standing. Historically explores cultural changes in American images of the healthy mind. Topics include medical and legal views of insanity, Freud’s impact on American thought, literary treatments of madness, and psychological themes in American popular culture.

439 American Photographs As Cultural Evidence (3)
Prerequisites: upper-division standing and American Studies 201. Cultural work of American photography, from the mid-19th century to the present. How photographs – especially the vernacular or everyday variety – have both reflected and shaped American beliefs, symbols and values.

440 American Folk Culture (3)
Prerequisite: upper-division standing. American culture from the perspectives of particular folk groups and through the eyes of the “common” person, past and present. Topics include: interpretation of artifacts and oral traditions; relationships between regional, ethnic, and folk identity; modernization and folk consciousness.

442 Television and American Culture (3)
Prerequisite: completion of the G. E. section of American history, institutions and values. American television as an interactive form of cultural expression, both product and producer of cultural knowledge. Structure and content of television genres, and social-historical context of television’s development and use, audience response, habits and environments of viewing.
444  The Built Environment (3)
Prerequisite: upper-division standing. How Americans have shaped and structured space from the 17th century to the present. Emphasizes the relationship between space, place, architecture and material culture; the interpretation of cultural landscapes and architectural styles; the changing meanings of the American home.

445  Cold War and American Culture (3)
Prerequisite: completion of G.E.Category II.B The Cold War’s impact on American society and culture. Topics include nuclear fear, McCarthyism, gender roles, family life, material culture, and the impact of containment, brinkmanship and détente.

449  The American West in Symbol and Myth (3)
Prerequisite: American Studies 201 or completion of G.E.section on American history, institutions, and values. Meaning of the West to American culture through analysis of cultural documents, such as explorer and captivity narratives, fiction, art and film. Topics include perception of wilderness, Indians, frontiersmen and role of the West in creating a sexist national mythology.

460  Bohemians and Beats: Cultural Radicalism in America (3)
Prerequisite: American Studies 201 or completion of G.E.section on American history, institutions, and values. Ideas, activities and legacies of the creators of a “countercultural” tradition in the 19th and 20th centuries. Explores their critique of modern civilization as well as their projects for self-transformation, social change and cultural renewal.

465  The Culture of the American South (3)
Prerequisite: American Studies 201 or completion of the G.E.section on American history, institutions, and values. Distinctive cultural patterns in the American South, past and present. Topics include: Southern concepts of work and leisure; race and gender roles; political and religious controversies; literature and folklore; and the South as portrayed in the media.

468  Culture in Turmoil: 1960s America (3)
Prerequisite: upper-division standing. Origins, manifestations and continuing significance of the turbulence in American culture associated with the 1960s. Accelerated changes that occurred (or seemed to occur) in cultural meanings of authority, achievement, patriotism, sexuality, technology and consciousness.

473  Sexual Orientations and American Culture (3)
Prerequisites: upper-division standing, American Studies 201. Cultural construction of the very idea of a sexual orientation. Shifting meanings of erotic attraction and involvement in America, especially regarding people of the same sex, from the colonial period to the present.

476  The Cultures of Early America (3)
Prerequisite: American Studies 201 or completion of G.E.Category II.B. Variety of cultures of America and, through an analysis of visual, material and print culture, investigates the beliefs, ideologies and institutions through which early Americans created their worlds. Also examines contemporary public memory of early America.

499  Independent Study (1-3)
Supervised research projects in American studies to be taken with the consent of instructor and department chair. May be repeated for credit.

501  Theory and Methods (3)
The American Studies movement. Its conceptual and methodological development. The way this development was affected by and in turn reflected larger trends in the culture itself.

502T  Seminar: Selected Topics (3)
A particular problem or topic as a case study in the use of inter-disciplinary methods in American studies. May be repeated for credit.

596  American Studies Teaching Tutorial (3)
Prerequisite: American Studies 501. Preparation for community college or university teaching. Small group discussion, lecture-discussion, examinations, teaching strategies. Enrollment requires approval of American Studies graduate coordinator. Course may be repeated for credit, but may only count once on a graduate study plan.

598  Thesis (3)
Prerequisites: graduate standing in American studies and consent of graduate coordinator. Writing a thesis based on original research and its analysis and evaluation.

599  Independent Graduate Research (1-3)
Prerequisites: graduate standing in American studies and consent of graduate coordinator. May be repeated for credit.
INTRODUCTION

Anthropology is the scientific and humanistic study of humans, our ancestors and our nonhuman primate relatives. Anthropologists are interested in a wide range of human activities, including communication and language, economics, political organization, religion, the arts, philosophy, education, health and nutritional practices, social organization, marriage, child rearing and development, science and technology. Anthropology fosters the study of people from all over the world as they live now, and in the prehistoric and historic past. A major goal of anthropology is to understand people living in relationship with their environment. Through an integrative analysis of evolution, adaptation and variation in terms of biology, culture, language and behavior, anthropologists understand the totality of the human experience. In our department, the four subfields of anthropology are emphases on: application of evolutionary theory to understanding behavioral and physiological interaction with their ecological, social and cultural contexts; cultural practices and beliefs; development and use of language and symbols; and evidence regarding these areas from past times. Faculty also focus on areas such as primate conservation, cultural resource management and applied anthropology. The Department of Anthropology endorses UPS 230.000, Statement of Professional Responsibility, and UPS 100.006, A Commitment to Civility at CSUF.

The major in Anthropology is designed to prepare students for advanced degrees in Anthropology, as well as for positions in the private and public sector. Social service, marketing research, museum work, health professions, cultural resources management, primate conservation and international development are some of the areas that offer many opportunities for anthropology graduates.

INTERNATIONAL ASPECTS OF ANTHROPOLOGY

Anthropology is inherently international in scope, drawing on worldwide, cross-cultural comparisons for understanding culture and what it means to be human. We offer an interdisciplinary perspective to promote an understanding of globalization and transnationalism. The department encourages study in different cultures and will provide, where appropriate, academic credit for participation in academic programs and supervised research abroad.

BACHELOR OF ARTS IN ANTHROPOLOGY

The Bachelor of Arts in Anthropology requires a minimum of 120 units, which includes courses for the major, all other university requirements and free electives. The major requires 45 units consisting of core courses, upper-division courses and elective coursework. A "C" (2.0) average and a grade of "C-" (1.7) or better is required in all courses applied to the major. Anthro 480 and 481 fulfill the university's upper-division writing requirement for Anthropology, and each must be passed with a "C" (2.0) or better.

Core Courses (15 units)

Anthro 101 Introduction to Biological Anthropology (3)
Anthro 102 Introduction to Cultural Anthropology (3)
Anthro 103 Introduction to Archaeology (3)
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>Anthro 480</td>
<td>History of Anthropology</td>
<td>(3)</td>
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<td>Anthro 481</td>
<td>Contemporary Anthropology</td>
<td>(3)</td>
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<td><strong>Upper-Division Courses (9-30 units)</strong></td>
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<td>Any 400-level course in anthropology is an upper-division course</td>
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<td>that may be applied to the major, including:</td>
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<td>Anthro 400</td>
<td>Qualitative Methods in Anthropology</td>
<td>(3)</td>
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<td>Anthro 401</td>
<td>Ethnographic Field Methods</td>
<td>(3)</td>
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<td>Anthro 402</td>
<td>Museum Studies</td>
<td>(3)</td>
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<td>Anthro 403</td>
<td>Archaeological Fieldwork</td>
<td>(3)</td>
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<td>Anthro 404</td>
<td>Analytical Methods in Archaeology</td>
<td>(3)</td>
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<td>Anthro 406</td>
<td>Descriptive Linguistics</td>
<td>(3)</td>
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<td>Anthro 407</td>
<td>Anthropological Video Production</td>
<td>(3)</td>
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<td>Anthro 408</td>
<td>Ethnogerontology</td>
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<td>Anthro 409</td>
<td>Applied Anthropology</td>
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<td>Anthro 410</td>
<td>Anthropology of Organizations</td>
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<td>Anthro 412</td>
<td>Culture Change</td>
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<td>Anthro 414</td>
<td>Economic Anthropology</td>
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<td>Anthro 415</td>
<td>Anthropology of Tourism</td>
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<td>Anthro 416</td>
<td>Anthropological Linguistics</td>
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<td>Anthro 417</td>
<td>Life Quests</td>
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<td>Anthro 418</td>
<td>GIS and Archaeology</td>
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<td>Anthro 419</td>
<td>Anthropology of Risk</td>
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<td>Anthro 430</td>
<td>Archaeology of Household Space</td>
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<td>Anthro 420</td>
<td>Visual Anthropology</td>
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<td>The Ancient Maya</td>
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<td>The Aztecs and Their Predecessors</td>
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<td>Archaeology of the Southwest</td>
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<td>Anthro 427</td>
<td>Archeology of Settlement Patterns</td>
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<td>Prehistoric North America</td>
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<td>Anthro 429</td>
<td>Archaeology of Inequality</td>
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<td>Anthro 441</td>
<td>Human Variation</td>
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<td>Anthro 442</td>
<td>Medical Anthropology</td>
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<td>Anthro 443</td>
<td>Advanced Topics in Human Osteology</td>
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<td>Anthro 445</td>
<td>Quantitative Methods in Anthropology</td>
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<td>Anthro 451</td>
<td>Advanced Human Evolution</td>
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<td>Anthro 452</td>
<td>Paleoanthropology</td>
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<td>Anthro 453</td>
<td>Human Evolutionary Anatomy</td>
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<td>Anthro 454</td>
<td>Great Ape Conservation</td>
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<td>Anthro 455</td>
<td>Behavioral Observation</td>
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<td>Anthro 460</td>
<td>Public Archaeology</td>
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<td>Anthro 461</td>
<td>California Archaeology</td>
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<td>Anthro 463</td>
<td>Archaeofaunal Analysis</td>
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<td>Anthro 470</td>
<td>Survey of Anthropological Films</td>
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<td>Anthro 476</td>
<td>Archaeological Investigations</td>
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<td>Anthro 490T</td>
<td>Undergraduate Seminar in Anthropology</td>
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<td>Anthro 491</td>
<td>Internship in Anthropology</td>
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<td>Anthro 497</td>
<td>Cultural Investigations</td>
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<td>Anthro 498</td>
<td>Museum Practicum</td>
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<td>Anthro 499</td>
<td>Independent Study</td>
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<td><strong>Electives (0-21 units)</strong></td>
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<td>Any 100- or 300-level course in anthropology may be used by</td>
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<td>majors as electives, including:</td>
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<td>Anthro 100</td>
<td>Non-Western Cultures and the Western Tradition</td>
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<td>Anthro 110</td>
<td>Ancient Peoples of the American Southwest</td>
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<td>Anthro 300</td>
<td>Language and Culture</td>
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<td>Anthro 301</td>
<td>Primate Behavior</td>
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<td>Anthro 304</td>
<td>Traditional Cultures of the World</td>
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<td>Anthro 305</td>
<td>Anthropology of Religion</td>
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<td>Anthro 306</td>
<td>Culture and Art</td>
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<td>Anthro 308</td>
<td>Culture and Aging: Anthropological Gerontology</td>
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<td>Anthro 310</td>
<td>Urban Anthropology</td>
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<td>Anthro 311</td>
<td>Culture and Communication</td>
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<td>Anthro 313</td>
<td>Culture and Personality: Psychological Anthropology</td>
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<td>Anthro 315</td>
<td>Culture and Nutrition</td>
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<td>Anthro 316</td>
<td>Anthropology of Sex and Gender</td>
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<td>Anthro 320</td>
<td>Cultures of Europe</td>
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<td>Anthro 321</td>
<td>Peoples of Native North America</td>
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<td>Anthro 322</td>
<td>Human Behavioral Ecology</td>
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<td>Anthro 325</td>
<td>Peoples of South America</td>
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<td>Anthro 327</td>
<td>Origins of Civilization</td>
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<td>Anthro 328</td>
<td>Peoples of Africa</td>
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<td>Peoples of the Caribbean</td>
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<td>Anthro 332</td>
<td>Women in Cross-Cultural Perspective</td>
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<td>Anthro 333</td>
<td>Anthropology of Childhood</td>
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<td>Anthro 340</td>
<td>Peoples of Asia</td>
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<td>Anthro 342</td>
<td>Anthropology and Health</td>
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<td>Human Osteology</td>
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<td>Anthro 344</td>
<td>Human Evolution</td>
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<td>Anthro 345</td>
<td>Peoples of the Middle East and North Africa</td>
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<td>Anthro 347</td>
<td>Peoples of the Pacific</td>
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<td>Anthro 350</td>
<td>Culture and Education</td>
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<td>Anthro 360</td>
<td>Contemporary American Culture</td>
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<td>Anthro 370</td>
<td>Anthropology of Non-Western Films</td>
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Under certain circumstances, with the approval of the adviser or department chair, up to six units may be accepted from related disciplines.

Note: Upper-division, 400-level courses are intended for junior, senior and graduate students. Courses under Electives in Anthropology are 100- or 300-level and may be taken by all students.

Multiple and/or Single Subject Credential Information

The Anthropology degree may be effectively combined with subject matter studies for either the multiple subject credential (K-8) or single subject credential (7-12) in Social Science. Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

MINOR IN ANTHROPOLOGY

Twenty-one units must be taken to fulfill requirements for a minor.

Core Courses (15 units)

Anthro 101 Introduction to Biological Anthropology (3)
Anthro 102 Introduction to Cultural Anthropology (3)
Anthro 103 Introduction to Archaeology (3)
Anthro 480 History of Anthropology (3)
Anthro 481 Contemporary Anthropology (3)

Additional Courses (6 units)

Six units of 300- or 400-level courses in anthropology.

Note: All courses applied to the minor must be passed with a “C” (2.0) or better.

MASTER OF ARTS IN ANTHROPOLOGY

The program offers advanced study of general anthropology, while simultaneously encouraging specialization in one (or more) of the anthropological subdisciplines: archaeology; cultural anthropology; anthropological linguistics; and evolutionary anthropology. Opportunities for field and laboratory research, and other related learning experiences permit students to enlarge upon formal classroom training and work independently with original data. Students may pursue a thesis or project of either a traditional or more exploratory character. Efforts are made to assist individuals to plan programs that will meet their individual needs and interests.

Application Deadlines and Procedure

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

There are two steps in the application process: (1) apply online to the university (see http://www.csumentor.edu); and (2) apply to the department, in care of the Graduate Program Adviser (see http://anthro.fullerton.edu/Grad.htm). Arrange to have two letters of recommendation sent to the Graduate Program Adviser. Please check with the graduate adviser for department deadlines.

Prerequisites

An applicant must meet the university requirements for conditionally classified graduate standing. The university requires a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on admission of graduates for complete statement and procedures). Admission is contingent upon evaluation and acceptance by the Graduate Affairs Committee.

The Department of Anthropology requires a grade-point average of 3.0 in all undergraduate coursework in anthropology. Students with limited subject or grade deficiencies may be considered for admission to the program if they agree to complete, with at least a “B” (3.0) average, additional courses selected by the Graduate Study Committee. Subject deficiencies must be met prior to candidacy. Students entering the MA program from other fields or other departments of anthropology should discuss appropriate course substitution with the graduate adviser. The department does not permit substitutions for the core courses.

Classification

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, will be granted classified graduate standing upon the development of an approved study plan:

1. A bachelor’s degree with a minimum of 27 units in anthropology, including the following courses or their equivalents

Core Courses (15 units)
Anthro 101, 102, 103, 480 and 481

Additional upper-division courses (12 units)
Reading courses and special examinations may be substituted for the additional upper-division coursework in Anthropology.

2. A GPA of “B” (3.0) for all work taken in Anthropology

3. Classification review administered by the graduate adviser

Study Plan

The 30-unit study plan for the degree must include the following:
Anthro 511 Theory and Method in Biological Anthropology (3)
Anthro 512 Theory and Method in Archaeology (3)
Anthro 513 Theory and Method in Cultural/Linguistic Anthropology (3)
Anthro 597 Project (6) or Anthro 598 Thesis (6)
Anthro 504T Graduate seminars in Anthropology, minimum of three (9 units)
Electives – two courses (6 units). Electives may be additional 504T seminars, Anthro 599 Independent Study or 400-level courses.

Note: All courses applied to the minor must be passed with a “C” (2.0) or better.

Additional upper-division courses (12 units)
Reading courses and special examinations may be substituted for the additional upper-division coursework in Anthropology.

2. A GPA of “B” (3.0) for all work taken in Anthropology

3. Classification review administered by the graduate adviser

Study Plan

The 30-unit study plan for the degree must include the following:
Anthro 511 Theory and Method in Biological Anthropology (3)
Anthro 512 Theory and Method in Archaeology (3)
Anthro 513 Theory and Method in Cultural/Linguistic Anthropology (3)
Anthro 597 Project (6) or Anthro 598 Thesis (6)
Anthro 504T Graduate seminars in Anthropology, minimum of three (9 units)
Electives – two courses (6 units). Electives may be additional 504T seminars, Anthro 599 Independent Study or 400-level courses.
ANTHROPOLOGY COURSES

Courses are designated as ANTH in the class schedule.

100 Non-Western Cultures and the Western Tradition (3)
Changing views of people, nature and culture in Western civilization as related to the impact of non-Western influences, including the use and interpretation of data on non-Western peoples and cultures. One or more sections offered online.

101 Introduction to Biological Anthropology (3)
Humans as biological organisms from an evolutionary perspective. Concepts, methods, findings and issues in the study of the Order primates, including the relationships among fossil monkeys, apes and humans, and the significance of genetic diversity in modern populations.

102 Introduction to Cultural Anthropology (3)
Nature of culture and its significance. Similarities and differences in human cultures. Analyses of family, economy, subsistence, religion, art and other aspects of culture in diverse societies. Central problems of cultural comparison and interpretation. One or more sections offered online.

103 Introduction to Archaeology (3)
Relationship of archaeology, culture history and process, field methods and analysis of archaeological data; uses and abuses of archaeology. One or more sections offered online.

110 Ancient Peoples of the American Southwest (3)
Introductory-level exploration of the lifeways of prehistoric peoples of the American Southwest as evidenced through archaeological remains and through Native American perspectives.

300 Language and Culture (3)
Prerequisite: completion of General Education (G. E.) Category III.C.1. Language as a factor in culture. Trends in the study of language and culture. One or more sections offered online.

301 Primate Behavior (3)
Prerequisite: Anthro 101, 102, Psychology 101 or completion of G. E. Category III.A.2. Anthropological study of the behavior of primates, including monkeys and apes with data collection in the wild and the laboratory; review and discussion of behavioral characteristics that are part of the primate heritage of humankind. One or more sections offered online.

304 Traditional Cultures of the World (3)
Prerequisite: completion of G. E. Category III.B.2. Comparative, worldwide survey of traditional, selected and well-studied ways of life using ethnographic writings and films. Examines diverse ways of life, with an emphasis on small-scale societies. One or more sections offered online.

305 Anthropology of Religion (3)
Prerequisite: completion of G. E. Category III.B.2. Beliefs and practices in the full human variation of religious phenomena, with an emphasis on primitive religions. Forms, functions, structures, symbolism, and history and evolution of religious systems. One or more sections offered as televised course.

306 Culture and Art (3)
Prerequisite: completion of G. E. Category III.B.2. Metaphysical and mystical systems underlying the "grammars" of the art, myths and rituals of various nonliterate and literate peoples and their development into creative experiences.

308 Culture and Aging: Anthropological Gerontology (3)
Prerequisite: completion of G. E. Category III.C.1. Anthropological discourse on diverse cultural conceptions of aging as they relate to gender, class, ethnic and religious categories. Cross-cultural comparison of culturally patterned time-table of life-cycle and age-grades for understanding the universals and variability in human aging.

310 Urban Anthropology (3)
Prerequisite: Anthro 102. Cross-cultural investigation of similarities and differences in urbanism with an emphasis on current theoretical and methodological perspectives in the study of urban social and cultural forms and processes.

311 Culture and Communication (3)
Prerequisite: completion of G. E. Category III.B.2. How meanings are created, exchanged and interpreted in both traditional and modern cultures through language, myth and religion, art and architecture, and other means of communication.

313 Culture and Personality: Psychological Anthropology (3)
Prerequisite: completion of G. E. Category III.C.1. Relationship of culture to the individual. Child-training in non-western cultures. Survey of concepts, studies and research techniques in psychological anthropology.

315 Culture and Nutrition (3)
Prerequisite: Anthro 101, 102 or equivalent. Interrelationships among human nutrition, basic food resources, individual development and socio-cultural organization; assessment of student's nutritional status, beliefs and practices relative to other cultures. One or more sections offered online.
316 Anthropology of Sex and Gender (3)
Prerequisite: completion of G. E. Category III.C.1. Human sex and gender roles in cross-cultural perspective and the role that gender plays in human social organization. Topics include cultural construction of gender, homosexuality, rights of women, evolution and gender. One or more sections offered online. (Same as Women’s Studies 316)

320 Cultures of Europe (3)
Prerequisite: completion of G. E. Category III.C.1. Cultural survey of Europe, focusing on the peasant, national and pan-European traditions of Europe. Diverse anthropological approaches are used to examine changing boundaries of European identity from prehistory to the present “European Union.” One or more sections offered online.

321 Peoples of Native North America (3)
Prerequisite: completion of G. E. Category III.C.1. Native peoples of North America; origins, languages, culture areas, cultural history; the impact of European contacts.

322 Human Behavioral Ecology (3)
Prerequisite: completion of G. E. Category III.A.2.c. Using modern evolutionary theory, students will examine human biological and cultural diversity through an analysis of comparative socioecology. Topics covered include reproduction and marriage, the family, childhood, population growth, and conservation. Computer labs utilizing eHRAF. One or more sections offered online. (Same as Biology 322)

325 Peoples of South America (3)
Prerequisite: completion of G. E. Category III.C.1. Cultural survey of South America. Representative cultural areas before and after contacts with Western countries.

327 Origins of Civilizations (3)
Prerequisite: completion of G. E. Category III.A.2. or III.C.1. Development of civilization in the Old and New Worlds in primary centers such as Mesopotamia, Egypt, the Indus Valley, China, Mesoamerica and Peru, and secondary centers such as the Aegean and Europe. One or more sections offered online.

328 Peoples of Africa (3)
Prerequisite: completion of G. E. Category III.C.1. Cultural survey of Africa. Description of selected cultures and aspects of culture before and after contact with non-Africans.

329 Peoples of the Caribbean (3)

332 Women in Cross-Cultural Perspective (3)
Prerequisite: completion of G. E. Category III.A.2. or III.C.1. Cross-cultural comparison of beliefs, values, expectations and socially defined roles for women in diverse societies. Changing role of women in industrial societies.

333 Anthropology of Childhood (3)
Prerequisite: completion of G. E. Category III.A.2 or III.C.1. Using a biocultural perspective, examines the form and experiences of childhood using a comparative, evolutionary, cross-cultural approach. Topics: work and play; evolutionary and cultural influences on children’s development trajectories; role of children. Computer labs with eHRAF.

340 Peoples of Asia (3)
Prerequisites: completion of G. E. Categories III.A.2. and III.C.1. Asian civilizations and cultural traditions: personality configurations in different culture areas; structure of Asian civilizations; and peasant, tribal and ethnic groups of Asia. One or more sections offered online.

342 Anthropology and Health (3)
Prerequisites: completion of G. E. Category III.A.2 and III.C.1. Uses an evolutionary, comparative, and cross-cultural perspective to understand the process and conception of health in different times, places and societies. Topics include evolutionary medicine, health beliefs, health ecology, culture and health. One or more sections offered online. Computer labs utilizing eHRAF.

343 Human Osteology (formerly 405) (3)
Prerequisite: Anthro 101 or equivalent. Techniques in basic identification of human skeletal remains. Aging, sexing, racing and stature reconstruction. For those interested in archaeology, hominid evolution and/or forensic science. One or more sections offered online. (2 hours lecture, 3 hours laboratory)

344 Human Evolution (3)
Prerequisite: Anthro 101 or completion of G. E. Category III.A.2. Advanced primate evolution; the origin of Homo sapiens as evidenced in the fossil record and through biochemical and molecular studies. Evolutionary theory and problems in human evolution. One or more sections offered online. (2 hours lecture, 3 hours laboratory)

345 Peoples of the Middle East and North Africa (3)
Prerequisite: completion of G. E. Category III.C.1. Interrelationship between culture, economy, political structure and belief system of selected cultures in the Middle East and North Africa.

347 Peoples of the Pacific (3)
Prerequisite: completion of G. E. Category III.C.1. Indigenous peoples and cultures of the Pacific Islands, including Tahiti, Hawaii and Australia. Forces and processes contributing to social change in island communities and current problems being faced by them. One or more sections offered online.

350 Culture and Education (3)
Prerequisite: completion of G. E. Category III.C.1. Transmission of values, implicit cultural assumptions and the patterning of education in cross-cultural perspective. American culture and development problems.
360 Contemporary American Culture (3)
Prerequisite: completion of G. E. Category III.C.1. Application of anthropological methods, categories of analysis and types of interpretation to American culture. Survey and critique of selected community studies and other kinds of relevant research.

370 Anthropology of Non-Western Films (3)
Prerequisite: Anthro 100, 102 or 304. Comparative analytical study of commercial and non-commercial films and videos made by non-western people. Films and videos considered as cultural artifacts that are particularly revealing of the ways people conceive of themselves and their cultures.

400 Qualitative Methods in Anthropology (3)
Prerequisite: Anthro 102. Qualitative methods used in the systematic analysis of culture; diverse methodologies used in various frameworks, including, but not limited to, semiotic, phenomenological and interpretive anthropology.

401 Ethnographic Field Methods (3)
Prerequisites: Anthro 102 and six additional units of anthropology. Anthropological field research by students on various problems using participant observation techniques.

402 Museum Science (3)
Prerequisite: Anthro 101, 102 or 103. Methods, principles and techniques used in natural history, and small scientific and historical museums. Subjects covered include scope of exhibit and research collections, care and repair of specimens, acquisitions, storage and preparation of presentations in anthropological, historical, biological and paleontological museums.

403 Archaeological Fieldwork (3)
Prerequisites: Anthro 102 or 103 and consent of instructor. Excavation of a local archaeological site. Archaeological mapping, photography and recording. Laboratory methods of cataloging, preservation, description and interpretation of archaeological materials. Saturday field sessions. May be repeated once for credit as an elective. (1 hour lecture, 6 hours laboratory)

404 Analytical Methods in Archaeology (3)
Prerequisites: Anthro 103, 403. Employment of physical data-gathering techniques (e.g., photographic, paleomagnetic) in the field and analysis of artifact collections and data from previous field operations in the laboratory. May be repeated once for credit as an elective. (1 hour lecture, 6 hours laboratory)

406 Descriptive Linguistics (3)
(Same as Linguistics 406)

407 Anthropological Video Production (3)
Prerequisite: six upper-division units of anthropology. Planning, shooting and editing videotapes relating to all sub-disciplines of anthropology. (1 hour lecture; 6 hours laboratory activities, demonstrations, and fieldwork)

408 Ethnogerontology (3)
Prerequisite: Anthro 102. Methods of ethnoscience and interpretive semiotics for analyzing cultural knowledge and domains pertaining to aging. Training in ethnographic cultural analysis of aging for the production of ethnographies that focus on the symbols, taxonomies, paradigms, and themes of aging.

409 Applied Anthropology (3)
Prerequisite: Anthro 102. Uses of anthropological skills and sensitivities in approaching contemporary human problems. Cultural change, organizational development, program planning and evaluation, the consultant’s role and professional ethics.

410 Anthropology of Organizations (3)
Prerequisite: Anthro 102. Cross-cultural examination of the diverse ways humans organize themselves in groups. Topics include voluntary and non-voluntary associations, gender- and age-based organizations, religious groups, environmental groups, health care organization and business organizations.

412 Culture Change (3)
Prerequisite: Anthro 102. Interrelations between cultural, social and psychological processes in the dynamics of culture growth and change. Impact of western technology on tribal and peasant societies. Anthropological contributions to the planning of directed sociocultural change in selected areas.

414 Economic Anthropology (3)
Prerequisite: Anthro 102. Ethnology and ethnography of economic life, principally in non-Western societies; operation of systems of production and distribution within diverse cultural contexts. One or more sections offered online.

415 Anthropology of Tourism (3)
Prerequisite: Anthro 102. Tourism and travel as cultural practices. Domestic and international tourism; perspective of hosts and travelers; global economy and tourism; souvenirs, artifacts and symbolic landscapes; tourism as pilgrimage.

416 Anthropological Linguistics (3)
Nature and functions of language; language structure and change; classification of languages; use of linguistic evidence in anthropology. (Same as Linguistics 416)

417 Life Quests (3)
Prerequisite: Anthro 102. Contemporary ways to wisdom and humanness in cross-cultural and historical perspectives. New and comparative approaches to understanding the life cycle, development and fulfillment of individual personalities.

418 GIS and Archaeology (3)
Prerequisite: Anthro 103 or equivalent course and junior or senior standing. Introduction to the use of Geographic Information Systems as they apply to the study of archaeology. Spatial analysis of past cultural remains from anthropological perspectives. One or more sections offered online.

419 Anthropology of Risk (3)
Prerequisites: upper-division standing and Anthro 101, 102, 103. Ecological context of risk, cultural and behavioral responses to resource insecurity, the culture construction of risk, health outcomes in relation to risk-prone and risk-averse behavior, and social differentiation and risk.
420 Visual Anthropology (3)
Prerequisites: Anthro 100, 101, 102, 103 or equivalent. Development of the field of visual anthropology and the changing and diverse approaches to the use of visual media in representing and interpreting other cultures.

423 The Ancient Maya (3)
Prerequisites: Anthro 102, 103. Archaeology and ethnohistory of the Maya area of Southern Mesoamerica. Problems of initial settlement of the area and the “rise” and dynamics of ancient Maya civilization.

424 The Aztecs and Their Predecessors (3)
Prerequisites: Anthro 102, 103. Archaeological survey of principal Mesoamerica pre-Columbian cultures north and west of the Maya area. Aztecs and their predecessors, religion, art, architecture, intellectual achievements and the Olmec heritage. One or more sections offered online.

426 Archaeology of the Southwest (3)
Prerequisite: Anthro 103. Archaeological ruins of the American Southwest – remains of ancient pueblos and cliff dwellings. Prehistory, ethnohistory and ethnographic record of ancient and contemporary Native American peoples of the Southwest over the past 11,000 years.

427 Archeology of Settlement Patterns (3)
Prerequisite: Anthro 103. Introduction to settlement pattern studies in archaeology. Dispersion of aggregates and households within communities, and communities within regions, as a way to study political, social and economic organization in past societies.

428 Prehistoric North America (3)
Prerequisite: Anthro 103. Change, development and diversity of adaptations of North American Indian cultures prior to European colonization. Uses archaeological data to describe and explain long-term processes of cultural change during ancient times in North America. One or more sections offered online.

429 Archaeology of Inequality (3)
Prerequisite: Anthro 102 or 103. Development of hereditary inequality in non-state societies and the processes by which inequalities become institutionalized. Range of theoretical approaches used to study social inequality, focusing specifically on archaeological contributions and the archaeological correlates of social inequality.

430 Archaeology of Household Space (3)
Prerequisite: Anthro 103. Households, domestic architecture and use of space in the archaeological and ethnographic record from diverse theoretical and methodological perspectives. Topics include cultural difference in residential dwellings, use of space, residence patterns, households, gender and ritual spaces.

441 Human Variation (3)
Prerequisites: Anthro 343 and one of either Anthro 301, 322 or 344. Processes underlying and the theories for the existence of the present variation between and within human populations. Genetics of human populations and the significance of racial classifications. (2 hours lecture, 3 hours laboratory)

442 Medical Anthropology (3)
Prerequisite: Anthro 342. Human health and disease and their relationship to cultural practices, beliefs and environmental factors; histories of various diseases as factors of cultural change; health care delivery systems. One or more sections offered online.

443 Advanced Topics in Human Osteology (formerly 425) (3)
Prerequisites: Anthro 343 and one of either Anthro 301, 322 or 344. Analytical methods stressing morphological examination of human bone in a laboratory setting (determination of human, prehistoric; analysis of fragmented and commingled remains; basic identification and report writing; pathological conditions). For those interested in archaeology, hominin evolution and/or forensic science.

445 Quantitative Methods in Anthropology (3)
Prerequisite: Anthropology major or minor and junior or senior standing. Develops skills and knowledge in the application of quantitative methods in anthropological research. Students learn an integrated approach to research design, data collection, data management, and data analysis through hands-on training.

451 Advanced Human Evolution (3)
Prerequisite: Anthro 322, 344 or Biology 274. Uses life history theory to examine evolutionary ecology of human behavior. Topics include the human life course, resource acquisition, parenting and fertility. Computer labs utilizing eHRAF. (Same as Biology 451)

452 Paleoanthropology (3) pending sigt.
Prerequisites: Anthro 301, 322 or 344. In-depth and detailed analysis of fossil evidence for human evolution using fossil cast material and computer aided virtual models. Modern evolutionary theory used to interpret the fossil evidence and understand hominin phylogeny.

453 Human Evolutionary Anatomy (3)
Prerequisites: Anthro 301, 322 or 344. Uses evolutionary framework to conduct in-depth and detailed examination of the structure and function of human anatomical systems, their interaction, and their evolutionary histories and how those histories affect health in modern populations.

454 Great Ape Conservation (3)
Prerequisites: Anthro 301, 322 or 344. Uses behavioral ecology and life history theory to understand issues surrounding conservation of non human primates. Develop theoretical background crucial to understanding the population dynamics and ecological principles driving primate conservation strategies.

455 Behavioral Observation (formerly 475) (3)
Prerequisite: Anthro 301 or completion of G. E. Category III.A.3. Prepares students to conduct advanced behavioral observation research from an anthropological perspective. Research design, data collection techniques, ethical and other considerations unique to varied data collection settings, computerized resources and literature resources. Incorporates service learning.
460 Public Archaeology (3)
Prerequisite: Anthro 103. Analyzes new archaeological methods, current research specializations, and responsibilities of archaeologists, including Cultural Resource Management (CRM). Review of local, state and federal legislation affecting the protection and preservation of archaeological sites and other cultural resources.

461 California Archaeology (3)
Prerequisite: Anthro 103. Evolution and development of native California tribes over a 13,000-year time span based on archaeological and anthropological data. Follows a temporal and regional approach covering prehistory, ethnography and early history of native California cultures.

463 Archaeofaunal Analysis (3)
Prerequisites: Anthro 103. Method, theory and lab work in analyses of archaeofaunal remains recovered from archaeological sites and reconstruction of prehistoric subsistence patterns and paleoenvironments based on faunal remains. Topics include vertebrate skeletal identification, taphonomy, subsistence studies and quantification.

470 Survey of Anthropological Films (3)
Prerequisite: Anthro 100, 101, 102 or 103; 420 recommended. Survey and analysis of the uses of film and video in anthropological research, teaching, theory, methodology. Films are studied for their anthropological content, and as artifacts of western culture, which reveal significant aspects of that culture.

476 Archaeological Investigations (3)
Prerequisite: Anthro 102 or 103. Methodology and practice of archaeological fieldwork. May be repeated for credit. (1 hour lecture, 6 hours laboratory)

480 History of Anthropology (3)
Prerequisites: Anthro 101, 102, 103. Principal contributions of anthropologists 1850-1950; evolutionary, diffusionist, historical, particularist, configurationalist, and culture and personality approaches in anthropology. One or more sections offered online.

481 Contemporary Anthropology (3)
Prerequisites: Anthro 101, 102, 103. Anthropologists from 1950-present; neoevolutionist, sociological, structuralist, psychological and symbolic approaches. One or more sections offered online.

490T Undergraduate Seminar in Anthropology (3)
Prerequisite: consent of instructor. Topics in anthropology. May be repeated for credit.

491 Internship in Anthropology (3)
Prerequisites: 18 upper-division units in anthropology and/or related fields. Career opportunities. On-the-job training under faculty supervision in museum, industry or governmental service. One or more papers required. May be repeated for credit for a total of six units.

497 Cultural Investigations (3)
Prerequisites: Anthro 102 and 401 or equivalent. Methodology and practice of cultural fieldwork. May be repeated for credit. (1 hour lecture, 6 hours laboratory)

498 Museum Practicum (3)
Prerequisites: at least 15 units of anthropology and consent of instructor. Practical experience in museum operations, using the facilities of the Anthropology Museum. Topics include exhibit preparation, membership and funding operations, catalogue preparation and outreach activities. May be repeated for credit for a maximum of six units.

499 Independent Study (1-3)
Prerequisites: at least 15 units of anthropology and consent of adviser. Individual research project involving library or fieldwork. Conferences with the adviser as necessary. Results in one or more papers. May be repeated for credit.

504T Seminar: Selected Topics in Anthropology (3)
Prerequisites: completion of undergraduate major in anthropology and/or graduate standing. Basic theoretical positions and methodological spectrum in biological anthropology.

507 Grammatical Analysis (3)
(Same as Linguistics 507)

511 Theory and Method in Biological Anthropology (3)
Prerequisites: completion of undergraduate major in anthropology and/or graduate standing. Basic theoretical positions and methodological spectrum in biological anthropology.

512 Theory and Method in Archaeology (3)
Prerequisites: completion of undergraduate major in anthropology and/or graduate standing. Basic theoretical positions and methodological spectrum in archaeological anthropology.

513 Theory and Method in Cultural/Linguistic Anthropology (3)
Prerequisites: completion of undergraduate major in anthropology and/or graduate standing. Basic theoretical positions and methodological spectrum in cultural and linguistic anthropology.

527 Project (3,6)
Prerequisites: graduate standing and consent of project adviser. Completion of a project derived from original field or laboratory research, and/or from library study. Project could also be a museum exhibit, field report or other project. A copy of the approved written component of the project must be filed in the department through the department graduate program adviser. May be repeated for credit to a maximum of six units.

598 Thesis (3,6)
Prerequisites: graduate standing and consent of thesis adviser. Completion of a thesis derived from original field or laboratory research, and/or from library study. A copy of the approved thesis must be submitted to the department through the department graduate program adviser, and a copy of the thesis must be approved by the University Graduate Studies Office for submission to the bookstore for binding and microfilming. May be repeated for credit to a maximum of six units.

599 Independent Graduate Research (1-3)
Prerequisite: consent of adviser. Individual research involving fieldwork, laboratory, or library study, and conferences with a project adviser as necessary, and resulting in one or more papers. May be repeated for credit.
INTRODUCTION

Accredited by the National Association of Schools of Art and Design since 1974, the Department of Art offers programs that include the scholarly fields of art history, theory, analysis and criticism; the studio fields of drawing and painting, entertainment art/animation, printmaking, sculpture, crafts (including jewelry, wood and metal), ceramics (including glass), graphic design, creative photography, illustration and exhibition design; and the single subject teaching field of art education.

Curricular plans for the Bachelor of Arts and the Bachelor of Fine Arts have been developed to meet the individual needs and interests of students in art.

The general objectives of the programs are to provide a comprehensive learning environment that contributes conceptually and technically to the development of the art historian, the visual artist and the art teacher. Specifically, the programs provide opportunities for students to: (1) develop a knowledge and understanding of fundamental visual experience and concepts basic to many forms and fields of art; (2) develop a critical appreciation of historical and contemporary art forms as they relate to individual and social needs and values; (3) creatively express one’s personal experience and thought with visual skill and clarity; (4) develop knowledge and skills necessary to pursue graduate studies in visual arts, or to teach art; and (5) develop the understanding and expertise applicable to professional practice.

FACULTY


ADVISERS

Undergraduate: Contact department office.
Graduate: Mike McGee

BACHELOR OF ARTS IN ART

The 120-unit Bachelor of Arts degree offers concentrations in Art History, General Studio Art and Teaching. The program objectives are to provide correlative experiences, information and theory.

The Art History concentration emphasizes the area of art history, theory and appreciation and is particularly recommended for those students who wish to pursue graduate studies in art history or museum studies.

The General Studio Art concentration is a varied curriculum that provides a broad education in the visual arts.

The Teaching Concentration prepares students to meet the requirements for admission to the Credential Program teaching art, grades K-12. Students are encouraged to work with

DEPARTMENT CHAIR
Larry Johnson

DEPARTMENT OFFICE
Visual Arts 102

DEPARTMENT WEBSITE
http://www.fullerton.edu/arts/art

PROGRAMS OFFERED

Bachelor of Arts in Art
  Art History
  General Studio Art
  Teaching

Bachelor of Fine Arts in Art
  Ceramics
  Crafts
  Creative Photography
  Drawing and Painting
  Entertainment Art/Animation
  Graphic Design
  Illustration
  Printmaking
  Sculpture

Minor in Art

Master of Arts in Art
  Drawing and Painting (including Printmaking)
  Sculpture
  Crafts (including Ceramics, Glass, Wood, Jewelry/Metalsmithing)
  Design (including Graphic Design, Illustration, Exhibition Design, Creative Photography)

Master of Fine Arts in Art
  Drawing, Painting and Printmaking
  Sculpture
  Ceramics (including Glass)
  Crafts (including Jewelry/Metalsmithing, and Woodworking)
  Design (including Graphic Design, Illustration and Exhibition Design)
  Creative Photography
  Certificate in Museum Studies
the department adviser and/or the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, major and electives.

In addition to the requirements listed below for the major, students must meet the other university requirements for a Bachelor of Arts degree. Students in the Teaching Concentration must also meet specific requirements for the desired teaching credential.

All art majors must take Art 300, Writing in the Visual Arts, and pass the university's Examination in Writing Proficiency (EWP) after achieving junior standing (60 units). Testing dates for the EWP are available from the Testing Center or the Academic Advisement Center.

To earn a Bachelor of Arts in Art students must achieve grades of “C” (2.0) or better in all art courses required for the degree.

**ART HISTORY CONCENTRATION**

**Preparation for the major (lower division - 21 units)**
- Art 201A,B Art and Civilization (3,3)
- Lower-division studio courses (3,3)
- Approved electives in art, American studies, anthropology, history, literature, music, philosophy or theatre (3,3,3)

**The major (upper division - 33 units)**
- Art 300 Writing in the Visual Arts (3)
- Art 480T Selected Topics in Art History (3)
- Art 481 Seminar in Art History (3)
- Approved upper-division elective (3)

**Upper-division art history (21)**

**GENERAL STUDIO ART CONCENTRATION**

**Lower Division (27 units)**
- Art 103 Two-Dimensional Design (3)
- Art 104 Three-Dimensional Design (3)
- Art 107A,B Beginning Drawing and Painting (3,3)
- Art 117 Life Drawing (3)
- Art 201A,B Art and Civilization (3,3)
- Art Electives (3,3)

Select at least two courses from two of the following areas: graphic design; entertainment art/animation; illustration; printmaking; creative photography; sculpture; ceramics; crafts; drawing and painting.

**Upper Division (27 units)**
- Art 300 Writing in the Visual Arts (3)
- Art History (3,3)

**Studio Area (12 units)**

Select one course from each of the following: drawing and painting; sculpture, creative photography, printmaking; crafts and ceramics; graphic design, illustration, entertainment art/animation.

**Electives (3,3)**

Choose two courses from at least two different categories of the following: drawing and painting; printmaking; creative photography; sculpture; crafts; glass; ceramics; graphic design; illustration; exhibition design; art education; entertainment art/animation.

**TEACHING CONCENTRATION**

**Single Subject Instruction**

(Qualifies for Teaching Art in Grades K-12)

**Preparation for the major (lower division - 30 units)**
- Art 103 Two-Dimensional Design (3)
- Art 104 Three-Dimensional Design (3)
- Art 106A Beginning Ceramics (3)
- Art 107A,B Beginning Drawing and Painting (3,3)
- Art 117 Life Drawing (3)
- Art 201A,B Art and Civilization (3,3)
- Art 205A Beginning Crafts (3)
- Art 207A Drawing and Painting (3)

**Major requirements (upper division - 24 units)**

Select Drawing and Painting, Crafts, or Creative Photography and Computer Design Emphasis.

**Drawing and Painting Emphasis**
- Art 300 Writing in the Visual Arts (3)
- Art 307A Drawing and Painting (3)
- Art 310A Watercolor (3)
- Art 312 Modern Art (3)
- Art 317A Life Studies, Drawing and Painting (3)
- Art 347A Printmaking Etching (3)
- Art 363B Illustration (3)
- Art 441 Media Exploration for Teaching Art (3)

**Crafts Emphasis**
- Art 300 Writing in the Visual Arts (3)
- Art 305A Advanced Crafts (3)
- Art 306A,B Advanced Ceramics (3,3)
- Art 312 Modern Art (3)
- Art 315A Jewelry (3)
- Art 363B Illustration (3)
- Art 441 Media Exploration for Teaching Art (3)

**Creative Photography and Computer Design Emphasis**
- Art 300 Writing in the Visual Arts (3)
- Art 338A,B Creative Photography (3,3)
- Art 363B Illustration (3)
- Art 441 Media Exploration for Teaching Art (3)
Art 478 Studio Expanded: Other Genre (3)
Art History (3)

Select one course from the following:
Art 483E Computer Assisted Graphics (3)
Art 483F Design for Interactive Art (3)

Credential Requirements
The B.A. in Art (Teaching Concentration) may be effectively combined with subject matter studies necessary for either the multiple subject teaching credential (K-8) or single subject credential (7-12) in art. Undergraduates are encouraged to work with the faculty adviser in art and the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the concentration and electives. With careful planning it may be possible to take certain education courses in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) for information on attending an overview presentation.

General Program Requirements
1. Be advised by a faculty adviser in art education
2. Fulfill credential requirements listed in the credential program section of the catalog (see “Teacher Education” or “Credentials” in the index)
3. Meet the requirements listed under the Teaching Concentration
4. Apply and be admitted to a credential program prior to enrollment in Art Ed 442, professional education courses and student teaching. Contact the Admission to Teaching Education office in the College of Education.
5. Be accepted for teacher education and student teaching based on candidate quotas, portfolio review and evidence of success in completed university coursework.
6. Be recommended by the faculty adviser in art education
7. Complete Secondary Education prerequisites 310 and 320 or equivalents prior to applying to the teacher education program for the Single Subject credential
8. Pass C-BEST exam prior to admission to the credential program
9. Complete Secondary Education prerequisites 330, 340 and 404/407 before extern semester
10. Have a G.P.A. of 2.89 overall, 3.0 in major.

Single Subject Credential Preparation
First semester (extern): 15 units
Second semester (intern): 15 units

Upon completion of above program, the student is eligible for a partial or preliminary credential. A clear credential requires nine additional units of state-mandated courses within a specified period of time.

Multiple Subject Credential Preparation
The following three courses are recommended for all students intending to teach in elementary schools in multiple subject classrooms.
Art 380 Art and Child Development (3)
Music 333 Music and Child Development (3)
Theatre 402 A or B Dramatic Activities for Children (3)

The following additional courses are strongly recommended for students who wish to expand their knowledge in any or all of the arts:
Dance 101, 112, 122, 132, 142, 323A,B, 422
Music 111, 281B,P,S, 283
Theatre 100, 263A,B, 276, 277, 370A,B, 402A,B, 403A,B

BACHELOR OF FINE ARTS IN ART

The Bachelor of Fine Arts degree is a professional program providing directed studies in nine studio concentrations within the visual arts. The program is designed for students seeking in-depth preparation for specialized goals selected from one of the following areas: ceramics, crafts, creative photography, drawing and painting, entertainment art/animation, graphic design, illustration, printmaking and sculpture. The program develops the understanding and advanced specialized skills applicable to professional practice and to meet entrance requirements to graduate school.

Admission Requirements
Upon admission to the University as an art major, students are placed in the Bachelor of Arts category, whether entering as a freshman or transferring from a community college. Upon proof of completion of the 12 lower-division studio units listed below with a “B” (3.0) or better grade point average, students may contact the Art Department for changing their academic objective to the Bachelor of Fine Arts in Art.
Art 103 Two-Dimensional Design (3)
Art 104 Three-Dimensional Design (3)
Art 107A Beginning Drawing (3)
Art 107B Beginning Painting (3)

Program Requirements
The 132-unit Bachelor of Fine Arts degree program requires a minimum of 81 units in art. The 12 units of studio art “Admission Requirements” plus 12 units of Art History and 57 units of art. The major is divided into 21 units of lower-division preparation and 48 upper-division units. In addition to the minimum 69-unit requirement for the B.F.A. degree, students must meet the other university requirements for a bachelor’s degree (see the University Catalog and Class Schedule).

To earn a Bachelor of Fine Arts in Art, students must achieve grades of “C” (2.0) or better in all art courses required for the degree.
In addition to Art 300 Writing in the Visual Arts (“below”), students must also take and pass the Examination in Writing Proficiency (EWP).
CERAMICS CONCENTRATION
Preparation (lower division - 21 units)
Art 106A,B Beginning Ceramics (3,3)
Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Lower-division studio electives (3,3)

Concentration (upper division - 48 units)
Art 300 Writing in the Visual Arts* (3)
Art 306A,B Advanced Ceramics (3,3)
Art 326A,B Ceramic Sculpture (3,3)
Art 424A,B Glass Blowing (3,3)
Art 484A or 484B or Art 484C Special Studies in Ceramics and Glass (3,3,3)
Upper-division art history electives (3,3)*
Upper-division studio art electives (3,3,3,3)*

CRAFTS CONCENTRATION
Preparation (lower division - 21 units)
Art 123 Descriptive Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 205A,B Beginning Crafts (3,3)
Lower-division studio electives (3,3)*

Concentration (upper division - 48 units)
Art 300 Writing in the Visual Arts* (3)
Art 305A,B Advanced Crafts (3,3)
Select 12 units from:
Art 306A,B Advanced Ceramics (3,3)
Art 315A,B Jewelry (3,3)
Art 330 Creative Papermaking (3)
Art 364A Stained Glass (3)
Art 364B Stained Glass/Kiln Working (3)
Art 385A,B,C,or F Special Studies in Crafts (3,3)
Art 495 Internship in Art (3)
Upper-division art history electives (3,3)*
Upper-division studio art electives (3,3,3,3)*

CREATIVE PHOTOGRAPHY CONCENTRATION
Preparation (lower division - 21 units)
Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 238 Photo Visual Concepts (3)
Art 247 Introduction to Linoleum and Woodcut Prints (3)
Lower-division studio electives (3,3)*

Concentration (upper division - 48 units)
Art 300 Writing in the Visual Arts* (3)
Art 338A,B Creative Photography (3,3)
Art 348 Artists’ Books (3)
Art 410 The Digital Studio (3)
Art 418 Seminar in Creative Photography (3)
Art 439 Creative Photo Studio Projects (3)
Art 478 Studio Expanded: Other Genre (3)
Art 489 Special Studies, Creative Photo (3,3)
Upper-division art history electives (3,3)*
Upper-division studio art electives (3,3,3,3)*

DRAWING AND PAINTING CONCENTRATION
Preparation (lower division - 21 units)
Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 207A,B Drawing and Painting (3,3)
Lower-division studio electives (3,3)

Concentration (upper division - 48 units)
Art 300 Writing in the Visual Arts* (3)
Art 307A,B Drawing and Painting (3,3)
Art 317A,B Life Studies, Drawing and Painting (3,3)
Art 487A Special Studies, Painting (3)
Art 487B Life Studies, Drawing and/or Painting (3)
Select nine units from the following:
Art 487A,B and/or C (3,3,3)
Upper-division art history electives (3,3)*
Upper-division studio art electives (3,3,3,3)*

ENTERTAINMENT ART/ANIMATION CONCENTRATION
Preparation (lower division - 21 units)
Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 217 Life Drawing for Animation (3)
Art 253 Introduction to Traditional Animation (3)
Art 255 Introduction to 3D Computer Animation (3)
Lower-division Studio Electives (3)*

Concentration (upper division - 48 units)
Art 300 Writing in the Visual Arts* (3)
Art 317A Life Studies, Drawing and Painting (3)
Art 337 Animal and Wildlife Drawing (3)
Art 353A Drawing for Animation (3)
Art 353B Animation (3)
Art 487E  Special Studies in Entertainment Art/Animation (3)

Select nine units from:

Art 317B  Life Studies, Drawing and Painting (3)
Art 317C  Sculpting Life Forms (3)
Art 318A  Drawing and Painting the Head and Hands (3)
Art 353A  Drawing for Animation (3)
Art 353B  Animation (3)
Art 355  3D Computer Animation (3)
Art 367  Elements of Sequential Art (3)
Art 373  Cartooning and Caricature (3)
Art 483B  Pictorial Background (3)
Art 483C  Special Studies in Illustration (3)
Art 483I  Motion Graphics Design (3)
Art 487E  Special Studies in Entertainment Art/Animation (3)
Art 487S  Special Studies in Sequential Art (3)
Art 495  Internship in Art (3)

Select three units from:

Art 483B  Pictorial Background (3)
Art 483C  Special Studies in Illustration (3)
Art 487E  Special Studies in Entertainment Art/Animation (3)
Art 487S  Special Studies in Sequential Art (3)
Art 495  Internship in Art (3)

GRAPHIC DESIGN CONCENTRATION
Preparation (lower division - 21 units)

Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 223A,B Lettering and Typography (3,3)
Art 223C  Typography into Graphic Design (3)
Lower-division studio electives (3,3)

Concentration (upper division - 48 units)

Art 300 Writing in the Visual Arts* (3)
Art 317A,B Life Studies, Drawing and Painting (3,3)
Art 318A Drawing and Painting the Head and Hands (3)
Art 323A Graphic Design (3)
Art 363A,B Illustration (3,3)
Art 483C Special Studies in Illustration (3,3)
Art 495 Internship in Art (3)
Upper-division art history electives (3,3)*
Upper-division studio art electives (3,3,3,3)*

PRINTMAKING CONCENTRATION
Preparation (lower division - 21 units)

Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 207A Drawing and Painting (3)
Art 247 Introduction to Linoleum and Woodcut Prints (3)
Lower-division studio electives (3,3)*

Concentration (upper division - 48 units)

Art 300 Writing in the Visual Arts* (3)
Art 307A,B Drawing and Painting (3,3)
Art 317A,B Life Studies, Drawing and Painting (3,3)
Art 338A Creative Photography (3)
Art 347A Printmaking Etching (3)
Art 347B Printmaking Lithography (3)
Art 487D Special Studies in Printmaking (3,3)
Upper-division art history electives (3,3)*
Upper-division studio art electives (3,3,3,3)*

SCULPTURE CONCENTRATION
Preparation (lower division - 21 units)

Art 117 Life Drawing (3)
Art 201A,B Art and Civilization (3,3)
Art 216A,B Beginning Sculpture (3,3)
Lower-division studio electives (3,3)*
Concentration (upper division - 48 units)
Art 300 Writing in the Visual Arts* (3)
Art 316A,B Sculpture (3,3)
Art 317A,B or C Life Studies, Drawing and Painting; Sculpting Life Forms (3,3)
Art 326A Ceramic Sculpture (3)
Art 336 Moldmaking and Cast Sculpture (3)
Art 346 Kinetic Sculpture (3)
Art 486A Modeling and Fabrication (3,3)
Upper-division art history (3,3)*
Upper-division studio art electives (3,3,3,3)*

ELECTIVES FOR ALL CONCENTRATIONS
Following are lists of lower-division Studio electives, upper-division Studio Art electives, and upper-division Art History electives, which may be used in any of the preceding concentrations.

Lower-Division Studio Electives
Art 106A,B Beginning Ceramics (3,3)
Art 117 Life Drawing (3)
Art 123 Descriptive Drawing (3)
Art 205A,B Beginning Crafts (3,3)
Art 207A,B Drawing and Painting (Experimental Methods and Materials) (3,3)
Art 216A,B Beginning Sculpture (3,3)
Art 217 Life Drawing for Animation (3)
Art 223A,B Lettering and Typography (3,3)
Art 223C Typography into Graphic Design (3)
Art 238 Photo Visual Concepts (3)
Art 247 Introduction to Linoleum and Woodcut Prints (3)
Art 253 Introduction to Traditional Animation (3)
Art 255 Introduction to 3D Computer Animation (3)
Art 263 Perspective Drawing (3)

Upper-Division Studio Art Electives
Art 305A,B Advanced Crafts (3,3)
Art 306A,B Advanced Ceramics (3,3)
Art 307A,B Drawing and Painting (3,3)
Art 310A,B Watercolor (3,3)
Art 315A,B Jewelry (3,3)
Art 316A,B Sculpture (3,3)
Art 317A,B Life Studies, Drawing and Painting (3,3)
Art 317C Sculpting Life Forms (3)
Art 318A Drawing and Painting the Head and Hands (3)
Art 318B Portraiture (3)
Art 323A,B Graphic Design (3,3)
Art 324 Beginning Glass Casting (3)
Art 326A,B Ceramic Sculpture (3,3)
Art 330 Creative Papermaking (3)
Art 336 Moldmaking and Cast Sculpture (3)
Art 337 Animal and Wildlife Drawing (3)
Art 338A,B Creative Photography (3,3)
Art 346 Kinetic Sculpture (3)
Art 347A Printmaking Etching (3)
Art 347B Printmaking Lithography (3)
Art 348 Artists' Books (3)
Art 353A Drawing for Animation (3)
Art 353B Animation (3)
Art 355 3D Computer Animation (3)
Art 357 Woodcuts and Monotypes (3)
Art 363A,B Illustration (3,3)
Art 363C Advanced Digital Illustration (3)
Art 364A Stained Glass (3)
Art 364B Stained Glass/Kiln Working (3)
Art 367 Elements of Sequential Art (3)
Art 373 Cartooning and Caricature (3)
Art 380 Art and Child Development (3)
Art 410 The Digital Studio (3)
Art 424A,B Glass Blowing (3,3)
Art 439 Creative Photo Studio Projects (3)
Art 448 Special Studies: Artists' Books (3)
Art 453A,B Exhibition Design (3,3)
Art 478 Studio Expanded: Other Genre (3)
Art 483A Special Studies in Graphic Design (3)
Art 483B Pictorial Background (3)
Art 483C Special Studies in Illustration (3)
Art 483D Special Studies in Exhibition Design (3)
Art 483E Computer Assisted Graphics (3)
Art 483F Design for Interactive Art (3)
Art 483G Entertainment Graphics (3)
Art 483H Plein-air Painting and Location Drawing (3)
Art 483I Motion Graphics Design (3)
Art 484A Special Studies in Ceramics and Glass: Ceramics (3)
Art 484B Special Studies in Ceramics and Glass: Glass Blowing (3)
Art 484C Special Studies in Ceramics and Glass: Glass Casting (3)
Art 485A Special Studies in Crafts: Jewelry (3)
Art 485B Special Studies in Crafts: General Crafts (3)
Art 485C Special Studies in Crafts: Metalsmithing (3)
Art 485F Special Studies in Crafts: Papermaking (3)
Art 486A Special Studies in Sculpture: Modeling and Fabrication (3)
Art 486B Special Studies in Sculpture: Casting (3)
Art 487A Special Studies in Painting (3)
Art 487B Life Studies: Drawing and/or Painting (3)
Art 487C Special Studies in Drawing (3)
Art 487D Special Studies in Printmaking (3)
Art 487E Special Studies in Entertainment Art/Animation (3)
Art 487S Special Studies in Sequential Art (3)
Art 489 Special Studies in Creative Photography (3)

Upper-Division Art History Electives
Art 301 Ancient Art (3)
Art 302 Medieval Art (3)
Art 311 Foundations of Modern Art (3)
Art 312 Modern Art
Art 320 History of Architecture Before the Modern Era (3)
Art 401 History of Women Artists (3)
Art 413 History of Contemporary Art (3)
Art 431 Renaissance Art (3)
Art 460 Pre-Columbian Art (3)
Art 461 American Art: 20th Century (3)
Art 462 Latin American Art from 1800 to the 1950s (3)
Art 463 Native North American Art (3)
Art 464 Museum Conservation (3)
Art 465 Art of Sub-Saharan Africa (3)
Art 466 Museum Education (3)
Art 470 History and Aesthetics of Photography (3)
Art 472 Native Arts of California and the Southwest (3)
Art 475 Professional Practices in the Arts (3)
Art 480T Selected Topics in Art History (3)
Art 481 Seminar in Art History (3)

MINOR IN ART
Twenty-four units with a grade of "C" (2.0) or better are required for a minor in art; a minimum of 12 units are to be in upper-division courses in residence. A basic course in each of the following areas is required: art history, theory, analysis and criticism; design; drawing and painting; and crafts.

Recommended courses to meet the "basic courses" requirement are: Art 201A or B; Art 103 or 104; Art 107A or B; Art 106A or 205A. Completion of these courses will provide a reasonable foundation for entry into upper-division courses. Students planning to qualify for a standard teaching credential specializing in elementary or secondary teaching with art as a minor must obtain approval from the Art Department.

MASTER OF ARTS IN ART
This program provides a balance of study and practice for those who wish a career in the visual arts, or who want to prepare for further graduate work in the field. The program offers the following areas of concentration: drawing and painting (including printmaking); sculpture; crafts (including ceramics, wood, glass, jewelry/metalsmithing); design (including graphic design, illustration, exhibition design, creative photography); and art history.

Application Deadlines
The deadlines for completing online applications to the university are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

The Art Department also has a supplemental application process required for all prospective graduate students. See http://www.fullerton.edu/arts/art for further information.

Admission Requirements
1. Classified standing:
   a. A baccalaureate degree in art with the same concentration as the graduate degree objective from an accredited institution, or 24 upper-division units in art of which 12 units must be in a concentration completed with grades of "B" (3.0) or better. Applicants are advised that most upper-division courses require lower-division prerequisites. A faculty adviser should be consulted with regard to recommended courses.
   b. GPA minimum of 2.5 in the last 60 semester units attempted
   c. Pass comprehensive review: held semiannually, the comprehensive review is an evaluation of the candidate by a committee comprising faculty teaching in the area of concentration. The committee reviews the student’s creative work, statement of purpose, academic and other relevant qualifications; assigned research papers are required of art history applicants in lieu of a portfolio. Procedures, dates and appointment times are available through the art department graduate secretary.
   d. Form a graduate committee
   e. Development of an approved study plan
   f. Art history program: reading knowledge of a foreign language is required before advancement to candidacy

2. Conditionally classified standing: The same requirements as a and b above, plus:
   a. Studio program: Participation in comprehensive portfolio review with a recommendation by the committee of conditional acceptance.
   b. Art History program: Satisfactory review of research papers by art history faculty
c. Enrollment is allowed in graduate-level courses with the exception of Art 500A,B; 511; 512; 597; and 598
d. Passing the comprehensive review will be required for classified standing

Study Plan

The degree program requires 30 units of graduate study approved by the student’s graduate committee, of which 15 must be 500-level courses. The M.A. study plan must be completed with no grade below "C" (2.0), a "B" (3.0) average, and "B" (3.0) or better in all courses in the area of concentration. The 30 units are distributed as follows:

1. Core courses in art history, philosophy, analysis and criticism (9 units)
   a. Studio program:
      Art 500A Graduate Seminar in Major Field (3)
      Art 500B Graduate Seminar in Major Field (3)
      (ADMISSION WITH CLASSIFIED STANDING ONLY)
   b. Art history program:
      Art 511 Seminar on the Content and Method of Art History (3)
      Art 512 Seminar on Selected Topics in Art History (3)
      (ADMISSION WITH CLASSIFIED STANDING ONLY)
   c. 400-level course in art history, theory, analysis or criticism on the recommendation of the major adviser.
2. Concentration (12 units) 500-and/or 400-level courses in an area of concentration (minimum of six units at 500-Level)
3. Additional coursework in the area of concentration or approved electives (3 or 6 units)
4. Art 597 Project (3) for studio; or Art 598 Thesis (6) for art history Every graduate student is required to demonstrate writing ability commensurate with the baccalaureate degree. Two graduate seminars are certified to fulfill this university requirement.

The Department of Art requires the studio candidate for the Master of Arts in Art to exhibit the project in one of the department’s graduate galleries. The art history candidate is required to submit a written thesis based on a specific topic of research.

For further information, consult the graduate program adviser and read the University Graduate Regulations section of this catalog.

MASTER OF FINE ARTS IN ART

The Master of Fine Arts in Art features a rigorous studio program for the serious, responsible and talented student. The curriculum and faculty challenge students to focus on the goal of becoming professional artists.

The M.F.A. program provides in-depth study within a 60-unit approved study plan in the following areas of concentration: design (including graphic design, illustration, and exhibition design); ceramics (including glass); crafts (including jewelry/metal smithing and woodworking); sculpture; drawing, painting, and printmaking; and creative photography.

Admission Requirements

1. Classified standing:
   a. Baccalaureate degree in art with the same concentration as the graduate degree objective from an accredited institution, or 24 upper-division units in art, 18 of which must be in the concentration completed with grades of “B” (3.0) or better. Applicants are advised that most upper-division courses require lower-division prerequisites.
   b. Minimum grade-point average of 2.5 in the last 60 units attempted and has been in good standing at the last college attended.
   c. Pass the comprehensive portfolio review: Held semi-annually, the comprehensive portfolio review is an evaluation of the candidate by a committee comprising faculty teaching in the area of concentration. The committee reviews the student’s creative work, statement of purpose, academic and other relevant qualifications. Procedures, dates and appointment times are available through the Art Department Graduate Office. If the student’s portfolio is not adequate, the applicant may still be recommended for conditionally classified standing by the faculty comprehensive review committee. However, the comprehensive portfolio review must be repeated.
   d. Form a graduate committee.
   e. Develop an approved study plan.
2. Conditionally Classified standing:
   Conditionally classified students may enroll in graduate courses with the exception of Art 500A,B; 511, 512, 597; and 598. The comprehensive portfolio review must be repeated and passed to be recommended for classification.

Application Deadlines

Deadlines for completing online applications to the university are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

The Art Department also has a supplemental application process. See http://www.fullerton.edu/arts/art for further information.

Study Plan

The M.F.A. degree program requires 60 units of graduate study. The study plan must be completed with grades of “C” (2.0) or better, an overall “B” (3.0) average or better and grades of “B” (3.0) or better in the concentration. Every graduate student is required to demonstrate writing ability commensurate with the baccalaureate. Two graduate seminars are certified to fulfill this university requirement. The 60-unit study plan is distributed as follows:

Areas (60 units total)
   Theory, Criticism: Art 500A, 500B (6)
   Art History (9)
Studio Area of Concentration (24)
Studio Electives in Art (12)

Capstone Experience:
Independent Study: Research (3)
Studio Project (6)

Master of Fine Arts Project
The M.F.A. project exhibition constitutes a professional one-person art exhibit. It is installed in one of the department’s graduate galleries and announced for public view by the student as the final phase of the M.F.A. program requirements.

POSTBACCALAUREATE UNCLASSIFIED
Students who do not have the prerequisites to qualify for the graduate program may apply to the university as a postbaccalaureate-unclassified student. Typically, students in this category have a bachelor’s degree in art but need to meet the prerequisites for a different concentration; or did not major in art and must complete courses for the 24 upper-division art unit requirement. To qualify for admission, an applicant must hold a baccalaureate degree from an accredited institution, have attained a grade-point average of at least 2.5 in the last 60 units attempted and have been in good standing at the last college attended. Admission with postbaccalaureate standing does not constitute admission to the art graduate program or graduate degree curricula.

CERTIFICATE IN MUSEUM STUDIES
Courses leading to the certificate are designed to educate students in museum practices in preparation for entry into the museum profession. The curriculum includes instruction in the historical development and philosophical basis of collections, exhibitions and their design, and curatorship. A museum internship is required. The certificate in museum studies may be undertaken as a self-contained program or in conjunction with the Master of Arts in Art degree or the Master of Fine Arts in Art degree or, by special permission, with other graduate degrees in the university. (For an M.A. or M.F.A. in Art degree with an exhibition design emphasis, see M.A. and M.F.A. emphases under the design concentration.)

Prerequisites
1. B.A. in Art or other major by special permission
2. Specific course prerequisites:
   a. 12 units in upper-division art history
   b. 6 units in design and exhibition design
   c. 3 units of advanced writing (Communications 435 Editorial and Critical Writing; or Communications 362 Public Relations Writing; or English 301 Advanced College Writing)
   d. 3 units of beginning accounting

Study Plan
The certificate program requires 24 units. The 24 units are distributed as follows:
Art 464 Museum Conservation (3)
Art 481 Seminar in Art History (3)
Art 483D Exhibition Design (3)
Art 495 Internship in Art (3)
Art 501 Curatorship (3)
Art 503D Exhibition Design (3,3)
Course in museum education (3)

For further information, consult the Department of Art.

ART COURSES
Courses are designated as ART in the class schedule.

101 Introduction to Art (3)
Historical and contemporary art forms of painting, sculpture, architecture and design. Field trips required. Not open to art majors for credit except by permission of Art Department. (3 hours lecture)

103 Two-Dimensional Design (3)
Art concepts, aesthetic elements and materials of two-dimensional design and visual organization. (6 hours activity)

104 Three-Dimensional Design (3)
Art concepts, aesthetic elements and materials of three-dimensional design and spatial organization. (6 hours activity)

106A Beginning Ceramics (3)
Form as related to ceramic materials, tools, processes. Kiln loading and firing, hand building, wheel throwing and raku. (9 hours laboratory)

106B Beginning Ceramics (3)
Prerequisite: Art 106A. Form as related to ceramics. Glaze batching and its application, and the presentation of ceramic technique. (9 hours laboratory)

107A Beginning Drawing (3)
Traditional and contemporary use of drawing materials integrated with visual experiences and art concepts. (6 hours activity)

107B Beginning Painting (3)
Traditional and contemporary use of painting materials integrated with visual experiences and art concepts. (6 hours activity)

117 Life Drawing (3)
Drawing the live model. (3 hours activity)

123 Descriptive Drawing (3)
Descriptive drawing, rendering techniques and theories representing forms of nature. (6 hours activity)
201A, B  Art and Civilization (3,3)
Ideas, forms and styles of the visual arts as they developed in various cultures from prehistoric time to the present. (3 hours lecture)

205A  Beginning Crafts (3)
Prerequisites: Art 103, 104. Pre- or corequisite: Art 104. Traditional and contemporary concepts and processes with emphasis on design principles in the development of aesthetic forms based on function. (9 hours laboratory)

205B  Beginning Crafts (3)
Prerequisite: Art 205A. Development of esthetic forms based on function, with emphasis on design principles and the creative use of hand tools and power equipment. (9 hours laboratory)

207A,B  Drawing and Painting (Experimental Methods and Materials) (3,3)
Prerequisites: Art 107A,B, 117 or equivalents. Traditional and contemporary concepts, methods and materials. (6 hours activity)

216A,B  Beginning Sculpture (3,3)
Prerequisite: Art 104. Creative use of wood and metal, power equipment and hand tools. (9 hours laboratory)

217  Life Drawing for Animation (3)
Prerequisite: Art 117. Continuing course of the human figure. Develops animation student’s skills of drawing from observation. May be repeated once for credit. (6 hours activity)

223A  Lettering and Typography (3)
Prerequisite: Art 103. History, design and use of letter forms; the rendering and use of hand-lettered forms. (6 hours activity)

223B  Lettering and Typography (3)
Prerequisites: Art 103 and 223A or equivalents. History, design and use of letter forms; techniques for rough and comprehensive layouts, and introduction to computer graphics. (6 hours activity)

223C  Typography into Graphic Design (3)
Prerequisites: Art 103 and 223A. Technology and its application to typographic and graphic design solutions. Conceptual understanding of current technology as medium and tool in the creative process. (6 hours activity)

224  Introduction to Glassblowing (3)
Prerequisite: Art 103 and/or 104. Introduces processes of art-making with hand blown glass as the medium. Historical and creative processes from concept to design to the execution of well-crafted glass projects.

238  Photo Visual Concepts (3)
Prerequisite: Art 103. Introductory photography course for art majors. Includes the study of photographic vision and design, visual conceptualization and examination of the qualities of light through the use of instant and automatic cameras. (9 hours laboratory)

247  Introduction to Linoleum and Woodcut Prints (3)
Prerequisites: Art 107A,B. Woodcut, linocut and monoprint as a medium of personal expression. (9 hours laboratory)

253  Introduction to Traditional Animation (3)
Prerequisites: Art 103, 104, 117, 217. Principles and practices of traditional animation techniques ranging from the fundamentals of squash, kinetics and acting. (6 hours activity)

255  Introduction to 3D Computer Animation (3)
Prerequisites: Art 103, 104, and 107A,B. Introduction to the art of creating three-dimensional digital character animation. (9 hours activity)

263  Perspective Drawing (3)
Prerequisites: Art 103 or 123 or equivalents. Introduction to linear perspective systems used to develop and place natural and fabricated forms in space on a two-dimensional surface. Integrated with methods and techniques of rendering light, shadow and reflection on varied subject matter, including the human figure. (6 hours activity)

300  Writing in the Visual Arts (3)
Prerequisite: junior standing. Principles, practices and objectives of writing in the visual arts. Includes descriptive, analytical and expressive essays; project and grant proposals; artist’s statements; resumes; and professional correspondence. Satisfies the classroom portion of the upper-division writing requirements for art majors.

301  Ancient Art (3)
Developments in art from the Paleolithic to late antiquity.

302  Medieval Art (3)
Developments in art from the late antiquity through the Gothic.

305A,B  Advanced Crafts (3,3)
Prerequisites: Art 205A,B. Advanced concepts and processes in the development of esthetic forms based on function, emphasizing individual growth and personal expression. (9 hours laboratory)

306A,B  Advanced Ceramics (3,3)
Prerequisites: Art 103, 104 and 106A,B. Forms and the creative use of ceramic concepts and materials; design, forming, glazing and firing. (9 hours laboratory)

307A,B  Drawing and Painting (3,3)
Prerequisites: Art 107A,B, 117, and 207A,B or equivalents. Concepts, materials and activities of drawing and painting, emphasizing individual growth, plan and craft. (6 hours activity)

310A,B  Watercolor (3,3)
Prerequisites: Art 107A,B or equivalents. Watercolor media related to varied subject matter and design applications. Includes field trip activity. Provides skills and concepts useful for school art programs. (6 hours activity)
311 Foundations of Modern Art (3)
Prerequisite: upper-division standing. History of painting and sculpture from the French Revolution to the end of the 19th century.

312 Modern Art (3)
Prerequisite: Art 101, 201A, or 201B, or upper-division standing and Art major. History of painting, graphic arts and sculpture from late 19th century to World War II.

315A,B Jewelry (3,3)
Prerequisites: Art 205A and 305A. Pre- or corequisite: Art 305A. Design and creation of jewelry. (9 hours laboratory)

316A,B Sculpture (3,3)
Prerequisites: Art 104 and 216A. Sculptural materials and processes. (9 hours laboratory)

317A,B Life Studies, Drawing and Painting (3,3)
Prerequisites: three units lower-division life drawing. Drawing and painting from the live model. (9 hours laboratory)

317C Sculpting Life Forms (3)
Prerequisites: Art 103, 104, 117, 217; and 317A or 318A. Three-dimensional investigation of any life form, its characteristics and expressive possibilities. (9 hours laboratory)

318A Drawing and Painting the Head and Hands (3)
Prerequisites: Art 107A,B and 117. Specialized problems in construction and anatomy of the human head and hands, and their principal use in drawing, painting and illustration. (9 hours laboratory)

318B Portraiture (3)
Prerequisites: Art 107A,B. Comprehensive problems in composition, concept, content and execution of portraits. (9 hours laboratory)

320 History of Architecture Before the Modern Era (3)
Prerequisite: upper division standing. Selected monuments from Stonehenge through the late Baroque. Interrelationship between patronage, style, function, structural principles and technological developments.

323A Graphic Design (3)
Prerequisites: Art 223A,B,C or equivalents. Development and projection of ideas in relation to the technical, aesthetic and psychological aspects of advertising art. Intermediate use of computer graphics. (6 hours activity)

323B Graphic Design (3)
Prerequisites: Art 223A,B,C and 323A, or equivalents, or consent of instructor. Development and projection of ideas in relation to the technical, aesthetic and psychological aspects of advertising art. Intermediate use of computer graphics. (6 hours activity)

324 Beginning Glass Casting (3)
Prerequisites: Art 103 and 104. Hot glass laboratory equipment and casting techniques. Introduction to hot pour, sand and kiln casting. (9 hours laboratory)

326A,B Ceramic Sculpture (3,3)
Prerequisites: Art 103, 104, 117. Development of ceramic technology into individual sculptural forms and techniques. (9 hours laboratory)

330 Creative Papermaking (3)
Prerequisites: Art 103 and 104. Use of papers and fibers as an art form. (9 hours laboratory)

336 Moldmaking and Cast Sculpture (3)
Prerequisite: Art 216A. Theories and techniques of rigid and flexible moldmaking incorporated with both cold material and hot metal casting processes. Recommended for concentrations in Entertainment Art/Animation, Ceramics and Crafts; required for Sculpture majors. (9 hours laboratory)

337 Animal and Wildlife Drawing (3)
Prerequisites: Art 107A,B, 117 and 317A. Principles and practices of drawing animals, including construction, anatomy, texture, movement and expression. Fundamentals, historical information and critiques are covered in the classroom; field studies are conducted at various zoos and wildlife habitats. (6 hours activity)

338A Creative Photography (3)
Prerequisite: Art 103 or its equivalent. Photographic media in personal expression. Historical attitudes and processes; new materials and contemporary aesthetic trends. Field trips required. (9 hours laboratory)

338B Creative Photography (3)
Prerequisite: Art 338A. Photographic medium as personal expression. Historical and contemporary aesthetic issues. Exploration of black and white, color and digital media. Field trips required. (9 hours laboratory)

346 Kinetic Sculpture (3)
Prerequisite: Art 216A or 216B. Kinetic sculpture is sculpture in motion. Theory and practice of creating sculpture that uses both motorized and nonmotorized means of activation. History of the medium and basic fabrication techniques. (9 hours laboratory)

347A Printmaking Etching (3)
Prerequisites: Art 107A,B, 117 and 247. Concept development, exploration and materials involved in printmaking techniques. Includes etching and aquatint. (9 hours laboratory)

347B Printmaking Lithography (3)
Prerequisites: Art 107A,B, 117, and 247. Concept development, exploration and materials involved in lithography. (9 hours laboratory)

348 Artists’ Books (3)
Prerequisites: Art 103, 107A or 247. Personal vision and concepts applied to the book form as art; the history and aesthetics of artists' books. (6 hours activity)
353A Drawing for Animation (3)
Prerequisites: Art 117 and 217. Corequisite: Art 317A. Principles and practices of drawing characters, backgrounds and objects for animation. Construction, character design, movement and expression in relation to current studio practice. May be repeated once for credit. (9 hours laboratory)

353B Animation (3)
Prerequisite: Art 353A. Advanced principles and practices of construction, character design, cleanup, movement and expression. Taught in relation to current studio practice. May be repeated once for credit. (9 hours laboratory)

355 3D Computer Animation (3)
Prerequisite: Art 255. Intermediate and advanced instruction in the art of creating three-dimensional digital character animation. May be repeated once for credit. (9 hours laboratory)

357 Woodcuts and Monotypes (3)
Prerequisites: Art 107A,B or equivalents. Woodcut and monotype as a means of personal expression. Traditional, as well as contemporary materials and trends. May be repeated once for credit. (9 hours laboratory)

363A Illustration (3)
Prerequisites: Art 103, 107A,B and 117. Story, book, magazine and film illustration. (6 hours activity)

363B Illustration (3)
Prerequisite: Art 363A. Computer aided illustration. (6 hours activity)

363C Advanced Digital Illustration (3)
Prerequisite: Art 363B. Narrative illustration using advanced digital painting programs and techniques. Theory of illustration concepts, composition and current trends in illustration as it relates to digital media are stressed in this studio course. May be repeated once for credit. (6 hours activity)

364A Stained Glass (3)
Prerequisites: Art 103 and 104. Architectural and autonomous stained glass design and craftsmanship. (6 hours activity)

364B Stained Glass/Kiln Working (3)
Prerequisite: Art 364A. Flat glass fusing and slumping. Designs are fused together in kilns and slumped over or into molds to create sculptural relief and low vessel forms. (6 hours activity)

367 Elements of Sequential Art (3)
Prerequisite: Art 317A. Theory and practice of pictorial narrative in film storyboard and graphic novel. Character and scenic design; story sketch, “breakdown” and production design. Considerations: plot, scene, exposition, transition and continuity. Individual and team projects. May be repeated once for credit. (6 hours activity)

373 Cartooning and Caricature (3)
Prerequisites: Art 107A,B, 117. Principles and practices of cartooning and caricature construction, anatomy and expression. Historical overview of the field with an emphasis on professional applications and the impact of computer graphics. (6 hours activity)

380 Art and Child Development (3)
Prerequisite: completion of General Education Category III.B.1. Art concepts, materials and processes as they relate to child development. (6 hours activity)

401 History of Women Artists (3)
Prerequisite: Art 201B. Study of art made by women in the context of major art historical developments from the 10th century to the present. Analysis of images of women and the evolution of gender stereotypes in art. (3 hours lecture)

410 The Digital Studio (3)
Prerequisite: any 300-level art studio class. Digital imaging as a medium of visual expression. Computer applications for creating and manipulating images are fundamental for the contemporary visual artist. May be repeated once for credit. (6 hours laboratory)

413 History of Contemporary Art (3)
Prerequisites: Art 312 is recommended. Historical perspective of contemporary art beginning with major developments in Europe and the United States in the 1950s. New materials, new exhibition methods, and in particular, the major conceptual issues raised by individual artists and groups.

418 Seminar in Creative Photography (3)
Prerequisite: any 300-level art course. Introduces studio art majors to photographic and media criticism and theory. Provides studio artists with necessary theoretical background and context for creating and understanding their work in current media culture.

424A,B Glass Blowing (3,3)
Prerequisites: Art 103, 104, 324. Creating hand-blown glassware and sculpture from molten glass using traditional and contemporary tools and techniques. Each course may be repeated once for credit. (9 hours laboratory)

431 Renaissance Art (3)
Prerequisite: Art 201B (art majors) or Art 101 (non-art majors). Painting, sculpture and architecture from the late 13th to 16th century in Italy.

439 Creative Photo Studio Projects (3)
Prerequisites: Art 338A,B. Advanced technical class to perfect and refine photographic skills. Integrate technical skills with creative options. May be repeated for credit to a maximum of nine units. (6 hours activity)

441 Media Exploration for Teaching Art (3)
Prerequisites: Art 103, 104, 107A,B, 205A. Art media used in secondary school art programs today. Materials for secondary art curriculum. Two- and three-dimensional media in subject matter applications. (6 hours activity)
448 Special Studies: Artists’ Books and Art (3)
Prerequisites: Art 103, 107A, or 347A or 348. Studio art course for advanced students who want to continue to explore the book form as it relates to their personal aesthetic goals. (6 hours activity)

453A,B Exhibition Design (3,3)
Technical and aesthetic experience in problem-solving exhibition design concepts, evaluation and design analysis. Production of exhibitions in the University Art Gallery; their selection, design, installation, lighting and supportive interpretive material. (More than 9 hours laboratory)

460 Pre-Columbian Art (3)
Prerequisites: Art 201A,B or consent of instructor. Art and architecture of Meso and South America from the early formative stage to the Spanish Conquest. Aesthetic achievement with varying contexts of pre-Columbian culture.

461 American Art: 20th Century (3)
Painting and sculpture in America during the 20th century. Role of the visual arts in helping to define, reflect and challenge American values and institutions.

462 Latin American Art from 1800 to the 1950s (3)
Prerequisite: Art 311 or 312. History of painting, sculpture and the graphic arts in Latin America. Changing relationship to European Modernism and major principles of Latin American cultural and political identity as expressed in art.

463 Native North American Art (3)
Prerequisite: Art 201A. Art and architecture of the Native Peoples of North America from c. AD 1 to the present. Relation between art and culture.

464 Museum Conservation (3)
Prerequisites: Art 453A and 6 units of art history or anthropology. Preservation of objects; the history, role and principles of conservation within a museum context. Three combined sessions at Conservation Center, LACMA; Huntington Library; J. Paul Getty Museum; and Museum of Cultural History, UCLA.

465 Art of Sub-Saharan Africa (3)
Prerequisite: Art 201A. Art and architecture of sub-Saharan Africa from c. 300 BC to present. Relation between art and culture.

466 Museum Education (3)
Prerequisites: 6 units 300-400 Art History or equivalent. History of museum education, its philosophy and issues. Relationship with other museum departments, outreach programs, new technology. Events organization, writing interpretive materials, budgets and grants, conducting tours. Lectures, field trips and guest speakers.

470 History and Aesthetics of Photography (3)
Prerequisites: 201A,B. Photography from ancient optical observations through 19th century invention to 20th century acceptance as an art form. Aesthetic movement and influential innovators. Lectures, slides and class discussion.

472 Native Arts of California and the Southwest (3)
Prerequisites: Art 201A and 463. Native arts and architecture of California and the Southwest from c. 500 BC to present. Relation between art and culture.

475 Professional Practices in the Arts (3)
Prerequisite: Art major with junior or above standing. Practices unique to the visual arts, including an overview of changing concepts in the art market, traditional roles in cultural context, portfolio development, strategies for protecting ideas and avoiding abuses, and long-term professional development.

478 Studio Expanded: Other Genre (3)
Prerequisite: any 400-level studio art course or permission of instructor. Various methods of expanding traditional studio approaches through the investigation of installation, performance and video art. May be repeated for credit to a maximum of 12 units, but no more than 3 units in a single semester. (6 hours activity)

479 Video: Aesthetics and Techniques (3)
Prerequisites: 6 units of upper-division studio art courses. Video as a medium of visual expression. All aspects of fine art video: history, aesthetics, camera work, non-linear editing and post-production techniques. May be repeated for credit for a maximum of 12 units. (9 hours laboratory)

480T Selected Topics in Art History (3)
Prerequisites: Art 201A or B and consent of instructor. Detailed study of the work of individual artists, patronage in particular places, specific pictorial, sculptural and architectural programs or art history periods. Topics will be listed in the class schedule. Repeatable if topic is different.

481 Seminar in Art History (3)
Prerequisites: 6 units upper-division art history or equivalent. Study and evaluation in one area of art history and appreciation. May be repeated once for credit.

483A Special Studies in Graphic Design (3)
Prerequisites: Art 323A and 323B or equivalents. Art 483E is recommended before taking Art 483A. Advanced use of computer graphics. Maximum of 12 units, but no more than 3 units in a single semester without permission of instructors. (6 hours activity)

483B Pictorial Background (3)
Prerequisites: Art 363A plus 3 upper-division units in area emphasis or equivalent. Team collaboration and individual development through exploration of story concepts, research, design and media for rendering and painting background environments. Historical precedents, color theory, perspective, theatrical composition, painting and drawing media, and stylization for dramatic impact. Maximum of 12 units, but no more than 3 units in any one area in a single semester without permission of instructors. (6 hours activity)
483C Special Studies in Illustration (3)
Prerequisites: a minimum of six upper-division units in area of emphasis or equivalent. Maximum of 12 units, but no more than 3 units in any one area in a single semester without permission of instructors. (6 hours activity)

483D Special Studies in Exhibition Design (3)
Prerequisites: a minimum of six upper-division units in area emphasis or equivalent. Maximum of 12 units, but no more than 3 units in any one area in a single semester without permission of instructors. (More than 9 hours laboratory)

483E Computer Assisted Graphics (3)
Prerequisites: Art 323A or Art 363A and consent of instructor. Theory and practice of design using the computer. Numerous applications of the computer through lecture demonstration, studio/laboratory experience, guest speakers and field trips. Maximum of 12 units, but no more than 3 units in a single semester without permission of instructors. (9 hours laboratory)

483F Design for Interactive Art (3)
Prerequisites: Art 323A, 323B, 483E or equivalents. Creation of interactive art and design projects. Concentration in the advanced visual organization systems of art and design and how to apply those techniques to an interactive computer environment. May be repeated once for credit. (9 hours laboratory)

483G Entertainment Graphics (3)
Prerequisites: Art 323A, 323B, and 483E. Structure, procedure and standards of the entertainment design field. Students will work on projects from a major entertainment design group, developing concepts and designs for comparison with professional solutions. May be repeated once for credit. (6 hours laboratory)

483H Plein-air Painting and Location Drawing (3)
Prerequisites: Art 363A and/or 307A. Theory and practice of representational art as applied to landscape as subject. Research of drawing and painting concepts and their historical precendents stressed in the studio and on location. May be repeated once for credit. (6 hours activity)

483I Motion Graphics Design (3)
Prerequisites: Art 483E (including completion of all 483E prerequisites) and instructor's consent; knowledge of film production/editing helpful. Translation of traditional graphic design into time and motion-based design. Historical precendents, film nomenclature, storyboarding, software/hardware for the creation of film titles, station/program identification (logo/logotypes), promotion graphics. May be repeated once for credit. (9 hours laboratory)

484 Special Studies in Ceramics and Glass (3)
Prerequisites: a minimum of six upper-division units in ceramics. Maximum of 12 units in each area, but no more than three units in any one area in a single semester without permission of instructors. (9 hours laboratory)

484A Ceramics (3)
484B Glass Blowing (3)
484C Glass Casting (3)

485 Special Studies in Crafts (3)
Prerequisites: a minimum of six upper-division units in designated area or consent of instructor. Maximum of 12 units in each area, but no more than three units in any one area in a single semester. (9 hours laboratory)

485A Jewelry (3)
485B General Crafts (3)
485C Metalsmithing (3)
485F Papermaking (3)

486 Special Studies in Sculpture (3)
Prerequisites: Art 316A,B and consent of instructor. Maximum of 12 units, but no more than 3 units in a single semester. (9 hours laboratory)

486A Modeling and Fabrication (3)
486B Casting (3)

487 Special Studies in Drawing and Painting and Printmaking (3)
Prerequisites: a minimum of six upper-division units in drawing and painting. Maximum of 12 units in each area, but no more than three units in any one area in a single semester without permission of instructors.

487A Special Studies in Painting (3)
487B Life Studies, Drawing and/or Painting (3)
487C Special Studies in Drawing (3)
487D Special Studies in Printmaking (3)

487E Special Studies in Entertainment Art/Animation (3)
Prerequisites: twelve units of upper-division courses, including Art 353B from the entertainment art/animation concentration. Planning, development and evaluation of individual projects. Maximum of 12 units, but no more than three units in any one area in a single semester without permission of instructors. (9 hours laboratory)
487S Special Studies in Sequential Art (3)
Prerequisite: Art 367. Individual investigation and development of a specialized portfolio in one or more of the following: character design; story sketch and/or production design; storyboard; or graphic novel. Maximum of 12 units, but no more than three units in any one area in a single semester without permission of instructors. (6 hours activity)

488T Selected Topics in Creative Photography (3)
Prerequisite: Art 338A. Photography and other optical image-making practices in relation to specific conceptual or technical topics. Each semester's content is developed by the individual instructor and listed in the class schedule. May be repeated twice for credit. (6 hours activity)

489 Special Studies in Creative Photography (3)
Prerequisites: a minimum of six upper-division units in photography courses or equivalent. Photography as personal expression. Maximum of 12 units, but no more than three units in a single semester. (9 hours laboratory)

495 Internship in Art (3)
Prerequisite: senior standing as a declared B.F.A. in Art major. Work in a specific art field in business or industry.

499 Independent Research (1-3)
Open to advanced students in art with consent of department chair and written consent of instructor. May be repeated for credit to a maximum of nine units, but no more than six units in a single semester.

500A Graduate Seminar in Major Field (3)
Prerequisite: Classified Standing. Directed research in the area of major emphasis. Oral and written material on historical backgrounds and developments in art as they relate to individual intent as an artist and in support of the master's project (with 500B meets graduate-level writing requirement).

500B Graduate Seminar in Major Field (3)
Prerequisite: Classified standing and 500A recommended. Problems and issues in art. Intellectual clarification and verbal articulation of individual intent as an artist. Oral and written material in support of the master's project (with 500A meets graduate-level writing requirement).

501 Curatorship (3)
Prerequisites: B.A. in art, anthropology or other major by special permission, and Art 466 and 481. Curator collects, cares for and studies objects.

503 Graduate Problems in Design Course Series (3)
Prerequisite: Classified Standing. Planning, development and evaluation of individual projects listed below. Maximum of 12 units in each area, but no more than three units in any one area in a single semester without permission of instructors.

503A Graphic Design (3)
(6 hours activity)

503C Illustration (3)
(6 hours activity)

503D Exhibition Design (3)
(More than 9 hours laboratory)

504 Graduate Problems in Ceramics Course Series (3)
Prerequisite: Classified Standing. Planning, development and evaluation of individual projects in ceramics, glass blowing and glass casting. Maximum of 12 units in each area but no more than three units in a single semester without permission of instructors. (9 hours laboratory)

504A Ceramics (3)

504B Glass Blowing (3)

504C Glass Casting (3)

505 Graduate Problems in Crafts (3)
Prerequisite: Classified Standing. Planning, development and evaluation of individual projects listed below. Maximum of 12 units in each area, but no more than three units in a single semester.

505A Jewelry (3)

505B General Crafts (3)

506A,B Graduate Problems in Sculpture (3,3)
Prerequisite: Classified Standing. Planning, development and evaluation of individual projects in sculpture. Maximum of 12 units in each area but no more than three units in a single semester without permission of instructors. (9 hours laboratory).

507 Graduate Problems in Drawing, Painting and Printmaking (3)
Prerequisite: 12 units of upper-division drawing and painting. Planning, development and evaluation of individual projects listed below. Maximum of 12 units in each area, but no more than three units in a single semester without permission of instructors.

507A Painting (3)
(6 hours activity)

507B Life Drawing (3)
(9 hours laboratory)

507C Drawing (3)
(6 hours activity)

507D Printmaking (3)
(9 hours laboratory)
**508A, B Graduate Problems in Creative Photography** (3, 3)
Prerequisite: consent of instructor. Planning, development and evaluation of individual projects in photography. Maximum of 12 units in each area, but no more than three units in a single semester without permission of instructors. (9 hours laboratory)

**510 Graduate Problems: The Digital Studio** (3)
Prerequisite: any 400-level studio art class. Technical proficiency and conceptual understanding of digital imaging techniques and applications. Students develop their own projects integrating computer technology with their personal vision and practice. May be repeated once for credit. (6 hours activity)

**511 Seminar on the Content and Method of Art History** (3)
Prerequisite: Art 481. Methods of research, analysis and theories of art historical scholarship. May be repeated once for credit.

**512 Seminar on Selected Topics in Art History** (3)
Prerequisites: appropriate upper-division art course approved by instructor, and Art 511. Analysis and evaluation of specific works and their historical significance, including cultural, social and economic circumstances. May be repeated up to a maximum of 6 units.

**518 Graduate Seminar in Creative Photography** (3)
Prerequisite: any 400-level art course. Expands and deepens knowledge of photographic and media criticism and theory. Explore advanced theoretical topics and apply the tools of criticism to better understand their own creative process and artwork.

**548 Graduate Problems in Artists' Books** (3)
Prerequisite: Art 448. Investigation and application of principles of the book form to visual art and design, illustration, photography and printmaking media. Development of original works of art, which demonstrate competency in design, construction and fabrication of graduate quality visual books. May be repeated for a maximum of 12 units. (6 hours activity)

**578 Graduate Studio Expanded: Other Genre** (3)
Prerequisite: any 400-level studio art course. All aspects of new genre work, including conceptual, historic and theoretical approaches. Studio disciplines that will be investigated are installation, performance art, video and public art. May be repeated twice for credit.

**579 Graduate Problems: Aesthetics and Advanced Techniques of Video** (3)
Production of video as a medium of visual expression. All aspects of fine art video; history aesthetics, camerawork, non-linear and assemble editing, post production techniques video installations and the role of video as a medium of contemporary fine art production. May be repeated for credit for a maximum of 12 units. (9 hours laboratory)

**580T Selected Topics in Art History** (3)
Prerequisite: one 400-level course in art history and current graduate level standing. Specific concepts and/or periods in art history. Specific topics will vary from semester to semester and will be posted in the class schedule. May be repeated twice if topic is different.

**588T Graduate Topics in Creative Photography** (3)
Prerequisite: any 400-level studio course. Photography and other optical imagemaking practices in relation to specific conceptual or technical topics. Students develop their own research and projects in relation to each semester’s specific topic and content.

**597 Project** (3 or 6)
Prerequisite: Art 500A, B, written consent of instructor and recommendation of the student's graduate committee. Art 500B may be taken concurrently with Art 597 on approval of instructor. Development and presentation of a creative project in the concentration beyond regularly offered coursework.

**598 Thesis** (3 or 6)
Prerequisites: Art 511, 512, written consent of instructor and recommendation of the student's graduate committee.

**599 Independent Graduate Research** (1-3)
Open to graduate students in art with consent of department chair and written consent of instructor. May be repeated for credit.

**ART EDUCATION COURSES**
Art Education courses are designated as ARTE in the class schedule.

**442 Teaching Art in Secondary School** (3)
Prerequisite: admission to teacher education. Objectives, methods and practices for teaching art in secondary schools. Required before student teaching of majors in art for the Single Subject Teaching Credential.

**449E Externship in Secondary Teaching** (3)
See description and prerequisites under Division of Teacher Education. Offered every fall semester.

**449I Internship in Secondary Teaching** (10)
See description and prerequisites under Division of Teacher Education. Concurrent enrollment in Art Education 449S required. Offered every spring semester.

**449S Seminar in Secondary Teaching** (3)
Taken concurrently with Art Ed 449I. Seminar in teaching a single subject in secondary schools. Videotape analysis of teaching based on Teaching Performance Assessments. Taken Credit/No Credit. A "B" (3.0) or better is required to receive a grade of credit.
**PROGRAM COUNCIL**

The program council consists of faculty and non-faculty from on and off-campus groups who provide direction and support for the Asian American Studies Program: Leah Brew (Counseling), Jeffrey Brody (Communications), Juana Chen (Asian American Studies), Thomas Fujita-Rony (Asian American Studies), Art Hansen (History), Craig K. Ihara (Philosophy), Richard Jong (Asian American Studies), Mikiyong Kim-Goh (Human Services), Trent Nguyen (Human Services), Tu-Uyen Nguyen (Asian American Studies), Eliza Noh (Asian American Studies), Michael Perez (Sociology), Eric Reyes (Asian American Studies), Sherri Sawicki (English), Yichen Shen (English), Susan Shoho (Gerontology), Sora Tanjasiri (Kinesiology), Jie Tian (Library), Howard Wang (Student Affairs), Jennifer Yee (Asian American Studies)

**INTRODUCTION**

The minor and the option in Asian American Studies are designed for students who have an interest in learning about the experiences, expression and social conditions of Americans of Asian and Pacific Islander ancestry, including those whose origins trace back to central, south and southeast, as well as east Asia and the Pacific Islands. Cross-disciplinary in nature, Asian American Studies draws on a wide variety of courses offered throughout the university that relate to Asian American history, art, literature, politics, socio-economics, psychology and relations to other ethnic and sociopolitical groups. In addition, the Asian American Studies Program currently offers 21 of its own courses.

The goals of both the option and minor are to encourage more students to do work in the area and to prepare students in selected career paths where sensitivity to and knowledge of Asian American and Pacific Islander issues, history and artistic expression are important. These include careers in counseling, human services, nursing, public administration, law and the health professions; teaching careers in history, English, political science, psychology, sociology, as well as elementary and secondary school education.

Two features of the Asian American Studies program are of special note. First, there is a conscious effort to inform and sensitize students to other ethnic groups and to their interrelationships and commonalities. Second, there is a definitive emphasis on contributing to Asian American communities and, thereby, the larger society. The requirement in experiential and community-based learning is one example of our effort to combine learning with service.

The option in Asian American Studies may be effectively combined with subject matter studies necessary for either the multiple subject teaching credential (K-8) or single subject credential (7-12) in Social Studies. Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the

**PROGRAM COORDINATOR**

Thomas Y. Fujita-Rony

**PROGRAM OFFICE**

Humanities 314

**DEPARTMENT WEBSITE**

http://hss.fullerton.edu/asian-american

**PROGRAMS OFFERED**

Minor in Asian American Studies
Bachelor of Arts in Ethnic Studies
Option in Asian American Studies

**INSTRUCTIONAL FACULTY**

Jeffrey Brody (Communications), Thomas Fujita-Rony (Asian American Studies), Art Hansen (History), Richard Jong (Asian American Studies), Mikiyong Kim-Goh (Human Services), Tu-Uyen Nguyen (Asian American Studies), Eliza Noh (Asian American Studies), Michael Perez (Sociology), Eric Reyes (Asian American Studies), Yichin Shen (English and Comparative Literature), Jennifer Yee (Asian American Studies)

**ADVISER**

Eliza Noh, Humanities 312E
Eric Reyes, Humanities 312H
Admission to Teacher Education office (657-278-3352) to obtain information on attending an overview presentation.

**BACHELOR OF ARTS IN ETHNIC STUDIES OPTION IN ASIAN AMERICAN STUDIES**

The B.A. in Ethnic Studies (Asian American Studies) requires a minimum of 120 units, which include courses for the option, General Education, all university requirements, and free electives.

The Option in Asian American Studies requires 36 units of coursework in Asian American Studies. If a student chooses the B.A. in Ethnic Studies (Asian American Studies) as a second major, up to nine units can double-count in general education.

Other Asian American Studies requirements can be double-counted in a student’s primary major.

**Core Courses (12 units)**
- Asian American 101 Introduction to Ethnic Studies
- Asian American 201 History of Asian Pacific Americans
- Asian American 300 Introduction to Asian Pacific American Studies
- Asian American 307 Research and Writing in Ethnic Studies

**Topical Requirements (12 units)**
In consultation with an adviser, students may focus their studies on Asian American Ethnic Groups; topics in Asian American Studies such as literature, art, communication, families, psychology, or law, etc.; or Non-Asian Ethnic Groups and Inter-ethnic Relations in the U.S.

**Specific Asian American Ethnic Groups (6 units)**
- Asian American 220 Vietnamese Communities in the U.S. (3)
- Asian American 360 Mixed Heritage Asian Americans (3)
- Asian American 362A The Filipina/o American Experience (3)
- Asian American 364 The South Asian American Experience (3)
- Asian American 366 The Korean American Experience (3)
- Asian American 370 The Chinese American Experience (3)
- Asian American 382 World War II
- Japanese American Evacuation (3)

An additional six units must be selected from the two categories listed below.

1. **Topics in Asian American Studies**
- Asian American 308 Asian American Women (3)
- Asian American 320 Asian American Creative Expression (3)
- Asian American 322 Asian Pacific Americans and Religion (3)
- Asian American 325 Asian American Film and Video (3)
- Asian American 327 Asian American Literature (3)
- Asian American 340 Asian American Communication (3)
- Asian American 342 Asian Pacific American Families (3)
- Asian American 344 Asian Pacific American Identities (3)
- Asian American 346 Asian American Psychology (3)

2. **Non-Asian Ethnic Groups and Inter-ethnic Relations in the U.S.**
- Afro-Ethnic 310 Black Women in America (3)
- Afro-Ethnic 311 Intracultural Socialization (3)
- Afro-Ethnic 320 Black Political Thought (3)
- Afro-Ethnic 322 Psychology of African Americans (3)
- Afro-Ethnic 335 History of Racism (3)
- American Studies 301 The American Character (3)
- American Studies 377 Prejudice and American Culture (3)
- Chicana/o 220 Mexican Heritage (3)
- Chicana/o 303 Cultural Differences in Mexico and the Southwest (3)
- Chicana/o 337 Contemporary Chicano Literature (3)
- Chicana/o 340 Mexican/Chicano Intellectual Thought (3)
- Chicana/o 345 History of the Chicano (3)
- History 190 Survey of American History with Emphasis on Ethnic Minorities (3)
- Sociology 357 Minority Group Relations (3)
- Women's Studies 302 Intro to Intercultural Women's Studies (3)

**Asian Language or Asian Cultures and Social Institutions (6 units)**

**Asian Languages**
Language courses include, but are not limited to the following:
- Chinese 100 Introduction to Chinese Conversation (3)
- Chinese 101 Fundamental Chinese A (5)
- Chinese 102 Fundamental Chinese B (5)
- Japanese 101 Fundamental Japanese A (5)
- Japanese 102 Fundamental Japanese B (5)
- Vietnamese 201 Vietnamese for Vietnamese Speakers (3)
- Vietnamese 202 Vietnamese for Vietnamese Speakers (3)
- Any 200 or higher level course in Chinese or Japanese

**Asian Cultures and Institutions**
Topics include, but are not limited to the following:
- Anthropology 347 Peoples of the Pacific (3)
- Comparative Literature 380 Introduction to Asian Literature (3)
- Comparative Literature 382T Topics in Asian Literature (3)
- Geography 340 Asia (3)
- History 463C Themes in Korean History (3)
- History 464B History of Southeast Asia, 1800-present (3)
- History 465A,B History of India (3)
- Philosophy 350 Asian Philosophy (3)
- Philosophy 352 Philosophy of Asian Martial Arts (3)
Political Science 434  China and Japan: Friends or Foes? (3)  
Comparative Religion 270T  Introduction to Asian Religions (3)  
Comparative Religion 354T  Topics in Buddhism (3)  
Human Comm 492T  Proseminar in Human Communication (3)  
(when topic covers intercultural communication)

Community Research Requirement (6 units)
All ASAM majors must complete ASAM 495, Internship in Asian American Studies. An additional course must be completed; students may choose either another internship course or one of the two courses below.

1. Asian American 495 Internship in Asian American Studies. This course combines work in a community organization with regular class meetings and written assignments. This can include the analysis of community-based organizations along ethnic, class, and/or gender lines; or interns of Asian American literature or art; or in terms of power politics, historical developments, or in minority group psychology.

2. Asian American 499 Independent Study. This course involves completing a senior project requiring community research. Students are required to display knowledge, understanding, and application of research, methods and culturally-relevant skills to solve real world problems in an Asian Pacific American community setting.

3. Oral history fieldwork. This course provides students with experience in an Asian Pacific American community agency or organization.

MINOR IN ASIAN AMERICAN STUDIES
The minor consists of 21-23 required units distributed among categories listed below, with at least six upper-division units.

Core Courses (6 units)
Asian American 201  History of Asian Pacific Americans (3)  
Asian American 300  Introduction to Asian Pacific American Studies (3)

Comparative Cultures Breadth Requirement (3 units)
A course on a different minority group in America should be selected from an approved listing in consultation with the program coordinator or a faculty adviser. Courses include, but are not limited to the following: Afro 304, 310, 311, 317, 320, 322, 335; American Studies 301, 377; Chicano 220, 303, 305, 331, 332, 337, 340, 450; Comparative Religion 305; History 190; Sociology 133, 357; Women’s Studies 302.

Topical Requirements (6 units)
Select two three-unit courses in Asian Pacific American Studies, chosen in consultation with a faculty adviser. Topics include, but are not limited to the following courses: Asian American 220, 308, 320, 327, 340, 342, 344, 346, 360 362A, 364, 366, 370; History 382; Human Services 318; Communications 438T.

Asian Language or Asian Cultures and Social Institutions Requirement (3-5 units)
One course in an Asian language (3-5 units), or one three-unit course on Asian cultures or Asian social institutions, chosen in consultation with the undergraduate adviser.

Approved courses include, but are not limited to the following:

Asian Language
Chinese 100  Introduction to Chinese Conversation (3)  
Chinese 101  Fundamental Chinese A (5)  
Chinese 102  Fundamental Chinese B (5)  
Japanese 101  Fundamental Japanese A (5)  
Japanese 102  Fundamental Japanese B (5)  
Korean 101  Fundamental Korean-A (5)  
Korean 102  Fundamental Korean-B (5)  
Korean 203  Intermediate Korean-A (3)  
Vietnamese 201  Vietnamese for Vietnamese Speakers (3)  
Vietnamese 202  Vietnamese for Vietnamese Speakers (3)  
Any 200 or higher level course in Chinese or Japanese

Asian Cultures and Social Institutions
Anthro 347; Comp Lit 382T; Comparative Religion 280, 354T; Geography 340; History 460, 463C, 464B, 465A; Philosophy 350, 352, 354T; Poli Sci 434; Human Comm 492C.

Community Research Requirement (3 units)
Students choose one of the following:

1. Asian American 499 Independent Study. This course involves completing a senior project requiring community research. Students are required to display knowledge, understanding and application of research, methods and culturally-relevant skills to solve real world problems in an Asian Pacific American community setting.

2. Oral history fieldwork. This course provides students with a service learning experience in an Asian Pacific American community agency or organization. Please check the department for information on the course number, title and scheduled offerings.

3. Asian American 495 Internship in Asian American Studies. This course combines work in a community organization with regular class meetings and written assignments. This can include the analysis of community based organizations along ethnic, class, and/or gender lines; or interns of Asian American literature or art; or in terms of power politics, historical developments, or in minority group psychology. Please consult the department for information on the course number, title, and scheduled offerings.
**ASIAN AMERICAN STUDIES COURSES**

Courses are designated as ASAM in the class schedule.

**101 Introduction to Ethnic Studies (3)**
(See also Afro-Ethnic Studies/Chicana(o) Studies/Women's Studies 101)

**190 Survey of American History with Emphasis on Ethnic Minorities (3)**
(See also History/Afro-Ethnic Studies/Chicana(o) Studies 190)

**201 History of Asian Americans (3)**
(See also History 201)

**220 Vietnamese Communities in the U.S. (3)**
Prerequisite: completion of General Education (G. E.) Category III.C.1. Historical and cultural overview of Vietnamese communities in the U.S., especially Orange County. The vital role of voluntary agencies, mutual assistance associations and religious centers. Examines Vietnamese business, entertainment, family, education and hobbies.

**300 Introduction to Asian Pacific American Studies (3)**
Prerequisite: completion of G. E. Category III.C.1. Interdisciplinary exploration of the experiences of several Asian American groups. Addresses questions of cultural assimilation and cultural persistence, family and gender roles, and literary and popular culture representations.

**307 Research and Writing in Ethnic Studies (formerly 400) (3)**
Prerequisite: English 101 or equivalent. Introduction to research and writing in ethnic studies. Issues of research in ethnic studies (e.g., quantitative v. qualitative analysis, reliability/validity) and specific methods of research (e.g., archives, interviews, oral history). Extensive writing. A grade of “C” (2.0) or better is required to satisfy the upper-division writing requirement. (Same as Afro-Ethnic 307 and Chicana(o) 307).

**308 Asian American Women (3)**
Prerequisite: junior or senior standing. Interdisciplinary examination of Asian and Pacific Islander American women’s experience. Compares and contrasts the experience of women from various parts of Asia and explores the social, cultural and political issues they face in the U.S. and abroad. One or more sections offered online. (Same as Women's Studies 308)

**320 Asian American Creative Expression (3)**
Prerequisite: completion of G. E. Categories III.B.1 and 2. Asian American life as portrayed through novels, short stories, plays, poetry, film, music, painting, dance and other expressive forms. Examines historical and contemporary works by a variety of Asian and Pacific Americans. One or more sections offered online.

**322 Asian Pacific Americans and Religion (3)**
Prerequisite: completion of G. E. Category III.B.2. Historically, religion plays a significant role for immigrants. Explores religion as a cultural dynamic in the incorporation and persistence of Asian Pacific Americans into American society, especially in Orange County and the greater Los Angeles area. (Same as Comp Religion 322)

**325 Asian American Film and Video (3)**
Prerequisite: completion of G. E. Categories III.B.1 and III.B.2. Introduction to major themes in Asian American film and video history and criticism. Asian American aesthetics, history and politics in areas of film and video direction, production, writing and acting. One or more sections offered online.

**327 Asian American Literature (3)**
Prerequisite: completion of G. E. Category III.B.2. Introduces early literary expressions of the Asian American experience. Readings include poetry, short stories, novels and autobiographies. Fundamental understanding of Asian American literary history and awareness of the cultural diversity in America. (Same as English 327)

**340 Asian American Communication (3)**
Prerequisites: junior or senior standing and completion of G. E. Category III.C.1. Introduction to Asian American communication. Influences of Asian American cultural heritage, ethnic identity, generation and language fluency on communication. Similarities and differences in communication among the various Asian American ethnic groups. (Same as Human Comm 340)

**342 Asian Pacific American Families (3)**
Prerequisite: completion of G. E. Category III.C.1. Asian Pacific American families have ranged from the seemingly solitary “bachelor” to the extended “clan.” Explores these, and many other ways of being a “family,” as it has been a basic part of Asian Pacific American history and culture.
344 Asian Pacific American Identities (3)
Prerequisite: completion of G. E. Category III.C.1. Interdisciplinary explorations of the ways in which those of Pacific Islander, Southeast, South and East Asian descent have met the challenge of being American at the personal level. Social construction of racial/ethnic identities, cultural conflict, self-determination and personal growth.

346 Asian American Psychology (3)
In-depth analysis of major issues in the Asian American community from a psychosocial perspective, including ethnic identity development, generational conflicts, the “model minority” myth, interracial relationships, attitudes toward mental health services and alternative healing/therapeutic approaches. (Same as Psychology 346)

360 Mixed Heritage Asian Americans (3)
Prerequisite: completion of the G. E. Category III.C.1. Overview of the mixed heritage Asian American population in the USA. Surveys the historical avenues that led to the United States and to inter-ethnic alliances. The many challenges this multi-ethnic population faces.

362A Filipina/o American Experience (3)
Prerequisite: completion of G. E. Category III.C.1. Introduction to Filipina/o American Studies, covering point of origin, immigration, legal barriers, economic struggles, civil rights and other current issues up to 1965.

364 The South Asian American Experience (3)
Interdisciplinary course that explores the experience of South Asian Americans originally from India, Pakistan, Bangladesh or Sri Lanka. Focuses on questions regarding influence of American culture on South Asian American identity, intergenerational concerns and cultural continuity among others.

366 The Korean American Experience (3)
Prerequisite: completion of the G. E. Category III.C.1. Historical events and contemporary issues such as Korean American immigration, Korean identity, inter-ethnic relations, gender issues and Korean American Entrepreneurship within the context of social, political and economic conditions of Korea and the United States.

370 The Chinese American Experience (3)
Prerequisite: completion of the G. E. Category III.C.1. Introduction to the experiences of Chinese in the United States. Historical events and contemporary issues, including Chinese immigration, exclusion, Chinese American identity, racial violence and gender.

382 World War II Japanese American Evacuation (3)
(Same as History 382)

389 Literature About the War in Vietnam (3)
(Same as English/Comp Lit 389)

495 Internship in Asian American Studies (3)
One hundred twenty (120) hours practical experience in some organization serving the Asian Pacific American community. Regular meetings with faculty advisor. May be repeated once for credit.

496 Student-to-Student Tutorials (1-3)
Consult “Student-to-Student Tutorials” in this catalog for a more complete course description.

499 Independent Study (1-3)
Supervised research and/or service learning projects in Asian American Studies to be taken with consent of instructor and program coordinator. May be repeated for credit.
INTRODUCTION

Asia, more than any other region in the world, has become the focus of extensive international business, political relationships and cultural exchange. Millions of people of Asian descent have become an integral part of American society. Indeed, California, more than any other place in the United States, is the residence of immigrants from throughout Asia. In order to keep pace with current developments in this extremely important part of the world, students are encouraged to take advantage of the opportunity to minor in Asian Studies.

The faculty for the Asian Studies Minor is drawn from several departments. What they have in common is that they teach and conduct research on Asia. The interdisciplinary nature of the Minor allows students the unique opportunity to learn about Asia from broad and differing perspectives.

MINOR IN ASIAN STUDIES

The minor consists of 21 units: 6 units chosen from the listed core courses and 15 units of electives chosen in consultation with an adviser as outlined below.

Core Courses (6 units)

Anthro 340 Peoples of Asia (3)
OR Anthro 347 Peoples of the Pacific (3)
Geography 340 Asia (3)

Electives (15 units)

One course each from three of the following four categories, plus 6 units of adviser-approved electives:

Language, Culture, Geography and Human Behavior

Anthro 340 Peoples of Asia (3)*
Anthro 347 Peoples of the Pacific (3)*
Any Japanese Language Course
Any Chinese Language Course
Any Vietnamese Language Course
Geography 330 California Landscapes (3)
Geography 340 Asia (3)
Kinesiology 151 Aikido (1)
Kinesiology 152 Karate (1)
Human Comm 320 Intercultural Communication (3)

*One of these is applicable as an elective if not chosen as a core course.
History and Politics

History 360 Modern Asia: Nationalism and Revolutionary Change (3)
History 460 The Chinese Diaspora
History 461 Modern Vietnam (3)
History 462A History of China (3)
History 462B History of China (3)
History 462C China Since 1949 (3)
History 463A History of Japan (3)
History 463B History of Japan (3)
History 463C Themes in Korean History (3)
History 464A History of Southeast Asia to 1800 (3)
History 464B History of Contemporary Southeast Asia, 1800-present (3)
History 465A History of India (3)
History 465B History of India (3)
History 490T Senior Research Seminar (3)

(Where course topic focuses on area of Asia).

Poli Sci 434 The Asia-Pacific in World Affairs (3)
Poli Sci 451T Problems in International Politics (3)
Poli Sci 457 Politics of International Economics (3)
Poli Sci 476 International Law (3)

Arts and Humanities

(including Art, Literature, Philosophy and Comparative Religion)

Comp Lit 380 Introduction to Asian Literature (3)
Comp Lit 382T Topics in Asian Literature (3)
Philosophy 350 Asian Philosophy (3)
Philosophy 352 Philosophy of Asian Martial Arts (3)
Comparative Religion 270T Introduction to the Asian Religions (3)

International Business and Economics

Economics 332 Economies of the Pacific Rim (3)
Economics 333 Economic Development: Analysis and Case Studies (3)
Economics 335 The International Economy (3)
Economics 411 International Trade (3)
Finance 370 International Business Finance (3)
Marketing 445 Multinational Marketing Strategies (3)
INTRODUCTION

Biology is the branch of science concerned with the study of life. The discipline is dynamic, diverse and expanding with the integration of new molecular approaches, information technology and concerns for the environment. Through the study of biology, students will: learn principles that govern the function of their own body and those of other organisms; explore how complex organisms develop from a single cell and how genes and the environment govern these events; and learn how plants capture the energy from the sun and, ultimately, sustain almost all life on Earth through intricate relationships with other organisms, including humans. In addition, in Southern California, proximity to a variety of employers ranging from biotechnology and biomedical companies, to environmental consulting firms provides biology majors with diverse employment opportunities.

The department has designed a curriculum that builds on a core of biology and supporting courses for students who: (1) seek careers in industry and state or federal agencies, (2) wish to prepare for secondary school teaching, or (3) desire to enter graduate and professional schools. The curriculum beyond the basic core experience will be developed through individual advising. Students will be assigned a faculty adviser when they enter the university or they may choose a faculty member to serve as their adviser. Each semester, students are required to meet with their designated adviser in order to develop an appropriate program of study. After discussion with their adviser, students will elect upper-division courses in one of four concentrations that will satisfy their individual interests and professional goals.

Special Programs

In addition to the usual course offerings, the Department of Biological Science participates in the Center for Applied Biotechnology Studies and four consortial programs with other California State University campuses. These are: CSUPERB (California State University Program for Education and Research in Biotechnology); the CSU Council on Ocean Affairs, Science & Technology (COAST); the Ocean Studies Institute (through the Southern California Marine Institute); and the California Desert Studies Consortium at Soda Springs. Each of these centers is described in this catalog under “Research Centers.”

Pre-professional Information

The Health Professions Advising Office provides advising services to students wishing to enter the health professions. The services include counseling students to plan their academic programs, providing students with information about volunteer opportunities in the area of their interest, and providing assistance in the preparation of applications, including interviewing techniques.

Teaching Credential Information

The Bachelor’s Degree in Biology may be effectively combined with subject matter studies necessary for the Single Subject Teaching Credential in science. Science teachers
are in great demand, and candidates may qualify for scholarships and paid teaching internships while completing their credential. Undergraduates are encouraged to contact the Center for Careers in Teaching (657-278-7130, www.fullerton.edu/ctc) and the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied/) for early advisement and to plan efficient course selections for general education, the major and credential program coursework. Postbaccalaureate and graduate students should contact the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied/). Additional information is found under Science Education Programs in the University Catalog, as well as at http://mast.wikispaces.com.

Recommendations for Transfer Students

Students planning to transfer from another college or university should take biology, chemistry, mathematics and/or physics courses that are equivalent to those required for the B.S. in Biological Science (refer to www.assist.org). Prospective transfer students should contact the Biology Department as soon as possible prior to transfer to select appropriate courses.

Recommended Program in General Education

Because of high unit requirements for the B.S. in Biological Science, students are urged to consult with their advisers to design their general education program.

Upper-Division Baccalaureate Writing Requirement

To meet the upper-division baccalaureate writing requirement, students must: (1) pass the English Writing Proficiency exam; and (2) pass with a “C” (2.0) or better ENGL 301 or CHEM 340 or six units from the following: BIOL 411, 414, 417, 422, 426, 445, 446, 447, 449, 468, 470, 495 and 498.

Internships

Biology 495 Biological Internship provides students with the opportunity to participate in a practical work experience that integrates their interests with classroom studies.

SCHOLARSHIPS IN BIOLOGICAL SCIENCE

For additional information, please see the CSUF Financial Aid website: http://www.fullerton.edu/financialaid/

L. Jack Bradshaw Scholarship in Immunology

To preserve the memory of Dr. L. Jack Bradshaw, one scholarship per year is awarded to a deserving undergraduate or graduate student of biology who plans to pursue a career in immunology or cancer research or treatment.

Dr. and Mrs. Donald B. Bright Environmental Scholarship

To preserve the memory of Dr. Donald B. Bright, one scholarship per year is awarded to a deserving undergraduate or graduate student of biology whose career plans include employment in the area of environmental science.

Coppel Graduate Science Award

Established by Lynn and Claude Coppel for biology graduate students for their unrestricted use.

Hillman and McClanahan Scholarship in Plant or Animal Physiological Ecology

Established by Dr. Stanley Hillman and Dr. Lon McClanahan for biology graduate students who are engaged in research in the field of either plant or animal physiological ecology.

Dharm Vireo Pellegrini Memorial Research Grant

To preserve the memory of Dharm Vireo Pellegrini, one scholarship awarded per year to a deserving undergraduate or graduate student of biology undertaking ornithological field research.

Judith A. Presch Desert Studies Scholarship

To preserve the memory of Judith A. Presch, two scholarships per year are awarded (one undergraduate and one graduate student) by the Desert Studies Consortium for work in the Mojave Desert.

Dr. and Mrs. Marvin J. Rosenberg Scholarship

Established by Dr. Marvin J. Rosenberg, one scholarship is awarded per year to a deserving continuing undergraduate or graduate student in the Cell and Development Biology Concentration or the Molecular Biology and Biotechnology Concentration.

Jerome Wilson Scholarship

To preserve the memory of Dr. Jerome Wilson, scholarships are awarded to deserving undergraduate or graduate students of biology with interest in genetics.

BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCE

A total of 120 units, including general education, 43 units in biology courses (20 units in lower-division core and 23 units of upper-division elective courses constituting one of the concentrations described below), and 30 units of supporting courses in physical sciences and mathematics is required for completion of the B.S. in Biological Science. In addition, as a graduation requirement, students pursing the B.S. in Biological Science must complete an exit exam on biology in the spring semester of their senior year.

The supporting courses must include one year of general college chemistry, including: qualitative analysis with laboratory; one year of organic chemistry with laboratory; one semester of college calculus or introduction to experimental design and statistics for biologists; and one year of college physics with laboratory. Those students seeking careers in the health professions should speak to a health professions adviser about specific course recommendations. Students who wish to earn a doctoral degree should consider, in addition, a modern foreign language or advanced courses in computational sciences.

To qualify for a B.S. degree in Biological Science, students must have earned a 2.0 or better in all biology courses and a 2.0 average in all required supporting courses. No credit toward the major will be allowed for biology courses in which a grade of C-, D or F is obtained. Courses taken under the Credit/No Credit grade option may not be applied towards the major.
All full-time, upper-division students and graduate students are expected to attend the departmental seminars.

**Core Requirements for the Major (20 units):**

The lower-division required courses that constitute the core requirements for biology provide an introduction to basic principles of biology and to the investigative nature of science. The curriculum uses themes and perspectives to connect and integrate major concepts, principles and basic facts. Three themes run throughout the core curriculum:

*Evolution:* Inherited changes in organisms accumulate over time.

*Unity and Diversity:* Organisms possess common characteristics while exhibiting a wide range of variability.

*Dynamics of Biological Systems:* Living systems continually respond to their external and internal environments by making changes necessary to sustain life.

Each theme will be presented from two perspectives:

*Human Impact:* The interactions between the human and the biological world, and

*Scientific Process:* The testing of new ideas, questions or hypotheses through observation and experimentation.

Students should complete the following four lower-division core courses with a passing grade of “C” (2.0) or better before they take any upper-division biology course.

- BIOL 171 Evolution and Biodiversity (5)
- BIOL 172 Cellular Basis of Life (5)
- BIOL 273 Genetics and Molecular Biology (5)
- BIOL 274 Principles of Physiology and Ecology (5)

**Upper-Division Courses (23 units):**

The upper-division program is designed to provide students with depth in a chosen concentration. With approval from his or her departmental adviser, each student selects a program leading to a concentration in one of four areas (see below). The upper-division program requires 23 units of upper-division coursework, including at least five units of laboratory- or field-based activities, at least six units of 400-level biology courses, and at least two units of a specified capstone course.

Students with junior or senior standing will be permitted to enroll in BIOL 480 Advanced Topics in Undergraduate Biology, BIOL 482 Capstone Studies in Biology, BIOL 495 Biological Internship, BIOL 498 Senior Thesis and BIOL 499 Independent Laboratory Study. However, no more than a combined total of six units of BIOL 480 (2 units max), BIOL 482 (2 units max), BIOL 495 (3 units max), BIOL 498 (2 units max) and BIOL 499L (6 units max) shall be counted toward the 23 upper-division biology units required for the major, and no more than three of these units may count toward the requirement to complete at least five units of upper-division biology laboratory/field electives.

**CONCENTRATION IN BIODIVERSITY, ECOLOGY AND CONSERVATION BIOLOGY**

The concentration consists of 23 units of upper-division biology electives, of which at least five units must be laboratory- or field-based activities, at least six units must be 400-level biology courses, and at least two units must be a capstone course. The 23 units of upper-division biology electives must also meet the following requirements:

**Upper-Division Required Courses:**

- BIOL 314 Population and Community Ecology (3)
- BIOL 325 Principles of Evolution (3)

**Upper-Division Electives (6 units minimum):**

**Organismal Courses (3 units minimum):**

One of the following:

- BIOL 302 General Microbiology (4)
- BIOL 340 Field Botany (3)
- BIOL 344 Survey of the Land Plants (3)
- BIOL 444 Plant Taxonomy (4)
- BIOL 467 Entomology (4)
- BIOL 474 Natural History of the Vertebrates (4)
- BIOL 476 Herpetology (4)
- BIOL 478 Mammalogy (4)
- BIOL 479 Ornithology (4)

**Physiology Courses (3 units minimum):**

One of the following:

- BIOL 362 Mammalian Physiology (4)
- BIOL 444 Plant Physiological Ecology (4)
- BIOL 445 Plant Cell Physiology (3)*
- BIOL 468 Comparative Animal Physiology (4)*

**Additional Upper-Division Electives (5 units minimum):**

Any additional upper-division biology courses from the Organismal Biology or Capstone list (additional units from Organismal Biology or Capstone courses not used to fulfill those requirements count here) or courses from the following:

- BIOL 301 Problems in Environmental Biology (3)
- BIOL 317 Field Marine Biology (4)¹
- BIOL 402 Computer Lab in Molecular Systematics (3)
- BIOL 404 Evolution (3)
  OR BIOL 409 Evolution for Teachers (3)
- BIOL 419 Marine Ecology (3)³
- BIOL 419L Marine Ecology Laboratory (1)³
- BIOL 422 Coastal Ecology (4)¹
- BIOL 436 Advanced Applied Statistics (3)
- BIOL 442 Pollination Biology (3)
- BIOL 443 Plant Ecology (4)
CONCENTRATION IN CELL AND DEVELOPMENTAL BIOLOGY

The concentration consists of 23 units of upper-division biology electives, of which at least five units must be laboratory- or field-based activities, at least six units must be 400-level biology courses, and at least two units must be a capstone course. The 23 units of upper-division biology electives must also meet the following requirements:

Upper-Division Required Courses (7 units)
Must complete both classes prior to entering other upper-division electives:
BIOL 302 General Microbiology (4)
BIOL 303 Intermediate Cell Biology (3)

Upper-Division Biology Electives (10 units minimum)

Cell Biology Courses (7 units minimum)
BIOL 362 Mammalian Physiology (4)
BIOL 405 Developmental Biology (3)

Molecular Biology Courses

The following may be used to complete the 10-unit minimum:
BIOL 309 Intermediate Molecular Biology (3)
BIOL 402 Computer Lab in Molecular Systematics (3)
BIOL 411 Medical Genetics and Systems Biology (3)*
BIOL 412 Principles of Gene Manipulation (3)
BIOL 413 Advances in Molecular Genetics (3)
BIOL 414 Microbial Genetics (3)*
BIOL 430 Advances in Microbiology (3)
BIOL 448 Plant Molecular Biology (3)
CHEM 421 Biological Chemistry (3)
OR CHEM 423A General Biochemistry (3)

Free Upper-Division Biology Electives

Additional upper-division biology electives to reach at least 23 units. Although it is recommended that Cell and Developmental Biology Concentration majors select these additional elective units from courses listed under Upper-Division Electives and Additional Upper-Division Electives under this concentration, any upper-division biology majors course may be utilized to fulfill these additional units.

Capstone Courses (2 units minimum)
BIOL 400 Seminar in Biology Education (2)
BIOL 401 Biogeography (3)
BIOL 447 Ethnobotany (3)*
BIOL 450 Conservation Biology (3)
BIOL 481 Advances in Evolution and Ecology (3)
BIOL 482 Capstone Studies in Biology (2)
BIOL 495 Biological Internship (3)*
BIOL 498 Senior Thesis (2)*
BIOL 499L Independent Laboratory Study (1 – 3)

**1 maximum of 4 units of these marine biology classes may be applied toward the 23 upper-division electives required for the BEC concentration
* courses that meet the upper-division writing requirements (6 units required)
CONCENTRATION IN MARINE BIOLOGY

The concentration consists of 23 units of upper-division biology electives, of which at least five units must be laboratory- or field-based activities, at least six units must be 400-level biology courses, and at least two units must be a capstone course. The 23 units of upper-division biology electives must also meet the following requirements. (Selected approved courses from the Ocean Studies Institute (see http://osi.scripps.edu/) taken as part of the CSU Catalina semester may be used to fulfill these requirements.).

Upper-Division Required Courses (3 units)
BIOL 314 Population and Community Ecology (3)
  OR BIOL 325 Principles of Evolution (3)

Upper-Division Biology Electives (11 units minimum)

Ecology Courses (4 units minimum)
One of the following:
BIOL 419 Marine Ecology (3) and BIOL 419L Marine Ecology Laboratory (1)
  OR BIOL 422 Coast Ecology (4)*

Organismal/Systematics Courses (4 units minimum)
One of the following:
BIOL 446 Marine Phycology (4)*
BIOL 461 Marine Invertebrate Biology (4)
BIOL 475 Ichthyology (4)

Other Marine Biology Courses (3 units minimum)
One of the following:
BIOL 301 Problems in Environmental Biology (3)
BIOL 302 Microbiology (4)
BIOL 317 Field Marine Biology (4)
BIOL 402 Computer Lab in Molecular Systematics (3)
BIOL 404 Evolution (3)
  OR BIOL 409 Evolution for Teachers (3)
BIOL 405 Developmental Biology (3)
BIOL 436 Advanced Applied Statistics (4)
BIOL 468 Comparative Animal Physiology (4)*

Free Upper-Division Biology Electives:
Additional upper-division biology electives to reach at least 23 units. Although it is recommended that Marine Biology majors select these additional units from the courses listed under Upper-Division Biology Electives under this concentration, any upper-division biology majors course may be utilized to fulfill these additional units.

Capstone Courses (2 units minimum)
BIOL 400 Seminar in Biology Education (2)
BIOL 401 Biogeography (3)
BIOL 422 Coastal Ecology (4)*
BIOL 450 Conservation Biology (3)

BIOL 482 Capstone Studies in Biology (2)
BIOL 495 Biological Internship (3)*
BIOL 498 Senior Thesis (2)*
BIOL 499L Independent Laboratory Study (1-3)

  * courses that meet the upper-division writing requirements (6 units required).

CONCENTRATION IN MOLECULAR BIOLOGY AND BIOTECHNOLOGY

The concentration consists of 23 units of upper-division biology electives, of which at least five units must be laboratory- or field-based activities, at least six units must be 400-level biology courses, and at least two units must be a capstone course. The 23 units of upper-division biology electives must also meet the following requirements:

Upper-Division Required Courses (6-7 units)
Must complete these classes prior to entering other upper-division electives:
BIOL 309 Intermediate Molecular Biology (3)
  AND one or more of the following:
BIOL 302 General Microbiology (4)
CHEM 421 Biological Chemistry (3)
  OR CHEM 423A General Biochemistry (3)

Upper-Division Biology Electives (10 units minimum)

Molecular Biology Courses (6 units minimum)
BIOL 402 Computer Lab in Molecular Systematics (3)
BIOL 405 Developmental Biology (3)
BIOL 411 Medical Genetics and Systems Biology (3)*
BIOL 412 Principles of Gene Manipulation (3)
BIOL 413 Advances in Molecular Genetics (3)
BIOL 414 Microbial Genetics (3)*
BIOL 430 Advances in Microbiology (3)
BIOL 445 Plant Cell Physiology (3)*
BIOL 448 Plant Molecular Biology (3)
BIOL 472A Advances in Biotechnology Lab (3)
BIOL 472B Advances in Biotechnology Lab (3)
BIOL 473 Bioinformatics (3)
CHEM 421 Biological Chemistry (3)
  OR CHEM 423A General Biochemistry (3)

Cell Biology Courses
The following may be used to complete the 10-unit minimum:
BIOL 362 Mammalian Physiology (4)
BIOL 417 Advances in Cell Biology (3)
BIOL 418L Advances in Cell Biology Lab (2)
BIOL 424  Immunology (4)
BIOL 426  Virology (3)*
BIOL 428  Biology of Cancer (3)
BIOL 444  Plant Physiological Ecology (4)
BIOL 470  Cellular Neurobiology (3)*
BIOL 477  Advances in Biotechnology (3)

Free Upper-Division Biology Electives

Additional upper-division biology electives to reach a total of at least 23 units. Although it is recommended that Molecular Biology and Biotechnology Concentration majors select these additional elective units from courses listed under Upper-Division Biology Electives under this concentration, any upper-division biology majors courses, or any of the following courses, may be utilized to fulfill these additional units:

- BIOL 304  Supervised Biology Lab Instruction (2)
- BIOL 480  Advanced Topics in Undergraduate Biology (1-3)

Capstone Courses (2 units minimum)

- BIOL 400  Seminar in Biology Education (2)
- BIOL 412  Principles in Gene Manipulation (3)
- BIOL 430  Advances in Microbiology (3)
- BIOL 472A, B  Advances in Biotechnology Lab (3)*
- BIOL 482  Capstone Studies in Biology (2)
- BIOL 495  Biological Internship (3)*
- BIOL 498  Senior Thesis (2)*
- BIOL 499L  Independent Laboratory Study (1-3)

3 courses that count as either electives or capstone but not both.
* courses that meet the upper-division writing requirements (6 units required)

Supporting Course Requirements for the Major (29-30 units)

- CHEM 120A,B  General Chemistry (10)
- CHEM 301A,B  Organic Chemistry (6)
- CHEM 302 or CHEM 302A,B  Organic Chemistry Laboratory (2)
- PHYS 211, 211L  Elementary Physics and Laboratory (4)
- PHYS 212, 212L  Elementary Physics and Laboratory (4)
- MATH 130A  Short Course in Calculus (4),
  OR MATH 150A  Calculus (4),
  OR MATH 337  Introduction to Experimental Design and Statistics in the Laboratory Sciences (3)

MINOR IN BIOTECHNOLOGY

The biotechnology minor is appropriate for students majoring in biological science or biochemistry and interested in gaining employment in nearly any area of the growing medical and agricultural biotechnology industries, working in academic research laboratories, or pursuing post-graduate degrees in basic molecular biology or biochemistry.

The biotechnology minor requires a minimum of 31 acceptable units of chemistry and biology. These courses must be completed with a minimal overall grade-point average of 2.0 and include 12 units unique to the minor that are not used to meet requirements for the biological science or biochemistry major.

Required Core Courses (28 units)

- BIOL 273  Genetics and Molecular Biology (5)
- BIOL 309  Intermediate Molecular Biology (3)
  OR Chem 421  Biological Chemistry (3)
- CHEM 301A,B  Organic Chemistry (6)
- CHEM 302 or CHEM 302A,B  Organic Chemistry Laboratory (2)
- BIOL 412  Principles of Gene Manipulation (3)
- BIOL/CHEM 472A,B  Advances in Biotechnology Laboratory (6)
- CHEM/BIO 477  Advances in Biotechnology (3)

Supporting Courses (3-4 units)

Complete one of the following courses:

- BIOL 309  Intermediate Molecular Biology (3)
- BIOL 413  Advances in Molecular Genetics (3)
- BIOL 424  Immunology (4)
- CHEM 421  Biological Chemistry (3)
- CHEM 423A General Biochemistry (3)
- CHEM 423B General Biochemistry (3)

MASTER OF SCIENCE IN BIOLOGY

The M.S. in Biology is a thesis-based degree for which the student completes original, independent research in one of the following areas: Biodiversity, Ecology and Conservation Biology, Cell and Developmental Biology, Marine Biology, Molecular Biology and Biotechnology, or Biology Pedagogy Research. The program offers specialized educational opportunities and training in preparation for: (a) advanced graduate work toward a doctoral degree in the biological sciences or science education; (b) teaching at the secondary and community college levels; (c) participation in research programs and employment as a research technician; (d) participation in various field service and conservation positions within local, state and national governments; (e) entering the field of public-health service; or (f) technological work in the health sciences.

Admission Requirements

An applicant must meet the university requirements for admission, which include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on Graduate Admissions for complete statement and procedures). Students must make two applications, one to the university and another to the department. In addition to the university requirements for admission, acceptance into this program is contingent upon the following: (1) a B.A. or B.S. in Biological Science or related area at an accredited institution with a grade-point average of 3.0 in biology courses and a grade-point average of 2.5 in the related courses.
in mathematics, chemistry and physics; (2) submission of scores on one of the following: (a) Graduate Record Examination General Test, (b) Medical College Admission Test, or (c) Dental Admission Test; (3) completion of the departmental application; (4) submission of two letters of recommendation; and (5) acceptance by a thesis adviser.

Students with deficiencies may be considered for conditional acceptance into the program. For conditionally accepted students, the specific conditions and a deadline for their completion are determined at the time of admission; continuation in the M.S. program is dependent upon completion of the admission conditions by the specified deadline.

**Application Deadlines**

The deadlines for completing the online university application are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Departmental applications are accepted for fall admissions from Nov. 1 to April 30 and for spring admissions from May 1 to Oct. 31. A completed departmental application and all required documents must be received by these deadlines. Check the Department of Biological Science website for information at http://biology.fullerton.edu.

**Classified Standing**

Students should achieve classified graduate standing as soon as they are eligible, since no more than nine units of graduate work taken before classification can be included on the study plan (see below) for the degree. A student who meets the admission requirements may apply for classified standing, which requires the development of a study plan approved by the thesis adviser, thesis committee, Department Graduate Program Adviser and Associate Vice President of Graduate Studies and Research. Students admitted with conditional acceptance must meet conditions (see above) before being considered for classified standing.

**Advancement to Candidacy**

Advancement to candidacy is attained by requesting a graduation check and receiving subsequent approval of the Department Graduate Program Adviser and Associate Vice President of Graduate Studies and Research.

**Study Plan**

Students must meet the Graduate Level Writing Requirement, which is described in this catalog under “Graduate Regulations.” Biology M.S. candidates will meet this requirement by taking BIOL 500A,B Professional Aspects of Biology.

A study plan includes 30 units of adviser-approved graduate work; at least one-half of the total units must be at the 500 level. All study plans must include BIOL 599 Independent Graduate Research, BIOL 500A,B Professional Aspects of Biology, BIOL 598 Thesis, and at least two graduate seminars.

A thesis acceptable to the adviser and committee, covering a research problem, as well as a thesis defense and a public presentation on the thesis research, are required to complete the degree program.

Supervising the work of graduate students requires the personal attention of advisers. To insure that advisers are available for new graduate students, a graduate student is expected to complete the requirements for graduation within three years after classification.

For more detailed information or advisement, students should contact the Department of Biological Science or the Department Graduate Program Adviser at biogradadv@fullerton.edu.

**BIOLOGICAL SCIENCE COURSES**

Courses are designated as BIOL in the class schedule.

Unless otherwise designated, prerequisites may be waived by the instructor of the course if the instructor is satisfied that the student is qualified for the course.

101 Elements of Biology (3)

Underlying principles governing life forms, processes and interactions. Elements of biology and reasoning skills for understanding scientific issues on personal, societal and global levels. For the non-science major. No credit toward biological science major.

101H Elements of Biology (Honors) (3)

Corequisite: Biology 101LH (Honors). Students must meet honors qualifications. Living organisms and characteristics of the natural environment. Scientific reasoning leading to our current understanding of living systems. For the non-science major.

101L Elements of Biology Laboratory (1)

Pre- or corequisite: BIOL 101. Laboratory experiments demonstrating the principles presented in the lecture course. Scientific inquiry, cell structure and function, physiology, genetics, biodiversity, evolution and ecology. For the non-science major. (3 hours laboratory or fieldwork; weekend field trips may be required).

101LH Elements of Biology Laboratory (Honors) (1)

Corequisite: BIOL 101H (Honors). Students must meet honors qualifications. Laboratory experiments and demonstrations which provide insight into scientific reasoning and the basis of our current understanding of living systems. For the non-science major. (3 hours laboratory or fieldwork; field trips may be required)

102 Biology for Future Teachers (3)

Designed especially for the prospective teacher, this activity-based course examines biological concepts in real-world contexts, such as the medical examination, genes and evolution, and the environment. Lecture and laboratory form a single unified learning experience. No credit toward biological science major. (6 hours activity)

171 Evolution and Biodiversity (5)

Introduction to scientific processes and methods of biology. Unifying principles of evolution processes leading to biodiversity, and principles of conservation biology. (Primarily for majors in the Colleges of Natural Science/Mathematics and Engineering/Computer Science; 3 hours lecture, 6 hours laboratory/fieldwork; weekend field trips may be required)
172 Cellular Basis of Life (5)
Prerequisite: BIOL 171. Structure and function of prokaryotic and eukaryotic cells including: evolutionary relationships; cell membranes; compartmentation; signaling and metabolic pathways; cellular reproduction; cell differentiation, multicellularity and development. (For majors in Colleges of Natural Science/Mathematics and Engineering/Computer Science; 3 hours lecture, 6 hours laboratory)

191A Integrated Human Anatomy and Physiology (4)
(Same as KNES 191A)

191B Integrated Human Anatomy and Physiology (4)
Prerequisite: KNES/BIOL 191A; corequisite: CHEM 200. Second semester of integrated concepts in human anatomy and physiology for nursing, allied health, and kinesiology majors. Nutrition, water and ion balance, and homeostatic regulation by the digestive, renal, cardio-respiratory, endocrine, nervous systems. No credit toward biological science major. (3 hours lecture, 3 hours laboratory) (Same as KNES 191B)

202 Microbiology for Nursing and Allied Health Professionals (4)
Prerequisite: BIOL 101, 191A or equivalent; corequisite: CHEM 200. Introduction to bacteria, fungi, protozoa and viruses with emphasis on pathogenic agents and how they are controlled by host defenses and human intervention. Laboratory provides practice with basic microbiological skills. No credit toward biological science major. (3 hours lecture, 3 hours laboratory)

210 Human Anatomy and Physiology (3)
Introductory anatomy and physiological concepts for Kinesiology and Health Science majors. Gross and micro-level human anatomy as well as the structure and function of selected systems. Preparation for Kinesiology 260, 300, 348, 371, and the major in Health Science. No credit toward biological science major. (Same as Kinesiology 210)

273 Genetics and Molecular Biology (5)
Prerequisite: BIOL 172; corequisite: completion or enrollment in CHEM 120A. Underlying principles of inheritance, structure and functions of nucleic acids, regulation of gene expression, the mechanisms by which populations evolve, and the impact of biotechnology on society. (3 hours lecture, 6 hours laboratory)

274 Principles of Physiology and Ecology (5)
Prerequisites: BIOL 273 and CHEM 120A; Math 130, 150A or 337 suggested. Principles of organisms' interactions with their environments; physiological and evolutionary mechanisms of change in response to environmental factors; population and community ecology; energy and material flow through ecosystems. (3 hours lecture, 6 hours laboratory/fieldwork; weekend field trips may be required)

299L Directed Laboratory Study (1-3)
Prerequisites: BIOL 171, 172 and consent of instructor. Research in biology under the supervision of a biology faculty member. Intended for students (especially lower division) who may not have completed sufficient coursework to allow them to work independently, but who are eager for laboratory research experience. May be repeated for university credit, but units do not count toward major. (3 hours laboratory per unit)

300 Environmental Biology (3)
Prerequisite: BIOL 101 or equivalent. Biological consequences of human intervention in ecosystems: Endangered and threatened species, pollution impact on organisms, pest control, population dynamics, genetic engineering of agricultural species, management of natural areas and urban ecosystem dynamics. No credit toward biological science major.

301 Problems in Environmental Biology (3)
Prerequisite: admission into Southern California Ecosystems Research Program in environmental biology. Environmental problems in Southern California ecosystems. Effects of human activities on desert, foothill, and wetland ecosystems. Offered as an intensive four-week summer field experience. (Equivalent to 1 hour lecture, 6 hours laboratory/fieldwork during a normal semester)

302 General Microbiology (4)
Prerequisites: biology majors, BIOL 274 with a "C" (2.0) or better, CHEM 120B with a "C-" (1.7) or better; biochemistry majors, BIOL 273 and CHEM 120B with a "C" (2.0) or better. Introduction to structure and function of bacteria and viruses including beneficial and detrimental activities and interactions with other organisms. Laboratory provides investigations with microscopy, culture, physiology and genetics of microbes. (2 hours lecture, 6 hours laboratory)

303 Intermediate Cell Biology (3)
Prerequisites: biology majors, BIOL 274 with a "C" (2.0) or better, CHEM 120B with a "C-" (1.7) or better; biochemistry majors, BIOL 273 and CHEM 120B with a "C" (2.0) or better; corequisite: CHEM 301A. Evidence-based examination of cells in action, roles of information, matter and energy flow as driving forces for compartmentation, protein sorting, metabolic and signaling pathways, motility and adhesion; examples taken from developmental, neural and cancer processes.

304 Supervised Biology Laboratory Instruction (2)
Prerequisites: BIOL 172, 273 or 274 and permission of instructor. For students interested in assisting in lower division biology lab that they have completed. Practical experience in laboratory teaching and introduction to major topics in biology education.
305 Human Heredity and Development (3)
Prerequisite: BIOL 101 or equivalent. Principles of human heredity and embryology relating to human development. Mendelian genetics, single gene effects, genetics, prenatal diagnosis, and human embryology. No credit toward biological science major.

306 Biology of Aging (3)
Prerequisite: BIOL 101 or equivalent. Biological changes in cells, tissues, organs and the whole body associated with aging. Theories of aging will be discussed with primary emphasis on mammals. No credit toward biological science major.

309 Intermediate Molecular Biology (3)
Prerequisites: biology majors, BIOL 274 with a "C" (2.0) or better, CHEM 120B with a "C-" (1.7) or better; biochemistry majors, BIOL 273, CHEM 120B with a "C" (2.0) or better. Corequisite: Chemistry 301A. Molecular and genetic basis of cellular functions. Role of gene expression and protein function in metabolism, physiology, growth, development. Introduction to recombinant DNA and its uses, and to critical analysis of primary literature.

310 Human Physiology (3)
Prerequisite: completion of a biology and chemistry course from General Education (G. E.) Category III.A.2; health science and kinesiology majors, BIOL/KNES 210 with a "C" (2.0) or better. Human physiological systems and their relationship to human function for non-biology majors and students in Kinesiology and Health Sciences. No credit for biological science major.

310L Human Physiology Laboratory (3)
Prerequisite: BIOL 310 with a "C" (2.0) or better or concurrent enrollment, or concurrent enrollment in BIOL 310; health science and kinesiology majors, BIOL/KNES 210 with a "C" (2.0) or better. Investigation of human physiology; the cellular to organ system level of muscular, cardiovascular, respiratory and renal systems; the neural and endocrine control of these systems. Labs emphasize functional aspects of each organ system. No credit toward biology major. (3 hours laboratory)

311 Nutrition and Disease (3)
(Same as CHEM 311)

314 Population and Community Ecology (3)
Prerequisites: completion of biology lower-division core. Introduction to the quantitative description of populations and communities, as well as the use of mathematical models to understand the dynamics of populations and communities. Links comparative, experimental and theoretical approaches to understanding the abundance and distribution of organisms and their interactions.

317 Field Marine Biology (4)
Prerequisites: completion of biology lower-division core. Field biology and natural history of local marine plants and animals. Identification of common species and factors determining their distributions and abundance in marine habitats. Effects of human activities on marine organisms. (2 hours lecture, 6 hours lab or fieldwork; weekend field trips may be required)

318 Wildlife Conservation (3)

319 Marine Biology (3)
Prerequisite: completion of G. E. Category III.A.2.c. Survey of marine plants and animals in their habitats. No credit toward biological science major.

322 Human Behavioral Ecology (3)
(Same as ANTH 322)

325 Principles of Evolution (3)
Prerequisites: completion of biology lower-division core. Mechanisms of evolutionary change, including mutation, selection, migration, and drift. Introduces methods for studying adaptations. Sexual selection, kin selection and evolution of life history strategies. Uses modern examples, including antibiotic resistance, to illustrate the relevance of understanding evolution.

330 Ecology of American Indians (3)
Prerequisite: completion of G. E. Category III.A.2.c. Interrelationships of native peoples of the Americas with the local flora and fauna and the natural environment. Roles of American Indians in predator-prey interactions, ecological hierarchy, nutrient cycling, successional change and resource management. No credit toward biological science major.

340 Field Botany (3)
Prerequisites: completion of biology lower-division core. Native flora of Southern California. Identification, natural history and factors that determine the distribution of species. (1 hour lecture, 6 hours laboratory or fieldwork; weekend field trips are required)

344 Survey of the Land Plants (4)
Prerequisites: completion of biology lower-division core. Anatomical and morphological characteristics of the land plants as they relate to the evolutionary development and ecological strategies of these plants. (2 hours lecture, 6 hours laboratory)
352 Plants and Life (3)  
Prerequisite: completion of G. E. Category III.A.2.c. Importance of plants in our lives, including such things as plant domestication and the origin of agriculture. Why plants are fascinating organisms. No credit toward biological science major.

360 Biology of Human Sexuality (3)  
Prerequisite: completion of G. E. Category III.A.2.c. Biology of the human reproductive system, sexual differentiation, anatomy and physiology, sexual behaviors, procreation, contraception and sexually transmitted disease. No credit toward biological science major.

361 Human Anatomy (4)  
Prerequisites: biology majors, BIOL 274 with a “C” (2.0) or better; biochemistry majors, BIOL 172, 273 with a “C” (2.0) or better; health science majors and kinesiology majors, BIOL 101, BIOL/KNES 210 with a “C” (2.0) or better. Systems approach to the structure and function of the human body. For biology majors and related health sciences. (2 hours lecture, 6 hours laboratory)

362 Mammalian Physiology (4)  
Prerequisites: biology majors, BIOL 274 with a “C” (2.0) or better, CHEM 120B with a “C” (1.7) or better; biochemistry majors, BIOL 172, 273, CHEM 120B with a “C” (2.0) or better. Fundamental mechanisms of mammalian and human physiology. Integration of cellular and organ system functions with emphasis on regulatory processes. For biology majors and related health sciences. (3 hours lecture, 3 hours laboratory).

400 Seminar in Biology Education (2)  
Prerequisites: one of the following: BIOL 302, 303, 309, 314 and permission of instructor. For students interested in biology education/science education. Students discuss major topics in biology education and conduct research. (2 hours lecture/discussion)

401 Biogeography (3)  
Prerequisites: BIOL 314 or 325. Evolutionary patterns and mechanisms of the distribution of plants and animals in the major habitats of the world. Current concepts and theories.

402 Computer Lab in Molecular Systematics (3)  
Prerequisites: BIOL 303, 309, 314 or 325. Gain practical and theoretical experience with software-based methods in molecular systematics, with emphasis on Internet resources for molecular biologists, acquisition of gene protein sequences, multiple sequence alignment, PCR primer design, phylogenetic analysis, and controversies in the field. (2 hours lecture, 3 hours laboratory)

404 Evolution (3)  
Prerequisites: BIOL 309 or 325. History of evolutionary thought; origin of universe, earth and life; geological and paleontological history of the earth; evidence derived from comparative anatomy, embryology, genetics, zoogeography; mechanisms of evolution.

405 Developmental Biology (3)  
Prerequisite: BIOL 303 or 309. Molecular and cellular processes in embryonic development encompassing mechanisms of fertilization, cell and tissue interactions, morphogenesis, organogenesis, and the regulation of gene expression.

409 Teaching Evolution: Online Course for Teachers (3)  
Prerequisites: completion of biology lower-division core, G. E. Category III.A and instructor permission. Concepts of evolution, methods of teaching evolution, information competence and ethics. Technology employed for communication, collaboration, investigation and organization. If both BIOL 404 and 409 are taken, only BIOL 404 counts for biological science major.

411 Medical Genetics and Systems Biology (3)  
Prerequisites: BIOL 302, 309, CHEM 421 or 423A. Advances in genetics, genomics, proteomics, and systems biology. Implications for the pharmaceutical industry, the clinic, and for genetic counseling. Uses of biological arrays in diagnosing and treating diseases.

412 Principles of Gene Manipulation (3)  
Prerequisites: BIOL 309 and CHEM 301B. Current approaches to and applications of recombinant DNA technology. Principles behind construction of recombinant molecules including vectors and enzymes, introduction into organisms, selection, expression of cloned genes, and impact of research on society.

413 Advances in Molecular Genetics (3)  
Prerequisites: BIOL 309 and CHEM 301A,B. Function of genetic material and informational macromolecules. Extensive analysis of recent scientific articles in molecular genetics illustrating mutagenesis, protein synthesis, protein structure and function, biogenesis of RNA molecules, regulation of gene expression and their relationship to important biological processes.

414 Microbial Genetics (3)  
Prerequisite: BIOL 302, 309, CHEM 421 or 423A. Perspective of genetics of microbial systems including background information, experimental methods, data interpretation, genetic analysis and applications to biotechnology.

417 Advances in Cell Biology (3)  
Prerequisite: BIOL 303. Current topics in the cell biology of cell motility, cell multiplication and regulation, membranes and permeability, cell signaling, cell-to-cell contact and extracellular matrix, and cell differentiation using current journal articles.

418L Advances in Cell Biology Lab (2)  
Prerequisite: BIOL 303. Use of current techniques like fluorescence microscopy, immunolabeling, ion-sensitive dye ratio-metry, image processing, and 2-D and 3-D reconstruction to study problems in cell biology, cellular developmental biology, and cellular neurobiology. (6 hours laboratory)
419 Marine Ecology (3)  
Prerequisite: BIOL 314 or 325. Ecology of planktonic, nektonic and benthic organisms; their communities and environments.

419L Marine Ecology Laboratory (1)  
Corequisite: BIOL 419. Field and laboratory studies of planktonic, nektonic and benthic communities. (3 hours laboratory or field work; weekend field trips may be required)

422 Coastal Ecology (4)  
Prerequisites: BIOL 314 or 325. Ecology of coastal populations and communities with emphasis on rocky intertidal or other marine or ocean-influenced habitats. Field and laboratory experiments and studies or ecological processes affecting species distributions and abundances. (2 hours lecture, 6 hours laboratory/field work; weekend field trips may be required)

424 Immunology (4)  
Prerequisites: BIOL 302, 303 or 309. Molecular, cellular and organismic nature of the immune process. Inflammation, phagocytosis, antigens, immunoglobulins and cell-mediated immune phenomena. Modern immunology techniques. (2 hours lecture, 6 hours laboratory)

426 Virology (3)  
Prerequisite: BIOL 303 or 309. Viral structure and replication and host-virus interactions in the viral replication process, with emphasis on animal and bacterial virus systems.

428 Biology of Cancer (3)  

430 Advances in Microbiology (3)  
Prerequisite: BIOL 302 or graduate standing. Current topics in microbiology virulence mechanisms, antibiotics, host-bacterium interaction, mobile DNA elements, secretion systems, select agents, differentiation, and development.

436 Advanced Applied Statistics (4)  
Prerequisites: MATH 337 or 338. Linear models, including mixed models, applied to experimental and field data from current research projects. Poisson and logistic regression. Model fitting and checking; use of permutation tests as needed. Presentation of results suitable for publication. (3 hours lecture, 3 hours laboratory) (Same as Math 436)

438 Public Health Microbiology (4)  
Prerequisite: BIOL 302. Control and epidemiology of infectious diseases of public health importance, water and sewage microbiology. Control of current problems. (2 hours lecture, 6 hours laboratory)

441 Plant Taxonomy (4)  
Prerequisites: completion of biology lower-division core. Classification and evolution of vascular plants. Emphasis on the flowering plants. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

442 Pollination Biology (3)  
Prerequisites: completion of biology lower-division core. Pollination in the plant kingdom. Floral cues, pollination syndromes, pollinator behavior, chemical and physical characteristics of pollination, energetics, gene flow, phenology, and ecological aspects of pollination. (2 hours lecture, 3 hours laboratory or fieldwork)

443 Plant Ecology (4)  
Prerequisite: BIOL 314. Community and population ecology of terrestrial plants. Environmental factors and plant distribution with emphasis on California vegetation. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

444 Plant Physiological Ecology (4)  
Prerequisites: completion of biology lower-division core. BIOL 445 is recommended. Fundamental mechanisms of plant physiological responses to the environment with primary emphasis on whole plants and ecosystems. (2 hours lecture, 6 hours laboratory; weekend field trips may be required)

445 Plant Cell Physiology (3)  

446 Marine Phycology (4)  
Prerequisites: completion of biology lower-division core. Biological aspects of marine algae; comparative development, morphology, taxonomy, physiology, and ecology. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

447 Ethnobotany (3)  
Prerequisite: BIOL 314 or 325. How people interact with plants and the environment, including such things as western medicinal plant use, traditional medicine and dentistry, exotic foods and conservation. (2 hours lecture, 3 hours laboratory; weekend field trips may be required)

448 Plant Molecular Biology (3)  
Prerequisite: BIOL 302 or 303 or 309 or CHEM 421 or 423A. Genetic mechanisms in vascular plants controlling metabolism, growth, development, and responses to biotic/abiotic environmental stresses. Molecular regulation of gene expression and transduction of internal and external signals.
449 Desert Ecology (4)  
Prerequisites: BIOL 314 or 325. Adaptations, distributions and interactions of desert plants, animals and microbes, including the influences of environmental factors. (2 hours lecture, 6 hours laboratory of fieldwork; weekend field trips may be required)

450 Conservation Biology (3)  
Prerequisite: BIOL 314 or 325. Current topics involving theory, concepts and techniques in the conservation of biological diversity.

451 Advanced Human Evolution (3)  
(Same as ANTH 451)

453 Life Science Concepts (3)  
Prerequisites: BIOL 101 or 102 (or equivalent) and upper-division standing. Biological principles using science processes appropriate for elementary teachers. No credit for Biological Science major. (2 hours lecture, 2 hours activity)

461 Marine Invertebrate Biology (4)  
Prerequisite: BIOL 314 or 325. Evolution, classification, phylogeny, morphological and physiological adaptations of marine invertebrate animals. Dissection, identification and observation of extant animals. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

462 General Parasitology (4)  
Prerequisite: BIOL 302. Survey of various animal parasites with an emphasis on the morphology, physiology, and genetics of human protozoans and helminthes. Other topics will include vectors and common parasites of domestic animals. (3 hours lecture, 3 hours lab per week)

466 Behavioral Ecology (3)  
Prerequisites: completion of biology lower-division core. Current problems in the evolution of animal behavior; the origin and maintenance of social systems and behavioral interactions of animals.

467 Entomology (4)  
Prerequisites: completion of biology lower-division core. Anatomy, physiology, evolution and biology of insects and other terrestrial arthropods. Dissection, collection, identification and observation of living arthropods. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

468 Comparative Animal Physiology (4)  
Prerequisites: completion of biology lower-division core and CHEM 120B. Comparative study of physiological and biochemical processes among representative animals. (3 hours lecture, 3 hours laboratory, weekend field trips may be required)

470 Cellular Neurobiology (3)  
Prerequisites: BIOL 303 or 309, and 362. Processes of cell communication, particularly in nervous systems. Molecular biology of neurons, model sensory and motor systems, and cellular basis for behavior.

472A Advances in Biotechnology Laboratory (3)  
Prerequisites: BIOL 302, 309, CHEM 421 or 423A Corequisite; CHEM 412. First semester explores biotechnology techniques for DNA cloning and analysis: restriction enzyme action, DNA sequencing, sequence analysis by computer, plasmid cloning, genomic library production and screening, DNA probe hybridization. (1 hour lecture/discussion, 6 hours laboratory) (Same as CHEM 472A)

472B Advances in Biotechnology Laboratory (3)  
(Same as CHEM 472B)

473 Bioinformatics (3)  
Prerequisites: CHEM 301B, 302 and BIOL 325 or CHEM 421. Provides a research-based, problem-solving experience using the tools and algorithms of molecular and computational biology to analyze genetic and protein sequences retrieved from appropriate databases. (2 hours lecture, 3 hours computer laboratory) (Same as CHEM 473)

474 Natural History of the Vertebrates (4)  
Prerequisites: completion of biology lower-division core. Natural history of the vertebrates. Observation, identification, behavior, ecology and distribution of the vertebrates. (2 hours lecture, 6 hours laboratory/fieldwork; weekend field trips may be required)

475 Ichthyology (4)  
Prerequisites: completion of biology lower-division core. Systematics, evolution, morphology, physiology, ecology and behavior of fishes. (2 hours lecture, 6 hours laboratory/fieldwork; weekend field trips may be required)

476 Herpetology (4)  
Prerequisites: completion of biology lower-division core. Biology, structure, physiology, ecology, distribution, identification, collection, evolution and behavior of amphibians and reptiles. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

477 Advances in Biotechnology (3)  
(Same as CHEM 477)

478 Mammalogy (4)  
Prerequisites: completion of biology lower-division core. Systematics, evolution, morphology, physiology, ecology and behavior of mammals. (2 hours lecture, 6 hours laboratory/fieldwork; weekend field trips may be required)

479 Ornithology (4)  
Prerequisites: completion of biology lower-division core. Anatomy, physiology, evolution, behavior, and ecology of birds. Laboratory and fieldwork in identification, anatomy, observational techniques and community composition. (2 hours lecture, 6 hours laboratory/fieldwork; weekend field trips may be required)
480 Advanced Topics in Undergraduate Biology (1-3)
Prerequisites: upper-division students majoring in biological science and consent of instructor. Current topics, recent advances and unification of the principles of biology. May be repeated for credit.

480E SCERP Proseminar (1)
Prerequisites: selection as a Southern California Ecosystems Research Program (SCERP) Scholar. Increase the experience and skills of SCERP Scholars in working on problems in environmental biology. Discussion of publications, development and presentation of SCERP research. Offered Credit/No Credit only. May be repeated for credit. Not available for graduate degree credit.

480M MARC Proseminar (1)
Prerequisite: selection as MARC Fellow. Intended to increase the contact of MARC Fellows with minority scientists of national repute who will present seminars. Fellows will read and discuss relevant primary literature, attend the seminars, and meet with speakers before and after the seminars. May be repeated for credit. (Same as CHEM and PSYC 480M)

481 Advances in Evolution and Ecology (3)
Prerequisites: BIOL 314 or 325. Current topics in evolutionary biology and ecology. Examination and analysis of current literature relating to evolutionary biology, population, community, and ecosystem ecology, behavioral ecology and evolutionary ecology.

482 Capstone Studies in Biology (2)
Prerequisite: consent of department; for Biological Science majors with completion of 90 units. Individualized practical experience related to the study of biology or pursuit of a biology career that reflects paradigms of the discipline. Application and integration of biological concepts and skills through library research, applied projects or community service activities. Not available for graduate degree credit.

495 Biological Internship (3)
Prerequisites: successful completion of 90 units, including all core requirements, and consent of instructor. Biological, ecological, and health-related fields. Ninety (90) hours of practical experience in student’s chosen field of interest with public or private agencies or businesses. May not be repeated for credit. (1 hour lecture/discussion, 6 hours laboratory work experience)

496 Biology Tutorials (1-3)
Prerequisites: completion of biology lower-division core and consent of instructor. Supervised experience in biological science teaching through tutoring or assisting in a laboratory or field class. No credit toward biological science major.

498 Senior Thesis (2)
Prerequisite: 6 units of BIOL 499L (two units may be taken concurrently). Thesis committee must approve research plan at least two semesters prior to enrollment in this course. Requires preparation, presentation and defense of a formal thesis.

499L Independent Laboratory Study (1-3)
Prerequisite: junior or senior standing with consent of instructor with whom the student wishes to pursue independent laboratory study in biology. May be repeated for credit.

500A Professional Aspects of Biology (1)
Prerequisites: graduate standing and concurrent enrollment in BIOL 500B. Discussions concerning research protocol, scientific methodology and communication techniques. Ethics and social responsibilities of professional biologists. (1 hour discussion)

500B Professional Aspects of Biology (1)
Prerequisites: graduate standing and concurrent enrollment in BIOL 500A. Individualized project work and experiences in scientific writing. Required of all students upon admission to the graduate program. (3 hours project work)

500C Professional Aspects of Biology: Teaching Effectiveness (2)
Pre/corequisites: graduate standing; must have received a Graduate Teaching Associate appointment. Assists graduate students in becoming effective classroom teachers and understanding the scholarship of teaching in higher education. Graduate Teaching Associates will learn pedagogy and a variety of teaching alternatives while concurrently teaching in a laboratory/discussion setting.

505T Seminar in Molecular, Cellular, Immunological and Physiological Biology (3)
Prerequisite: graduate standing. Selected advanced topics. May be repeated for credit.

517T Seminar in Ecological and Organismic Biology (3)
Prerequisite: graduate standing. Selected advanced topics. May be repeated for credit.

520T Seminar in Microbiology (3)
Prerequisite: graduate standing. Selected advanced topics. May be repeated for credit.

547 Ethnobotany (3)
Prerequisites: graduate standing. An ethnobotanical investigation of plants and human culture. Develop skills to conduct original ethnobotanical research through voucher collections, plant identification, participant observation, interviews, experimentation and critique of scholarly research. (2 hours lecture, 3 hours laboratory, weekend field trips may be required).
570 Survey of Molecular Biology and Pharmacology/Toxicology (3)

Prerequisites: enrollment in the Program for Applied Biotechnology Studies (PABS) Master of Biotechnology (MBT) degree program or consent of instructor, and MGMT 540. Corequisites: concurrent enrollment in two other PABS MBt degree survey courses: Survey Mathematical Modeling and Bioinformatics (BIOL 571), and Survey Pharmaceuticals and Biomedical Device Engineering (BIOL 572). Overview of molecular biology, pharmacology and toxicology concepts as applied to the development of pharmaceutical products and biomedical devices. Students work collaboratively toward a final project to propose a new pharmaceutical product and/or biomedical device.

571 Survey of Mathematical Modeling and Bioinformatics (3)

Prerequisites: enrollment in the Program for Applied Biotechnology Studies (PABS) Master of Biotechnology (MBT) degree program or consent of instructor, and MGMT 540. Corequisites: concurrent enrollment in two other PABS MBt degree survey courses: Survey Molecular Biology and Pharmacology/Toxicology (BIOL 570), Survey Pharmaceuticals and Biomedical Device Engineering (BIOL 572). Introduction to the strategies, approaches and computer application utilized for drug discovery and design, database design and data mining. Case studies will illustrate specific applications of the methods of measuring, visualizing, representing, inferring, clustering, classifying, and modeling biotechnological data.

572 Survey of Pharmaceutical and Medical Devices Technology (3)

(Same as Computer Science 572)

580 Advanced Topics in Graduate Biology (1-3)

Prerequisites: graduate standing in biology and consent of instructor. Current research topics, experimental design and problem solving in biological systems. May be repeated for credit.

598 Thesis (1-3)

Open to graduate students with consent of instructor with whom the student is conducting graduate thesis research. May be repeated for a maximum of 6 units of credit.

599 Independent Graduate Research (1-3)

Open to graduate students with consent of instructor with whom the student wishes to pursue independent study in biology. May be repeated for credit.
INTRODUCTION

This major prepares students for beginning professional-level positions in business and administration in the private and public sectors. Career opportunities range from accounting, cost analysis, marketing research and statistical forecasting to real estate, personnel, sales and information systems. This curriculum also provides a foundation for advanced study.

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION

Admission to the Business Administration Major

Admission to the Business Administration major involves two steps. Students who apply to the major are initially classified as Pre-business. After completing the lower-division core requirements with grades of at least “C” (2.0), students may apply to the Business Administration major.

All of the following requirements must be met for the degree. Students must earn a grade of at least “C” (2.0) in each core course listed below. For assistance in interpreting these requirements, contact the Business Advising Center.

The Bachelor of Arts in Business Administration requires a minimum of 120 units. Students must fulfill all requirements for the major, General Education, all other University requirements and free electives.

Required Lower-Division Core Courses

- Accounting 201A  Financial Accounting (3)
- Accounting 201B  Managerial Accounting (3)
- Business Admin 201  Business Writing (3)
- Econ 201  Principles of Microeconomics (3)
- Econ 202  Principles of Macroeconomics (3)
- Management 246  Business and Its Legal Environment (3)
- InfoSys/DecSci 265  Introduction to Information Systems and Applications (3)
- Math 135  Business Calculus (3)
- OR Math 130  Short Course in Calculus (4)
- OR Math 150A  Analytic Geometry and Calculus (4)

Required Upper-Division Core Courses

- Business Admin 301  Advanced Business Communication (3)
- Econ 310  Intermediate Microeconomic Analysis (3)
- OR Econ 315  Intermediate Business Microeconomics (3)
- OR Econ 320  Intermediate Macroeconomic Analysis (3)
- Finance 320  Business Finance (3)
- Management 339  Principles of Management and Operations (3)
- Management 340  Organizational Behavior (3)
Marketing 351  Principles of Marketing (3)

Required Capstone Core Course
After completing all lower and upper-division core courses, take:
Management 449  Seminar in Strategic Management (3)

Required Concentration Courses
A minimum of 18 units of coursework is required in one concentration. See listing of concentration requirements below.

Global Business Requirement
Complete one three-unit course in the area of Global Business. The course must be selected from the list of Approved Global Business Courses and may not be a course in your concentration. The approved list is available in the Business Advising Center.

Other Requirements, Grades and Residence
Grade-Point Average (GPA). Maintain at least a 2.0 grade point average in all college level units attempted, in all units attempted at CSUF, in all units attempted in the major and in all units attempted in the concentration. Earn at least a “C’’ (2.0) grade in each core course and in each of the following concentrations: accounting, information systems and management science. A grade of “C–” (1.7) or lower is not a passing grade.

Grade option. Take all required core courses and all required concentration courses in the Mihaylo College of Business and Economics for a letter grade (A,B,C,D,F). The Credit/No Credit grading option may not be used for these courses, and a grade of CR (credit) will not satisfy the requirements for the degree. Exception: Courses in calculus may be taken under the Credit/No Credit grading option; however, if it is also taken to meet general education requirements then it must be taken for a letter grade.

Residence. At least 30 units in the major and at least one-half of the units in the concentration (except accounting, which requires 15) must be taken in residence in the Mihaylo College of Business and Economics; at least 15 of the last 24 units before graduation must be taken in residence in the Mihaylo College of Business and Economics.

Concentrations for the B.A. in Business Administration
Business administration majors must complete the requirements of one concentration in addition to the degree requirements listed above.

ACCOUNTING CONCENTRATION (21 UNITS)
Accounting 301A,B  Intermediate Accounting (3,3)
Accounting 302  Cost Accounting (3)
Accounting 307  Accounting Information Systems (3)
Accounting 308  Concepts of Federal Income Tax Accounting (3)

And two courses from the following (6 units):
Accounting 401  Advanced Accounting (3)
Accounting 402  Auditing (3)
Accounting 403  Accounting for Governmental and Nonprofit Entities (3)
Accounting 405  Fraud Detection (3)
Accounting 408  Problems in Taxation (3)
Accounting 420  Advanced Cost Accounting (3)
Accounting 422  Internal Audit and Control (3)
Accounting 460  Seminar in Financial Statement Analysis (3)
Accounting 470  Tax Research, Practice and Procedures (3)

BUSINESS ECONOMICS CONCENTRATION (18 UNITS)
All students with an economics concentration are required to take Econ 310 Intermediate Microeconomic Analysis (3) or Econ 315 Intermediate Business Microeconomics (3) as part of their business administration core requirements. In addition, the concentration requires Econ 320 Intermediate Macroeconomic Analysis (3), Econ 340 Economic Research Methods (3) and 12 units of upper-division economics electives, 6 units of which must be at the 400 level.

Students interested in economics also may wish to consider the Bachelor of Arts in Economics.

ENTERTAINMENT AND TOURISM MANAGEMENT CONCENTRATION (18 UNITS)
Required courses (15 units)
Accounting 364  Entertainment Accounting (3)
Management 365  Entertainment Business (3)
Management 446  Entertainment Business Law (3)
Management 470  Media Entertainment Business (3)
Management 471  Live Entertainment Business (3)
Interdisciplinary Electives (3 units from the following)
Communications 446  Entertainment and Society (3)
Communications 447  Tourism and Travel (3)
Management 435  Management of Service Organizations (3)
Management 444  Project Management (3)
Marketing 430  Sports Marketing (3)
Marketing 465  Managing Services Marketing (3)
Radio-TV-Film 480  Management in RTVF (3)
Theatre 351  Theatre Management (3)

ENTREPRENEURSHIP CONCENTRATION (18 UNITS)
Accounting 463  Financial Controls for Entrepreneurs (3)
Management 461  Entrepreneurial Management (3)
Management 464  Entrepreneurial Leadership (3)
Management 465A  New Venture Creation and Funding (3)
Management 465B  New Venture Launch (3)
Marketing 462  Marketing for Entrepreneurs (3)

**FINANCE CONCENTRATION (18 UNITS)**

**Required Courses (6 units)**
Finance 332  Theory of Corporate Finance (3)
Finance 340  Introduction to Investments (3)
   OR Finance 342  Capital and Money Markets (3)

**Electives (12 units)**
Students must complete 12 units of elective courses in finance. Students are encouraged to choose as many courses as possible from one of the following and are expected to consult with faculty advisers when selecting courses.

**Corporate/International Financial Management Track**
Finance 331  Working Capital Management and Computer Applications (3)
Finance 335  Financial Analysis for Investors and Lenders (3)
Finance 342  Capital and Money Markets (3)
Finance 370  International Business Finance (3)
Finance 371  Export-Import Financing (3)
Finance 373  Asia-Pacific Financial and Security Markets (3)
Finance 432  Financial Forecasting and Budgeting (3)
Finance 433  Problems in Business Finance (3)

**Financial Institutions Track**
Finance 335  Financial Analysis for Investors and Lenders (3)
Finance 342  Capital and Money Markets (3)
Finance 351  Introduction to Real Estate (3)
Finance 352  Real Estate Finance (3)
Finance 370  International Business Finance (3)
Finance 425  Commercial Bank and Financial Institution Management (3)
Finance 444  Options and Futures (3)

**Insurance and Financial Service Track**
Finance 335  Financial Analysis for Investors and Lenders (3)
Finance 342  Capital and Money Markets (3)
Finance 360  Principles of Insurance (3)
Finance 410  Theory and Practice of Personal Financial Planning (3)
Finance 411  Retirement and Estate Planning (3)
Finance 461  Business Property and Liability Risk Management (3)
Finance 462  Life and Health Insurance (3)

**Investments/Financial Planning Track**
Finance 335  Financial Analysis for Investors and Lenders (3)
Finance 342  Capital and Money Markets (3)
Finance 355  Real Estate Investment Analysis (3)
Finance 360  Principles of Insurance (3)
Finance 410  Theory and Practice of Personal Financial Planning (3)
Finance 411  Retirement and Estate Planning (3)
Finance 442  Advanced Investment Analysis (3)
Finance 444  Options and Futures (3)

*Note: To be eligible to sit for the Certified Financial Planner Examination, students must take all of the following: Finance 340, 355, 360, 410, 411 and Accounting 358.*

**REAL ESTATE PROFESSIONS TRACK**
Finance 351  Introduction to Real Estate (3)
Finance 352  Real Estate Finance (3)
Finance 353  Real Estate Valuation (3)
Finance 355  Real Estate Investment Analysis (3)
Finance 454  Real Estate Market Analysis (3)
Finance 456  Property Development and Management (3)

*Note: To be eligible to sit for the Real Estate Broker License Examination, students must have completed eight college-level courses, in addition to meeting the experience/educational requirements. Five of the courses are required, including: Real Estate Practice (not offered at CSUF); Legal Aspects of Real Estate (not offered at CSUF); Real Estate Finance (Finance 352); Real Estate Appraisal (Finance 353); and Real Estate Economics (Finance 454). In lieu of Real Estate Economics, the student may complete Econ 201, 202, 361 or Accounting 201A or 201B. In addition to the five required courses, the student is required to complete three courses from a long list of electives, including the following courses offered at CSUF: Real Estate Principles (Finance 351); Advanced Real Estate Finance (Finance 355); Advanced Real Estate Appraisal (Finance 551); and Business Law (Management 246). For detailed information, please visit the California Department of Real Estate website.*

**INFORMATION SYSTEMS CONCENTRATION (21 UNITS)**
InfoSys/DecSci 309  Intro to Operating Systems and Programming (3)
InfoSys/DecSci 310  Systems Analysis and Design (3)
InfoSys/DecSci 408  Database Management Systems (3)
InfoSys/DecSci 409  Business Telecommunications for Information Systems Design (3)
InfoSys/DecSci 454  Seminar in Information Systems Development (3)

*And two courses from the following (6 units):*
InfoSys/DecSci 371  C++ for Business Applications (3)
InfoSys/DecSci 372  JAVA Programming for Business Applications (3)
InfoSys/DecSci 411  Business Application Design (3)
MANAGEMENT CONCENTRATION (18 UNITS)
Students in the management concentration must choose one of the following emphases:

General Management (18 units)
Management 343 Human Resource Management (3)
Management 425 Productivity and Quality Management (3)
Management 440 Emerging Issues in Management (3)
and nine units of elective coursework to be chosen in consultation with a departmental adviser.

Human Resources Management (18 units)
Management 343 Human Resource Management (3)
Management 432 Staffing (3)
Management 434 Compensation (3)
Six units of elective coursework to be chosen in consultation with a departmental adviser.

Legal Studies (18 units)
Management 348 Commercial Law (3)
Management 445 Employment Law (3)
And 12 units of electives from the following:
Management 346 International Law for Business (3)
Management 349 Law for Small Business (3)
Management 440 Emerging Issues in Management (3)
Management 441 Labor-Management Relations (3)
Management 446 Entertainment Business Law (3)
Management 447 Internet Legal Issues (3)

Operations Management (18 units)
Management 422 Production and Inventory Control (3)
Management 423 Purchasing and Supply Management (3)
Management 425 Productivity and Quality Management (3)
and six units of elective coursework to be chosen in consultation with a departmental adviser.
Management 430 Integrated Supply Chain Management (3)

MANAGEMENT SCIENCE CONCENTRATION (18 UNITS)
Required Courses (9 units)
InfoSys/DecSci 309 Introduction to Operating Systems and Programs (3)
InfoSys/DecSci 310 Systems Analysis and Design (3)
InfoSys/DecSci 440 Integrative Decision Tools for Business Operations (3)
OR InfoSys/DecSci 442 Business Modeling Using Spreadsheets (3)

One Course in Statistical Concepts (3 units)
Electives in Statistics (Students must take at least one course from this category)
InfoSys/DecSci 422 Surveys and Sampling Design and Applications (3)
InfoSys/DecSci 461 Statistical Theory for Management Science (3)
InfoSys/DecSci 467 Statistical Quality Control (3)
InfoSys/DecSci 472 Design of Experiments (3)
InfoSys/DecSci 473 Applied Statistical Forecasting (3)
InfoSys/DecSci 474 Data Mining for Managers (3)
InfoSys/DecSci 475 Multivariate Analysis (3)

Electives (6 units) from the following:
InfoSys/DecSci 408 Database Management Systems (3)
InfoSys/DecSci 411 Business Application Design (3)
InfoSys/DecSci 415 Principles of Business Intelligence (3)
InfoSys/DecSci 465 Linear Programming in Management Science (3)
InfoSys/DecSci 490 Queuing and Stochastic Models in Management Science (3)
Econ 440 Introduction to Econometrics (3)
Finance 360 Principles of Insurance (3)
Finance 444 Options and Futures (3)
Management 422 Production and Inventory Control (3)
Management 430 Integrated Logistics Management (3)
Management 444 Project Management (3)
Math 390 Introduction to Actuarial Science (3)
An additional course in Statistical Concepts (3)

MARKETING CONCENTRATION (18 UNITS)
Required Courses (9 units)
Marketing 353 Marketing Information Technology (3)
Marketing 370 Buyer Behavior (3)
Marketing 379 Marketing Research Methods (3)

Electives (6 units) from the following:
Marketing 401 Professional Selling (3)
Marketing 405 Advertising and Promotions Strategy (3)
Marketing 415 Managing the Sales Force (3)
Marketing 425 Retail Marketing Strategy (3)
Marketing 430  Sports Marketing (3)
Marketing 445  International Marketing (3)
Marketing 455  Strategic Internet Marketing (3)
Marketing 462  Marketing for Entrepreneurs (3)
Marketing 465  Managing Services Marketing (3)
Marketing 475  Export Marketing Strategies (3)
Marketing Concentration Capstone Course (3 units)
Marketing 489  Developing Marketing Strategies (3)

JOINT EMPHASIS IN ACCOUNTING AND FINANCE (30 UNITS)
Acct 301A  Intermediate Accounting (3)
Acct 301B  Intermediate Accounting (3)
Acct 302  Cost Accounting (3)
Acct 422  Internal Audit Control (3)
Acct 460  Financial Statement Analysis (3)
Fin 332  Theory of Corporate Finance (3)
Fin 340  Introduction to Investments (3)
Fin 370  International Business Finance (3)
Fin 432  Budgeting and Forecasting (3)
Fin 433  Problems in Business Finance (3)

MINOR IN BUSINESS ADMINISTRATION
The minor provides a basic understanding of the role of business in society and the methods used by business. This curriculum also provides a basis for advanced study. A working knowledge of algebra is necessary for several of the required courses.

Business administration minors shall not enroll in any required upper-division course (in the minor) until they have completed all of the required lower-division courses (in the minor) with a grade of at least "C" (2.0) in each course. Students must earn a grade of at least "C" (2.0) in each course required for the minor.

Required Lower-Division Courses
Accounting 201A,B  Financial and Managerial Accounting (3,3)
Econ 201  Principles of Microeconomics (3)
Econ 202  Principles of Macroeconomics (3)
InfoSys/DecSci 265 Introduction to Information Systems and Applications (3)
Management 246  Business and Its Legal Environment (3)

Required Upper-Division Courses
Special Notice: Enrollment in these courses requires the completion of all lower-division minor requirements with a grade of "C" (2.0) or better in each course.
Finance 320  Business Finance (3)
Management 339  Principles of Management and Operations (3)
OR Management 340  Organizational Behavior (3)
Marketing 351  Principles of Marketing (3)

Economics Majors minoring in Business Administration: Economics Majors can complete a minor in business administration by taking Accounting 201B, Management 246, Finance 320, Management 339 or 340 and Marketing 351. All other required courses for the minor are required for the major in Economics.

MINOR IN ENTREPRENEURSHIP*
The minor in Entrepreneurship provides a basic background in business and entrepreneurship for students majoring in disciplines outside of business. This program will assist students who may wish to pursue careers in smaller, technology-based companies or who may be involved in starting new companies. Students must earn a grade of at least "C" (2.0) in each course listed below.

Required Courses (18 units)
Accounting 201A  Financial Accounting (3)
Business Admin 210 Understanding Business (3)
Finance 320  Business Finance (3)
Management 465A  New Venture Creation and Funding (3)
Management 465B  New Venture Launch (3)
Marketing 351  Principles of Marketing (3)

Advisory Note: Students are advised to have a working knowledge of Excel and to have completed a college-level course in statistics that covers regression prior to enrolling in upper-division courses for the Entrepreneurship minor.

MINOR IN INFORMATION SYSTEMS*
This minor surveys modern computer methods and the development of information systems. Emphasis is placed on systems which aid management decision-making. Students must earn a grade of at least "C" (2.0) in each course listed below.

Accounting 201A  Financial Accounting (3)
InfoSys/DecSci 265  Introduction to Information Systems and Applications (3)
InfoSys/DecSci 309  Introduction to Operating Systems and Programming (3)
InfoSys/DecSci 310  Systems Analysis and Design (3)
InfoSys/DecSci 408  Database Management Systems (3)
One of the following:
InfoSys/DecSci 371  C++ for Business Applications (3)
InfoSys/DecSci 372  Java Programming for Business Applications (3)
InfoSys/DecSci 411  Business Application Design (3)

*Students with a major in business administration may not minor in entrepreneurship or information systems. Interested students may elect to complete a second concentration in entrepreneurship or information systems.
CREDENTIAL INFORMATION

The bachelor’s degree in Business Administration may be effectively combined with subject matter studies necessary for the single subject teaching credential in business. Undergraduates are encouraged to work with the department adviser and/or the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation and orientation and then contact the department credential adviser.

MASTER OF BUSINESS ADMINISTRATION DEGREE

The MBA program in the Mihaylo College of Business and Economics is dedicated to providing a quality program with flexible program options and accessibility. The Mihaylo College of Business and Economics has been successfully transforming students’ lives through our MBA program since 1963.

Accreditation is an important measure of our quality. The Mihaylo College of Business and Economics holds dual accreditation in business administration and accounting from AACSB International, the premier accrediting body for university-level business programs in the world. We are the only university in Orange County, and one of five in California, to hold this prestigious level of dual accreditation. Our accreditation guarantees that students receive a high quality education, delivered by the most qualified faculty, all from a College that has met the highest standards in business education.

Depending on personal and professional commitments, students may earn their MBA on a full- or part-time basis. Classes are offered during the late afternoon and evenings, and students may complete their program at either the main campus in Fullerton or at the CSUF Irvine Campus.

Our curriculum reflects a balance of theory and practice. Critical thinking, functional knowledge and applications, as well as workplace problem-solving skills are woven into the educational experience. In addition, our program allows for individual flexibility as students may choose from 11 concentration areas to tailor their degree towards their individual professional, personal and educational goals.

Admission

Admission into the MBA program is competitive and decisions are based on the holistic assessment of each candidate’s academic and personal/professional background. Applicants will be evaluated based on the following criteria:

1. Acceptable bachelor’s degree from an appropriately accredited institution
2. Minimum grade-point average of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended
3. Satisfactory score on the Graduate Management Admission Test (GMAT). Students must score in the top 50 percent on the verbal, quantitative and analytical writing areas
4. For international students, a minimum TOEFL score of 570 on the paper exam, 230 on the computer based exam or 90 on the internet based (iBT) is required
5. Recommendation from the MBA Admissions Committee based upon a review of the above requirements, the student’s “Statement of Purpose” and prior work experience

Additional coursework may be required of admitted students who holistically satisfy the criteria but are weak in one of the above areas.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (Students may apply online through http://www.csumentor.edu). Mailed applications should be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Program of Study

Students with a bachelor’s degree in business administration may be able to complete the program with a minimum of 33 units. However, those students with little or no recent coursework in business administration may require up to 48 total units. The difference is explained below as “Foundation Courses.” Each student in the MBA program must complete an adviser-approved Study Plan.

All newly admitted students must demonstrate proficiency in calculus, software applications and statistics either at the time of admission or within their first year of study. The three technical courses listed below or equivalent coursework must be completed with grades of at least a “C” (2.0):

- Math 135 Business Calculus (3)
- InfoSys/DecSci 265 Introduction to Information Systems and Applications (3)
  OR InfoSys/DecSci 513 Statistical Analysis (3)

Foundation Courses

The MBA program at CSUF presumes that all students demonstrate proficiency in the topics covered by the following Foundation Courses, either by having completed the courses or their equivalent before acceptance into the master’s program or by taking them as part of their Study Plan. Decisions about equivalency are made by College Advisers and Department Chairs within the Mihaylo College of Business and Economics. Prior coursework may be used to demonstrate proficiency; provided that the proposed equivalent courses are no more than seven years old and that the student has achieved at least a “C” (2.0) grade with an overall GPA of 3.0 (B). The Foundation Courses are:

- Accounting 510 Financial Accounting (3)
- Accounting 511 Seminar in Managerial Accounting (3)
- Economics 515 Microeconomic Perspective for Managers (3)
- Finance 517 Managerial Finance (3)
210 Business Administration

The Master of Business Administration Study Plan requires a minimum of 33 units of adviser-approved coursework. Students electing the International Business concentration must complete a minimum of 36 units of adviser-approved coursework. A minimum 3.0 GPA (B) is required in Study Plan courses and overall applicable coursework. Any Study

Any study plan course with a grade lower than “C” (2.0) must be repeated with at least a “C” (2.0) grade.

Required Courses (18 units minimum)

All MBA students must complete a required core of six adviser-approved courses (18 units). These must be at the 500 level. Up to four additional Foundation Courses may be required for those students who enter the program with a limited background in business fields. All specific required courses are determined in consultation with the College Advisers and/or Department Chairs within the Mihaylo College of Business and Economics.

MBA Concentration Elective Courses (12 -15 units)

A student may elect to follow a Generalist path within the MBA or select from one of the 10 concentration areas to tailor their degree towards their individual professional, personal and educational goals. Concentrations are offered in the following areas: Accounting, Business Intelligence, Economics, Entrepreneurship, Finance, Information Systems, International Business, Management, Management Science and Marketing. All concentrations require four courses from within the thematic area (12 units). A minimum of two of the four courses must be at the 500 level. The International Business concentration requires five courses (15 units). All concentration courses must be approved by the Department Chairs or their designee. The Generalist approach consists of 12 units from different areas, with no more than two electives from any one disciplinary area. Specific courses in that plan must be approved by the Associate Dean or designee.

Within each concentration, students must complete a minimum of 6 units at the 500 level. Students completing the International Business or Accounting concentration must complete a minimum of 9 units at the 500 level. Note: The accounting concentration electives must cover the following areas: Financial Accounting and Theory, Accounting Information Systems, Auditing and Taxation.

Capstone Course (3 units)

Business Admin 591 Business Strategy Capstone (3)

Students must pass the individual project in Business Admin 591 and complete the course with a grade of “B” (3.0) or better. In exceptional cases, a thesis (Business Admin 598, Thesis) may serve as an option. See the graduate adviser for details.

BUSINESS ADMINISTRATION COURSES

Courses are designated as BUAD in the class schedule.

201 Business Writing (3)

Prerequisite: English 101 or equivalent (with a grade of “C” (2.0) or better). Core communication practices: routing business correspondence, positive, informative, negative, persuasive messages. Introduction to research and job application process.

210 Understanding Business (3)

Nature, dimensions and forms of business and the role of entrepreneurship in business creation and growth. Development of an understanding of contemporary business issues, including an introduction to major business functions.

301 Advanced Business Communication (3)

Prerequisites: English 101, Business Admin 201 and InfoSys/DecSci 265 (or equivalent) with a “C” (2.0) or better. Advanced course in business communication focusing on case analysis, analytical reports, ethics and business presentations.

495 Internship (1-3)

Prerequisites: junior standing, major in Business Administration, consent of the instructor, 2.5 GPA and semester in residence at the university. Planned and supervised work experience. May be repeated for a total of six units of credit. Credit/No Credit grading only.

499 Independent Study (1-3)

Prerequisite: consent of instructor. Open to qualified students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

501 Managerial Communications (3)

Investigates the entire process of case studies and formal reports. Students analyze management communication problems, apply writing strategies and deliver executive presentations. May be taken credit/no credit or for a letter grade.

591 Business Strategy Capstone (3)

Prerequisites: classified MCBE status, within six units of completion of study plan and in final semester of program. Tools of strategic management and their application in a business environment. Integrates business functional areas and tools by means of a business consulting project. Fulfills the terminal requirement for the MBA degree.

598 Thesis (3)

Prerequisites: classified MCBE status and consent of the associate dean. Individual research under supervision. See “Theses and Projects” in this catalog for university requirements.
INTRODUCTION

The Department of Chemistry and Biochemistry plans its curriculum to provide thorough instruction in the basic principles and concepts of chemistry and biochemistry for students who will (1) advance to graduate work in chemistry or biochemistry; (2) teach in the science programs of secondary schools; (3) seek employment in industry or government; (4) advance to medical, dental, or pharmacy training or (5) pursue a degree or minor in support of a career in other areas such as physics, biology, geology, business or computer science.

The department offers three bachelor’s degrees, the Bachelor of Science (B.S.) and the Bachelor of Arts (B.A.) in Chemistry and the Bachelor of Science (B.S.) in Biochemistry.

To qualify for any of these degrees, a student must earn a “C” (2.0) grade or better in all courses required for the major including prerequisites in related sciences or mathematics.

The Department of Chemistry and Biochemistry is currently on the approved list of The American Chemical Society (ACS), and students have the opportunity to earn ACS certification of the B.S. degrees offered.

The Bachelor of Arts in Chemistry, the Bachelor of Science in Chemistry and the Bachelor of Science in Biochemistry require a minimum of 120 units. These total units include courses for the major, General Education, all University requirements, and free electives.

Learning Goals and Student Learning Outcomes

The following goals and learning outcomes have been established for students pursuing a degree in chemistry or biochemistry:

Concepts

- Understand the concept that all matter is composed of atoms whose inherent periodic properties determine their interactions and combinations into compounds with specific molecular structure, chemical function and physical properties
- Understand and apply fundamental thermodynamic laws and kinetics to chemical reactions in equilibrium and nonequilibrium systems
- Demonstrate literacy in concepts underlying fundamental analytical instrumentation and instrumentation techniques used in chemistry and biochemistry
- Understand the various ways that chemists represent and test chemical knowledge in models, theories, mathematical relationships and symbolic notations
- Understand the principles of safe practices in the laboratory across the subdisciplines of the chemical sciences.

Skills and processes

- Demonstrate the ability to generate data and information through designing and safely implementing experiments using contemporary methods and techniques

DEPARTMENT CHAIR
Maria C. Linder

DEPARTMENT OFFICE
McCarthy Hall 580

DEPARTMENT WEBSITE
http://chemistry.fullerton.edu

PROGRAMS OFFERED
Bachelor of Science in Biochemistry
Bachelor of Science in Chemistry
Bachelor of Arts in Chemistry
Minor in Chemistry
Minor in Biotechnology
Emphasis in Biotechnology
Emphasis in Environmental Chemistry
Master of Science in Chemistry
Emphasis in Geochemistry

SUBJECT MATTER

PREPARATION PROGRAM
Single Subject Teaching Credential in Science

FACULTY
Peter de Lijser, Richard Deming, Mark Filowitz, Leslie Gillespie, Barbara Gonzalez, Christina Goode, A. Scott Hewitt, Paula Hudson, Christopher Hyland, Katherine Kantardjieff, Zhuangjie Li, Maria Linder, Christopher Meyer, Franklin Ow, Madeline Rasche, Kereen Monteyne, Harold Rogers, Karn Sorasaenee, Chandra Srinivasan, Jonathan Stoddard, Fu-Ming Tao

ADVISERS
Undergraduate: Richard Deming
Graduate: Peter de Lijser
• Collect, analyze and interpret data and information
• Retrieve appropriate scientific literature and data
• Communicate data, concepts, skills and processes to experts and nonexperts in the field.

Attitudes
• Demonstrate the safe and ethical use of scientific knowledge, materials and procedures, and be able to explain their impact on a diverse society
• Deliberately employ methods of scientific inquiry to collect, analyze and interpret evidence to solve problems while recognizing the tentative nature of scientific knowledge
• Work effectively, independently and cooperatively
• Pursue career objectives that make use of the baccalaureate degree.

Internships
Internship in Chemistry and Biochemistry (Chemistry 490) provides practical work experience which integrates with the student’s classroom studies.

Recommended Program in General Education
Because of high unit requirements for chemistry degree programs, a student majoring in chemistry is strongly urged to consult with an adviser at the Academic Advisement Center in UH-123 prior to designing his/her general education program. There is a six-unit exemption in general education for B.S. Chemistry degree majors for which the undergraduate Chemistry adviser must be consulted.

Upper-Division Baccalaureate Writing Requirement
Chemistry and biochemistry majors meet the coursework portion of the university’s upper-division writing requirement by passing Chemistry 340, English 301, or English 360 with a grade of “C” or better.

TEACHING CREDENTIAL
The Bachelor’s Degree in Chemistry may be effectively combined with subject matter studies necessary for the Single Subject Teaching Credential in science. Science teachers are in great demand, and candidates may qualify for scholarships and paid teaching internships while completing their credential. Undergraduates are encouraged to contact the Center for Careers in Teaching (657-278-7130, www.fullerton.edu/cct) and the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied/) for early advisement and to plan efficient course selections for general education, the major and credential program coursework. Postbaccalaureate and graduate students should contact the Science Education Programs Office (657-278-2307 or http://nsm.fullerton.edu/scied/). Additional information is found under Science Education Programs in the University Catalog as well as at http://mast.wikispaces.com.

BACHELOR OF SCIENCE IN BIOCHEMISTRY
The Bachelor of Science degree in Biochemistry is recommended for students planning to go directly into professional biochemistry careers and for students planning to attend graduate school in biochemistry or molecular biology. It is also excellent preparation for medical, dental, pharmacy and health science schools. Students who complete this program and include Inorganic Chemistry 325 (3 units) and Chemistry 411 (3 units) may qualify for certification by the American Chemical Society. The major in biochemistry requires the following courses:

Basic Courses (48 units)
Chemistry 120A,B General Chemistry (10)
Chemistry 210 Computational Tools for Chemical Sciences (1)*
Chemistry 301A,B Organic Chemistry (6)
Chemistry 302 Organic Chemistry Laboratory (2)
OR Chemistry 306 Organic Chemistry Laboratory (2)
Chemistry 315 Theory of Quantitative Chemistry (3)
Chemistry 316 Quantitative Chemistry Laboratory (1)
Chemistry 340 Writing for the Chemical Sciences (3)
OR English 301 Advanced College Writing (3)
OR English 360 Scientific and Technical Writing (3)
Chemistry 361A,B Introduction to Physical Chemistry (6)
OR Chemistry 371A,B Physical Chemistry (6)
Chemistry 390 Career Options in Chemistry and Biochemistry (1)
Chemistry 410A Introduction to Computational Genomics (1)
Chemistry 423A,B General Biochemistry (6)
Chemistry 422 Biochemistry Laboratory (2)
Chemistry 477 Advances in Biotechnology (3)
Chemistry 495/499 Senior Research/Independent Study (3)

* Students who pass Multivariable Calculus (Math 250A, 4 units) are exempt from Chemistry 210.

Related Courses (26 units)
Physics 211, 212 Elementary Physics (6)
Physics 211L, 212L Elementary Physics: Laboratory (2)
Math 150A,B Calculus (8)
Biology 172 Cellular Basis of Life (5)
Biology 273 Genetics and Molecular Biology (5)

Upper-division electives are encouraged. See the department handbook or the department adviser for the approved list of courses.

BACHELOR OF SCIENCE IN CHEMISTRY
The Bachelor of Science degree in Chemistry is recommended for students planning to go directly into professional chemistry careers and for those who wish to do graduate work in chemistry. Students who complete this program and include an advanced
course in instrumental analysis (such as 3 units of Chemistry 411) and Advanced Inorganic Chemistry (Chemistry 425) may qualify for degree certification by the American Chemical Society. The B.S. in Chemistry requires 48 units of Chemistry courses, 25 units of support courses, and 9 units of adviser-approved career breadth courses.

**Basic Courses (48 units)**

Chemistry 120A,B General Chemistry (10)
Chemistry 210 Computational Tools for Chemical Sciences (1)*

OR (for students electing Environmental Chemistry Emphasis)
Math 338 Statistics Applied to Natural Sciences (4 units)

Chemistry 301A,B Organic Chemistry (6)
Chemistry 306A,B Organic Chemistry Laboratory (4)
Chemistry 315 Theory of Quantitative Chemistry (3)
Chemistry 316 Quantitative Chemistry Laboratory (1)
Chemistry 325 Inorganic Chemistry (3)
Chemistry 340 Writing for the Chemical Sciences (3)

OR English 301 Advanced College Writing (3)
OR English 360 Scientific and Technical Writing (3)

Chemistry 355 Physical Chemistry Laboratory (3)
Chemistry 371A,B Introduction to Physical Chemistry (6)
Chemistry 390 Career Options in Chemistry (1)
Chemistry 410C Introduction to Computational Chemistry (1)
Chemistry 495/499 Senior Research/Independent Study (2)

*Students who pass Multivariable Calculus (Math 250A, 4 units) are exempt from Chemistry 210.

**Related Courses (25 units)**

Physics 225, 226, 227 Fundamental Physics (7)
Physics 225L, 226L Fundamental Physics Laboratory (2)
Math 150A,B Calculus (8)
Math 250A Multivariate Calculus (4)
Math 250B Linear Algebra and Differential Equations (4)

*Note: For students planning to pursue a graduate degree, Physics 227L (1 unit) is highly recommended.

**Career Breadth (9)**

*Note: Career Breadth requirements is satisfied by taking 9 units of upper-division coursework directly related to the student’s career plans in chemistry and approved by the undergraduate adviser.

**BACHELOR OF ARTS IN CHEMISTRY**

The Bachelor of Arts in Chemistry degree is offered for students who are planning careers that require a sound background in fundamental chemistry, but not at the depth of the B.S. degree. The B.A. is particularly suited for those who plan to go into areas such as secondary education, technical sales, science writing, chemical patent law and forensic sciences. The B.A. in Chemistry requires 45 units of Chemistry courses, and 16 units of related courses.

**Basic Courses (45 units)**

Chemistry 120A,B General Chemistry (10)
Chemistry 210 Computational Tools for Chemical Sciences (1)*

Chemistry 301A,B Organic Chemistry (6)
Chemistry 306A,B Organic Chemistry Laboratory (4)
Chemistry 315 Theory of Quantitative Chemistry (3)
Chemistry 316 Quantitative Chemistry Laboratory (1)
Chemistry 325 Inorganic Chemistry (3)
Chemistry 340 Writing for the Chemical Sciences (3)

OR English 301 Advanced College Writing (3)
OR English 360 Scientific and Technical Writing (3)

Chemistry 355 Physical Chemistry Laboratory (3)
Chemistry 371A,B Introduction to Physical Chemistry (6)
Chemistry 390 Career Options in Chemistry (1)
Chemistry 410C Introduction to Computational Chemistry (1)
Chemistry 411A,B,C or G Instrumental Analysis (1)
Chemistry 421 Biological Chemistry (3)
Chemistry 495/499 Senior Research/Independent Study (2)

*Students who pass Multivariable Calculus (Math 250A, 4 units) are exempt from Chemistry 210.

**Related Courses (16 units)**

Physics 211, 212 Elementary Physics (6)
Physics 211L, 212L Elementary Physics Laboratory (2)
Math 150A,B Calculus (8)

**Chemistry/Pre MBA Program**

A student may combine a B.A. in chemistry with a minor in Business Administration to qualify to enroll in and complete an MBA degree at CSUF in one additional year (33 units), provided all entrance requirements for the MBA program have been met. See your department adviser for details.

**MINOR IN CHEMISTRY**

The Minor in Chemistry requires a minimum of 24 acceptable units of chemistry, including general chemistry (Chemistry 120A,B) plus 14 units of upper-division chemistry courses. These courses must be completed with an overall grade-point average of 2.0. A list of approved upper-division chemistry classes is available from the department office.

The Minor in Chemistry is appropriate for students majoring in Biological Science, Geological Science, or Physics. It is also appropriate for students who have an interest in art restoration, environmental science, forensic science, industrial administration, medical technology, patent or environmental law, or science writing. Students with an interest in these or other areas should consult the chemistry department about courses for the minor which are most appropriate for their interests.
EMPHASIS IN BIOTECHNOLOGY

This emphasis is appropriate for students majoring in biochemistry and interested in gaining employment in nearly any area of the medical and agricultural biotechnology industries, working in academic research laboratories, or pursuing postgraduate degrees in molecular biology or biochemistry.

Required Courses (12 units)
Chemistry 472A,B Advances in Biotechnology Lab (6)
Chemistry 477 Advances in Biotechnology (3)
Biology 412 Principles of Gene Manipulation (3)

EMPHASIS IN ENVIRONMENTAL CHEMISTRY

This emphasis provides a concentration in chemistry with respect to the environment. The coursework addresses issues of concern such as EPA analysis protocols and other analytical methods, the interactions of chemicals with the air, water, and soil environments, how chemicals interact with living systems, chemical hazards, safe handling and disposal of chemicals, and an introduction to the regulatory framework. Interested students should consult their academic adviser for specific course requirements. The emphasis provides training for individuals interested in becoming environmental scientists and for those interested in graduate programs in this area.

Requirements (18-19 units)
Three of the following (9 units):
Chemistry 435 Chemistry of Hazardous Materials (3)
Chemistry 436 Atmospheric Chemistry (3)
Chemistry 437 Environmental Water Chemistry (3)
Chemistry 438 Environmental Biochemistry (3)
Three of the following one-unit mini-courses (3 units):
Chemistry 411A Optical Spectroscopy (1)
Chemistry 411C Separations (1)
Chemistry 411G Mass Spectrometry (1)
Math 338 Statistics Applied to the Natural Sciences (4 units)
(This course can be substituted for chemical and biochemical computation courses in meeting requirements for the major.)
Senior Research (Chemistry 495) (2-3 units)
(Topic must be environmentally related.)

The Environmental Chemistry Emphasis may be integrated with the B.S. in Chemistry with no additional required units by using the above courses to meet career breadth and elective requirements. The environmental chemistry courses also can be used to satisfy requirements for the minor in chemistry.

REQUIREMENTS FOR CHEMISTRY MAJORS SEEKING A TEACHING CREDENTIAL

To qualify for the Subject Matter Preparation Program for the Single Subject Teaching Credential in Science with a concentration in Chemistry, students must earn a bachelor’s degree and complete the following:

1. Biology 171
2. Geological Sciences 101, 101L and 420 and/or

MASTER OF SCIENCE IN CHEMISTRY

The degree is designed to qualify students for more advanced work in chemistry, to provide preparation that will lead to responsible positions in industrial or government research and development laboratories, and to provide preparation for the effective teaching of chemistry in high schools and community colleges.

The program provides fundamental courses at a level and depth commensurate with those taken during the first year of a doctoral program and provides an introduction to research and research methods.

Admission

Students must meet the university requirements for admittance to the university. This normally requires a baccalaureate degree from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. (See the section of this catalog on Graduate Admissions for a complete statement and procedures.) In addition to university requirements, in order to achieve conditionally classified standing in the chemistry program, a student must meet the following requirements:

1. An undergraduate degree in chemistry or a selection of science courses deemed as adequate preparation for further study in chemistry by the Department Graduate Committee
2. At least a 2.75 GPA in science courses
3. For students holding undergraduate degrees from non-U.S.-accredited institutions, the GRE subject examination (Chemistry or Biochemistry), with scores reported to the department.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Placement Examinations

All incoming students are required to pass an analytical writing exam. Any student failing to pass will be required to take a remedial writing class. Each student is required to take and pass placement examinations or take and pass the appropriate courses with a grade of “B” (3.0) or better. Graduate students in one of the chemistry options must demonstrate competency by passing four placement examinations in the following five areas of chemistry: analytical, inorganic, organic, physical, and/or biochemistry. Graduate students...
in the biochemistry option must demonstrate competency in the following areas of chemistry: analytical, organic, biochemistry, as well as either physical or biology.

A student may take each placement examination two times within the first year of enrolling in the graduate program. A student who does not pass the placement examinations within the first year must demonstrate competency by passing with a grade of “B” (3.0) or better the appropriate courses within two years after first enrolling.

The appropriate courses are Chemistry 301B for organic, 315 for analytical, 325 for inorganic, 361A,B for physical (biochemistry option), 371A,B for physical (chemistry option), 423A,B for biochemistry and Biology 273 for biology.

Classified Standing

In order to proceed from conditionally classified to classified standing, a student must meet the following requirements:

1. Demonstration of competency in any three of the areas, as described above
2. Approved selection of a research director
3. An approved study plan
4. The university graduate-level writing requirement

Study Plan

Three alternatives are available for the study plan. The student can complete either a laboratory thesis (preferred) a library thesis, or project.

The degree program consists of 30 units of graduate committee-approved coursework completed with a minimum grade of “B” in all coursework exclusive of Chemistry 505A,B and 599. Each student prepares a study plan in consultation with the graduate program adviser. The study plan must be approved by the student’s research director, the department, and the Office of Graduate Studies. All chemistry courses on the study plan must be 400 level or above.

Study plans may contain no more than 2 units of Chemistry 505A,B, and no more than 6 units of Chemistry 599 (3 units for students electing the library thesis alternative).

1. Basic requirements
   Courses required of all students:
   - Chemistry 505A,B Seminar (2)
   - Chemistry 599 Independent Graduate Research (3-6)
   - Chemistry 598 Thesis (2-4)
     OR Chemistry 597 Project (2-4)

2. Core and Elective Requirements
   A minimum of 18 units of adviser-approved coursework are required, at least nine units of which must be the 500 level. Nine of these units must be core courses in the student’s area of specialization, as follows:
   - Analytical: Chemistry 511, 512, and 552
   - Biochemistry: Chemistry 541, 542, and 546
   - Inorganic: Chemistry 425, 431, and 552
   - Organic: Chemistry 431, 535, and 539
   - Physical: Chemistry 512, 551, and 552

   A specialization in geochemistry is also available. Consult the chemistry graduate adviser for more information. For further details or advisement concerning the M.S. program, contact the graduate adviser.

CHEMISTRY AND BIOCHEMISTRY COURSES

Courses are designated as CHEM in the class schedule.

100 Survey of Chemistry (3)
   Prerequisite: one year of high school algebra. The fundamental principles of chemistry; atomic and molecular structure and the application of these principles to contemporary problems. For the nonscience major.

100L Survey of Chemistry Laboratory (1)
   Prerequisite: concurrent or prior enrollment in Chemistry 100 or Chemistry 115. Experiments chosen to develop laboratory techniques; chemical principles and their application to environmental and societal problems. (3 hours laboratory)

102 Physical Science for Future Elementary Teachers (3)
   (Same as Physics 102)

105 Survey of the Molecules of Life (3)
   An introduction to the biochemical processes of life, including metabolism, development and disease. Recent scientific advances are discussed with emphasis on AIDS, cancer, diabetes and cloning. Scientific methods and ethical issues in scientific research are examined.

111 Nutrition and Health (3)
   The basics of nutrition; diet, food additives, vitamins, hormones, drugs, disease and related biochemical topics. Current controversies, popular practices, fads and fallacies. For the non-science major.

115 Introductory General Chemistry (4)
   Chemistry at the basic level. For students with limited background in chemistry who plan to take additional chemistry or other science courses. Does not fulfill chemistry requirements for majors or minors in the physical or biological sciences (3 hours lecture, 2 hours activity)

120A General Chemistry (5)
   Prerequisites: passage of the chemistry placement examination and exemption form or passage of the ELM examination or completion of Chemistry 115 with a grade of “C” (2.0) or better. For majors and minors in the physical and biological sciences The principles of chemistry: stoichiometry, acids, bases, redox reactions, gas laws, solid and liquid states, changes of state, modern atomic concepts, periodicity and chemical bonding. Laboratory: elementary syntheses, spectroscopy and volumetric quantitative analysis. (3 hours lecture, 3 hours laboratory, 2 hours activity)
120B General Chemistry (5)
Prerequisite: Chemistry 120A or its equivalent. For majors and minors in the physical and biological sciences, chemical thermodynamics, chemical equilibrium (gaseous, aqueous, acid-base, solubility and complexation), elementary electrochemistry and chemical kinetics. Laboratory: quantitative and qualitative analysis and elementary physical chemistry; some qualitative analysis. (3 hours lecture, 6 hours laboratory).

125 General Chemistry for Engineers (3)
Prerequisite: Chemistry 120A. The topics are the same as Chemistry 120B but without laboratory. Not open to students with credit in Chemistry 120B.

200 Chemistry for Nursing and Allied Health Professionals (5)
Prerequisites: Intermediate algebra with a grade of “C” (2.0) or better. One year of high school chemistry or a passing score on the placement test for general chemistry or completion of introductory general chemistry (Chemistry 115 or equivalent) with a “C” (2.0) or better strongly advised. A one-semester course that introduces the fundamental concepts of general, organic and biochemistry and their applications to the health sciences. Meets requirement for pre-nursing curriculum and can be applied to other allied health majors. (3 hours lecture, 3 hours activity)

210 Computational Tools for Chemical Sciences (1)
Prerequisites: Chemistry 120A, B and a major in chemistry or biochemistry. Introduction to the use of spreadsheets and higher level programming languages and molecular modeling for chemical problem solving and data management. Chemical algorithms; data analysis and interpretation; graphical preparation and analysis; search/retrieval of chemical data and literature; file transfers between programs and operating systems.

295 Directed Study (1)
Prerequisite: consent of instructor. Research in chemistry under the supervision of a chemistry department faculty member. Credit/no credit only. May be repeated for credit. Does not count towards major. (3 hours laboratory per unit)

301A Organic Chemistry (3)
Prerequisites: Chemistry 120A, B. Properties and reactions of aliphatic and aromatic compounds, theories of structure, and reaction mechanisms. For the nonchemistry major or for a B.A. in Chemistry, B.S. in Chemistry or B.S. in Biochemistry major.

301B Organic Chemistry (3)
Prerequisites: Chemistry 120A, B and 301A. Properties and reactions of aliphatic and aromatic compounds, theories of structure, and reaction mechanisms. For the nonchemistry major or for a B.A. in Chemistry, B.S. in Chemistry or B.S. in Biochemistry major.

302 Organic Chemistry Laboratory (2)
Prerequisite: Chemistry 301A. Corequisite: Chemistry 301B. Techniques for the synthesis, characterization and isolation of typical aliphatic and aromatic compounds. For the non-chemistry major or the B.S. in Biochemistry major. (6 hours laboratory)

302A Organic Chemistry Laboratory (1)
Chemistry 302A must be taken concurrently with Chemistry 301A. Techniques for the synthesis, isolation and characterization of typical aliphatic and aromatic compounds. Students wishing to fulfill all of their organic chemistry laboratory requirements in a single semester should enroll in Chemistry 302.

302B Organic Chemistry Laboratory (1)
Chemistry 302B must be taken concurrently with Chemistry 301B. Techniques for the synthesis, isolation and characterization of typical aliphatic and aromatic compounds. Students wishing to fulfill all of their organic chemistry laboratory requirements in a single semester should enroll in Chemistry 302.

303A Biotechnology: Business and Society (1)
Prerequisites: completion of General Education (G.E.) Categories I, II, and III.A.1 and 2. Major applications of modern biotechnology will be explored in a lecture/discussion/presentation format that includes guest speakers from industry. (3 hours lecture/discussion for 5 weeks)

303B Biotechnology: Medical Biotechnology (1)
Prerequisites: completion of G.E. Categories I, II, III.A.1, and 2 and Chemistry 303A. Major applications of modern biotechnology will be explored in a lecture/discussion/presentation format that includes guest speakers from industry. (3 hours lecture/discussion for 5 weeks)

303C Biotechnology: Agricultural and Environmental Biotechnology (1)
Prerequisites: completion of G.E. Categories I, II, III.A.1, and 2 and Chemistry 303A. Major applications of modern biotechnology will be explored in a lecture/discussion/presentation format that includes guest speakers from industry. (3 hours lecture/discussion for 5 weeks)

306A Organic Chemistry Laboratory (2)
Prerequisites: Chemistry 120 A,B. Corequisite: Chemistry 301A. Techniques for synthesis, isolation and characterization of typical aliphatic and aromatic compounds, with applications of instrumental and spectroscopic methods for the B.A. and B.S. in Chemistry major. (6 hours laboratory)

306B Organic Chemistry Laboratory (2)
Prerequisites: Chemistry 301A, 306A. Corequisite: Chemistry 301B. Continuation of Chemistry 306A for the B.A. and B.S. in Chemistry major. (6 hours laboratory)
311 Nutrition and Disease (3)
Prerequisite: Chemistry 111 or Biology 101. Relationship between nutrients and disease, with an emphasis on cancer, atherosclerosis and infectious illness. Dietary factors that modify and/or contribute to the disease process from the viewpoints of physiology, biochemistry and immunology. Not applicable to the major. (Same as Biology 311)

313A Environmental Pollution and Its Solutions: Air Pollution (1)
Prerequisites: completion of G.E. Categories I, II, and III.A. Human pollution of the Earth’s atmosphere and means to ameliorate this pollution. Historical examples, current cases, and future prospects. (3 hours lecture/discussion for 5 weeks)

313B Environmental Pollution and Its Solutions: Water Pollution (1)
Prerequisites: completion of G.E. Categories I, II, and III.A. Human pollution of the Earth’s aqueous environment and means to ameliorate this pollution. Historical examples, current cases, and future prospects. (3 hours lecture/discussion for 5 weeks)

313C Environmental Pollution and Its Solutions: Land Pollution (1)
Prerequisites: completion of G.E. Categories I, II, and III.A. Human pollution of the Earth’s terrestrial environment and means to ameliorate this pollution. Historical examples, current cases, and future prospects. (3 hours lecture/discussion for 5 weeks)

315 Theory of Quantitative Chemistry (3)
Prerequisite: Chemistry 120B. Physics 211, 212 or Physics 225. Physics 226 strongly recommended. Modern analytical chemistry; aqueous and non-aqueous equilibrium calculations, electrochemistry, spectrometry, and contemporary separation methods with emphasis on chromatography.

315W Quantitative Chemistry Workshop (1)
Corequisite: Chemistry 315. Designed to enhance knowledge and skills needed for success in Chemistry 315. Emphasis on review of general chemistry, problem-solving skills, study and exam skills, and their application to quantitative chemistry. Credit/No Credit only. (2 hours activity)

316 Quantitative Chemistry Laboratory (1)
Prerequisites: Chemistry 315, Chemistry 210. Modern analytical chemistry laboratory: polyprotic acids, liquid chromatography, electrochemistry, absorption spectroscopy (ultraviolet/visible, infrared, atomic). (3 hours laboratory)

325 Inorganic Chemistry (3)
Prerequisite: Chemistry 301B. The chemistry of the main group elements and an introduction to transition metal chemistry.

340 Writing for the Chemical Sciences (3)
Prerequisites: upper-division standing, English 101 and two semesters of chemistry beyond general chemistry. Design and preparation of scientific manuscripts and presentations. Emphasizes practice in writing, American Chemical Society writing guidelines, peer-review and critical analysis of scientific literature. (English 301 or English 360 may be substituted.)

355 Physical Chemistry Laboratory (3)
Prerequisite: Chemistry 316, Chemistry 361A or Chemistry 371A. Corequisite: Chemistry 361B or 371B. Experiments in chemical synthesis, instrumental analysis and physical chemistry. Laboratory training and written presentation of theory, data and results are emphasized. (1 hour lecture, 6 hours laboratory).

361A Introduction to Physical Chemistry (3)
Prerequisites: Math 150A, B and Physics 211, 212 or 225, 226, Chemistry 301A, B. Thermodynamics and kinetics; properties of gases and solutions; molecular structure and energies and application to spectroscopic techniques; liquids, phase equilibria, thermodynamics of multicomponent systems with application to the life sciences.

361B Introduction to Physical Chemistry (3)
Prerequisites: Math 150A, B and Physics 211, 212 or 225, 226, Chemistry 301A, B. Thermodynamics and kinetics; properties of gases and solutions; molecular structure and energies and application to spectroscopic techniques; liquids, phase equilibria, thermodynamics of multicomponent systems with application to the life sciences.

371A Physical Chemistry (3)
Prerequisites: Math 250A, Physics 225, 226 and Chemistry 301A, B. Thermodynamics, solutions, chemical and phase equilibria, electrochemistry, transport phenomena, introduction to atomic and molecular structure, rotation and vibration spectroscopy, statistical mechanics, and kinetics.

371B Physical Chemistry (3)
Prerequisites: Math 250A, Physics 225, 226 and Chemistry 301A, B. Thermodynamics, solutions, chemical and phase equilibria, electrochemistry, transport phenomena, introduction to atomic and molecular structure, rotation and vibration spectroscopy, statistical mechanics, and kinetics.

390 Careers in Chemistry and Biochemistry (1)
Prerequisite: Chemistry 120B. Career options in chemistry. Credit/No Credit only.

395 Undergraduate Research (1-3)
Prerequisites: completion of one upper-division course in chemistry, one semester of experience working in a research laboratory, and consent of instructor. Independent research in chemistry or biochemistry under the guidance of a department faculty member. May be repeated for credit. Does not count towards major. (3 hours per week per unit). (4 units maximum)
410A Introduction to Computational Genomics (1)
Prerequisites: Chemistry 361A; 421 or 423A; 210. Co-requisite, 361B or 371B or 423B. Introduction to protein and DNA sequence analysis and molecular evolution; probabilistic models of sequences; gene identification; comparative genomics (algorithms and statistics); brief review of structure and evolution of genes and proteins.

410B Advanced Computational Biochemistry (1)
Prerequisites: Chemistry 361A; 421 or 423A; 210. Co-requisite, 361B or 371B or 423B. Principles of protein folding and structure; methods for determining protein structure; methods of protein structure prediction and modeling; contents of structural databases; structure visualization, validation and analysis; structure-based drug design; rational mutagenesis; computational biochemistry tools.

410C Introduction to Computational Chemistry (1)
Prerequisites: Chemistry 361A or 371A; 210. Co-requisite, 361B or 371B. Basic theory of molecular electronic structure; common methods for molecular computation; visualizing molecular structure and understanding calculated properties; predicting molecular spectra and other experimental data; applying molecular computation to practical problems in research.

410D Advanced Computational Chemistry (1)
Prerequisites: Chemistry 361A or 371A; 210; 410C. Co-requisite, 361B or 371B. High level methods of molecular computation; theory of reaction rates; methods for transition state computations; tools and techniques for exploring reaction mechanisms or pathways; prediction of reaction kinetics data; applications of molecular computations in research.

411A Instrumental Analysis - Optical Spectroscopy (1)
Prerequisites: Chemistry 315 and 316. Corequisite: Chemistry 361B or 371B. (UV/visible, infrared, atomic absorption, flame emission) Students wishing an ACS certified degree must take three units of Chemistry 411 courses. (1 hour lecture, 3 hours laboratory for 5 weeks)

411B Instrumental Analysis - Magnetic Resonance (1)
Prerequisites: Chemistry 315 and 316. (nuclear magnetic resonance, electron spin resonance) Students wishing an ACS certified degree must take three units of Chemistry 411 courses. (1 hour lecture, 3 hours laboratory for 5 weeks)

411C Instrumental Analysis - Separations (1)
Prerequisites: Chemistry 315 and 316. (high performance liquid chromatography, gas chromatography) Students wishing an ACS certified degree must take three units of Chemistry 411 courses. (1 hour lecture, 3 hours laboratory for 5 weeks)

411G Instrumental Analysis - Mass spectrometry (1)
Prerequisites: Chemistry 315 and 316. (conventional magnetic sector, quadruple, Fourier transform, tandem, and time-of-flight; hyphenated techniques including gas chromatography (GC-MS), liquid chromatography (LC-MS). Students wishing an ACS certified degree must take three units of Chemistry 411 courses. (1 hour lecture, 3 hours laboratory for 5 weeks)

421 Biological Chemistry (3)
Prerequisite: Chemistry 301A. Corequisite: Chemistry 315. Survey of biochemistry designed for biology majors and pre-health profession careers. This course will cover major areas of biochemistry, including intermediary metabolism and compounds of biochemical interest. The focus of this one-semester course will be on the application of biochemistry and the biochemical foundation of health science.

422 General Biochemistry Laboratory (2)
Prerequisites: Chemistry 302 or 306A and 316. Corequisite: Chemistry 421 or 423A. The chemistry and metabolism of carbohydrates, nucleic acids, lipids and proteins; techniques of enzyme chemistry and isolation; research methods. (6 hours laboratory)

423A General Biochemistry (3)
Prerequisite: Chemistry 301B. Corequisite: Chemistry 315. Survey of biochemistry designed for Biochemistry majors; structural chemistry and function of biomolecules, bioenergetics and intermediary metabolism.

423B General Biochemistry (3)
Prerequisite: Chemistry 423A. Survey of biochemistry designed for Biochemistry majors; structural chemistry and function of biomolecules, central metabolism; replication and expression of the genetic material.

425 Advanced Inorganic Chemistry (3)
Prerequisites: Chemistry 325 and 361A,B or 371A,B. The bonding, structure and reactivity of transition and lanthanide elements. Molecular orbital and ligand field theory, classical metal complexes and organometallic chemistry of the transition elements.

431 Advanced Organic Chemistry (3)
Prerequisites: Chemistry 301B and 361A,B or 371A,B. Theoretical and physical aspects of organic chemistry. The modern concepts of structure, and reaction mechanisms.

435 Chemistry of Hazardous Materials (3)
Prerequisite: Chemistry 301B. An in-depth examination of hazardous chemicals; organic and inorganic air- and moisture-sensitive compounds, reactive metals; chemical reactivity patterns; chemical compatibilities; storage and handling; methods of disposal and waste containment; Federal and local regulations; case histories.
436 Atmospheric Chemistry (3)
Prerequisite: Chemistry 315. Chemistry and photochemistry of the troposphere and stratosphere, both natural and polluted. Includes fundamental reaction kinetics and mechanisms, monitoring techniques, smog chamber, field and modeling studies.

437 Environmental Water Chemistry (3)
Prerequisite: Chemistry 315. Chemical characteristics of fresh and oceanic water; major water pollutant classes, origins, environmental chemical transformations, effects, abatement, and fates; chemical methods for determining water quality, large scale processes for water treatment.

438 Environmental Biochemistry (3)
Prerequisite: Chemistry 301B. Effects of current agricultural, industrial and mechanical practices on the composition, metabolism and health of soil, plants, animals and man, from a biochemical perspective; mechanism of action and degradation of common agricultural chemicals and industrial pollutants.

445 Nutritional Biochemistry (3)
Prerequisite: Chemistry 423A or 421. Nutrition, metabolism and excretion of carbohydrates, proteins, fats, vitamins, major minerals and trace elements from a biochemical perspective. Relevant variations in dietary practices related to life stages and specific illnesses.

472A Advances in Biotechnology Lab (3)
(Same as Biology 472A)

472B Advances in Biotechnology Laboratory (3)
Prerequisite: Biology/Chemistry 472A. Second semester exploring biotechnology techniques for gene product analysis: DNA sequencing, site-directed mutagenesis, predicting amino acid changes, protein overproduction, enzyme function assays, protein identification/preparation by gel techniques, immunoblotting. (1 hour discussion, 6 hours laboratory) (Same as Biology 472B)

473 Introduction to Bioinformatics (3)
(Same as Biology 473)

477 Advances in Biotechnology (3)
Prerequisites: completion of Biology 172 and Biology 273. Corequisite: Chemistry 421 or 423B. Current topics in biotechnology centering on techniques for molecular cloning and DNA sequencing of genes. Medical breakthroughs for diagnosis of mutations and gene therapy. Role of biotechnology in agriculture, energy and environment. Bioethical issues. (Same as Biology 477)

480A Topics in Contemporary Chemistry (1)
Prerequisite: junior or senior standing in chemistry. Research seminar dealing with topics of current interest in chemistry such as photochemistry, biochemistry, analytical chemistry and organometallic chemistry. Credit/no credit only. Not applicable toward master's degree. May be repeated for credit.

480M MARC Proseminar (1)
(Same as Biology and Psychology 480M)

480T Topics in Contemporary Chemistry (2-3)
Prerequisite: junior or senior standing in chemistry. Special lecture topics of current interest in chemistry. May be repeated for credit. (1 hour lecture per unit)

490 Internship in Chemistry and Biochemistry (1-2)
Prerequisites: junior or senior standing in chemistry and consent of instructor. Internship in chemistry. Work on projects in industrial, governmental or medical laboratories. May count as career breadth requirement units for chemistry majors, or substituted for Chem 495, with permission. May be repeated once. Does not count toward M.S. degree.

495 Senior Research (1-3)
Prerequisites: three one-year courses in chemistry, Chemistry 390, and consent of instructor. Corequisite: Chemistry 340. The methods of chemical research through a research project under the supervision of one of the Department faculty. May be repeated for credit. Only 6 units may apply toward B.A. or B.S. degree (6 hours per week per unit)

496 Student-to-Student Tutorials (1-3)
Supervised experience in chemistry teaching through tutoring or assisting in laboratory or field classes. Consult “Student-to-Student Tutorials” in this catalog for prerequisites and a more complete course description.

498 Senior Thesis (2)
(Same as Biology 498)

499 Independent Study (1-3)
Prerequisites: junior or senior standing and completion of two one-year courses in chemistry. Special topics in chemistry selected in consultation with the instructor and approval of department chair. May be repeated for credit. Only six units may apply toward B.A. or B.S. degree. In some cases, 499 can be substituted for 495, Senior Research, to meet degree requirements.

505A Seminar (Participation) (1)
Prerequisites: graduate standing and consent of department. Student attendance at presentations by invited scientists on topics of current interest in chemistry. May not be repeated for credit. (1 hour seminar)

505B Seminar (Presentation) (1)
Prerequisites: Chemistry 505A, graduate standing and consent of the department. Student presentation of recent contributions to the chemical literature. May not be repeated for credit. (1 hour seminar)

511 Theory of Separations (3)
Prerequisites: Chemistry 355 and 361A,B or 371A,B. The theory, application and limitations of physical and chemical separation techniques; chromatography.
512 Advanced Instrumentation (3)
Prerequisite: Chemistry 315. Spectroscopic instrumentation components and systems. Includes laser spectroscopy, mass spectroscopy, chemical sensor, process control, surface science, and microscopy methods; vacuum technology, optics, electro-optics, and electronics components; design and repair of instrumentation.

535 Organic Synthesis (3)
Prerequisites: Chemistry 361A,B or 371A,B and 301B. Methods of synthetic organic chemistry and their application to construction of organic molecules.

537 Organic Spectroscopy (3)
Prerequisites: Chemistry 301B/302 or 301B/306B, Chemistry 361A,B. Chemistry 431 recommended. Theory and use of infrared spectroscopy, mass spectrometry, ultraviolet-visible spectroscopy and nuclear magnetic resonance spectroscopy as methods for the identification of organic compounds.

539 Chemistry of Natural Products (3)
Prerequisite: Chemistry 301B. The biosynthesis of the alkaloids, terpenes, steroids and other natural products of plant and animal origin.

541 Protein Biochemistry (3)
Prerequisites: Chemistry 423A,B or equivalent. Protein isolation strategies and techniques; chemical/physical characterization and modeling; functional characterization (kinetics, binding, chemical modification); molecular biology, including cloning, expression, sequencing and engineering.

542 Nucleic Acid Biochemistry (3)
Prerequisites: Chemistry 423A and B, or equivalent, and a biochemistry lab course (Chemistry 422 or equivalent). The course covers biochemistry of nucleic acids in living systems at the molecular level. Advances and techniques used in nucleic acid research are also covered. A strong emphasis is placed on critical reading, analysis, and presentation of primary literature.

543 Physical Biochemistry (3)
Prerequisites: Chemistry 361A,B or 371A,B, 421 or 423A,B. Methods for measuring physical properties of proteins and nucleic acids. Thermodynamic and hydrodynamic aspects.

546 Metabolism and Catalysis (3)
Prerequisite: Chemistry 421 or 423A,B. Regulation of biosynthetic and degradative reactions in living systems. The control of enzyme activity and concentration. Mechanisms of hormone action.

551 Quantum Chemistry (3)
Prerequisites: Chemistry 371A,B. Postulates and theories of approximation methods in quantum chemistry, the electronic structure of atoms and molecules, chemical bonds, group theory and applications.

552 Kinetics and Spectroscopy (3)
Prerequisite: Chemistry 361B or 371B. Kinetics and spectroscopy of chemical and biochemical systems in the gas phase, in the liquid phase, and on surfaces.

580T Topics in Advanced Chemistry (1-6)
Prerequisite: graduate standing in chemistry. Current research topics in chemistry in the area of analytical, organic, inorganic, physical chemistry and biochemistry. May be repeated for credit. (1 hour seminar per unit)

597 Project (1-6)
Prerequisites: an officially appointed project committee and consent of the department chair. Guidance in the preparation for a project for the master’s degree.

598 Thesis (1-6)
Prerequisite: an officially appointed thesis committee. Guidance in the preparation of a thesis for the master’s degree.

599 Independent Graduate Research (1-6)
Prerequisite: graduate standing in chemistry. May be repeated for credit.
INTRODUCTION

Chicana and Chicano Studies offers an outstanding interdisciplinary education. Highlights of our program include the following:

Great Credentials

The department has developed a challenging curriculum that is especially relevant in our growing multicultural society. Increasingly, public and private employers are recognizing the need for professionals who can relate to Chicano and other Latino populations. A number of employers have expressed a sincere interest in hiring well-rounded individuals with marketable skills and who have in-depth knowledge relating to these communities. The Chicana and Chicano Studies Department takes great pride in preparing graduates who can fulfill these criteria.

Exciting Classes

Our department offers challenging coursework that explores racial politics, history, education, literature, law and immigration, civil rights, feminism, socio-economics, the Chicana/o family, art, music and film. Particular emphasis is given to other Latino cultures in the United States. Students emerge from this challenging major armed with powerful analytical tools, a strong expertise in subject matter, and a newfound appreciation for the complexity of the Chicana/o experience. Frequently, our students conduct important research under the supervision of our superb faculty. Several classes offer student opportunities to internationalize their educational experience. Some seminars also provide students with the chance to strengthen local communities through service-learning internships. Finally, coursework and learning are continually reinforced through technology-based assignments.

Outstanding Faculty

Our faculty members are internationally recognized scholars who hold doctorate and professional degrees from prestigious universities. Several have won prestigious grants and fellowships and all are eager to share their enthusiasm about the field of Chicana and Chicano studies.

Teaching Credential

Because Chicana/o Studies is interdisciplinary, the major provides a particularly appropriate background for elementary school teaching (K-8) and secondary school teaching (7-12). Undergraduate majors are encouraged to work closely with the CSUF Center for Careers in Teaching at 657-278-7130. Working closely and collaboratively with the center will help speed majors toward obtaining their credentials in a straightforward and efficient manner. With careful planning, it may be possible to enter the credential program in a student’s senior year. Postgraduate students should contact the Admission to Teacher Education Office in the College of Education at 657-278-3352 to obtain information on attending an overview presentation.
Excellent Jobs After Graduation

Our graduates are very well prepared to excel in a variety of areas. Many have found rewarding careers as counselors, social workers, law officers, community organizers, and work in various local, state and federal agencies. Alumni have also gone to study at prestigious professional schools of business and law, as well as graduate programs in history, political science, anthropology, and ethnic studies. We look forward to having students learn more about the extraordinary opportunities that await them as a Chicana/o Studies major at California State University, Fullerton.

BACHELOR OF ARTS IN ETHNIC STUDIES OPTION IN CHICANO STUDIES

The Bachelor of Arts in Ethnic Studies (Chicana/o Studies) requires a minimum of 120 units, which includes courses for the option, General Education, all university requirements, and free electives.

A total of 36 units from the following courses are required for the option.

Lower Division (6 units)
Chicana/o 106 Intro to Chicano Studies (3)
Chicana/o 220 Mexican Heritage (3)

30 Additional Units

Required Courses (9 units), selected from the following:
Chicana/o 330 The Evolution of Mexican Literature (3)
Chicana/o 331 The Chicano Child (3)
Chicana/o 340 Mexican/Chicano Intellectual Thought (3)
Chicana/o 345 History of the Chicano (3)
Chicana/o 353 Mexico Since 1906 (3)

Upper-Division Writing Requirement (3 units)
Chicana/o 307 Research and Writing in Ethnic Studies (3)
OR English 301 Advanced College Writing (3)

Electives (18 units minimum)
Courses to be selected from remaining Chicana/o Studies curriculum, of which only six units maximum of lower-division elective courses may apply.

MINOR IN CHICANO STUDIES

The minor in Chicano Studies consists of 24 units in the following areas:

Required lower-division courses (6 units)
Chicana/o 106 Intro to Chicano Studies (3)
Chicana/o 220 Mexican Heritage (3)

Required upper-division courses (9 units)
(to be selected from the following)
Chicana/o 330 The Evolution of Mexican Literature (3)
Chicana/o 331 The Chicano Child (3)
Chicana/o 340 Mexican/Chicano Intellectual Thought (3)
Chicana/o 345 History of the Chicano (3)
Chicana/o 353 Mexico Since 1906 (3)

Approved Electives
Nine units of approved coursework in lower- and upper-division classes that are selected in consultation with the department adviser.

GRADUATE STUDY

The Department of Chicana and Chicano Studies offers courses for advanced study in the following graduate degree programs:
Master of Science in Education: Bilingual/Bicultural Concentration
Master of Arts in Spanish: Bilingual Concentration

CHICANA AND CHICANO STUDIES COURSES

Courses are designated as CHIC in the class schedule.

101 Introduction to Ethnic Studies (3)
(Same as Afro-Ethnic Studies 101)

102 Communication Skills (3)
Basic communication skills, including oral and written expression. A unit on the mechanics of writing and reporting on a term paper is included as part of the course.

106 Introduction to Chicano Studies (3)
Prerequisite: completion of General Education (G.E.) Category III.C.1. Role of the Chicano in the United States. The Chicano’s cultural values, social organization, urbanization patterns, and the problems in the areas of education, politics and legislation. One or more sections offered online.

108 Linguistics and Minority Dialects (3)
(Same as Linguistics 108)

190 Survey of American History with Emphasis on Ethnic Minorities (3)
(Same as History 190 and Afro-Ethnic Studies 190. Fulfills Title V, Statutory Requirements.)

220 Mexican Heritage (3)
Basic characteristics of the Mexican, especially the Chicano, society and culture from 1519 to present. Emphasizes arts, literature and history of Mexico and the Chicano in the United States.

302 Ancient Mexican Culture (3)
Historical and cultural survey of principal pre-Columbian cultures of Mexico and their significance to Mexican society.

303 Cultural Differences in Mexico and the Southwest (3)
Prerequisite: completion of G.E. Category III.C.1. Cultural conflicts in Mexico and the Southwest as seen by the intellectual thinkers of Mexico and the United States. Urban and rural problems.

304 Music of Mexico (3)
(Same as Music 304)
305 The Chicano Family (3)
The Chicano family's development as an American social institution. Historical, cross-cultural perspectives, and the social and psychological dynamics of the Chicano family are discussed.

306 Barrio Studies (3)
Prerequisite: Chicana/o Studies 220. Major characteristics of the barrio. Supervised fieldwork in the barrio is required. Analysis of the barrio or an agency within the barrio will be made after fieldwork is completed. (2 hours lecture, 3 hours fieldwork)

307 Research and Writing in Ethnic Studies (3)
(Same as Afro 307 and Asian American 307)

313 La Chicana (3)
Prerequisite: completion of G.E. Category III.C.1. Cultural influences that the family, religion, economic status and community play upon the lifestyles, values and roles held by Chicanas. One or more sections offered online. (Same as Women's Studies 313)

315 Chicano/ Latino Theater (3)
Prerequisite: completion of G.E. Category III.B.1. or III.B.2. Analysis of contemporary Chicano/ Latino theater in relation to its historical evolution. Emphasizes plays, playwrights and theater groups expressing the Chicano/Latino experience. Extensive play reading. (Same as Theater 315)

316 The Chicano Music Experience (3)
Mexican folk and popular music and its relationship to the culture of Mexico. Pre-Cortesian period to the present in Mexico and Southwestern United States.

330 The Evolution of Mexican Literature (3)
Prerequisite: completion of the G.E. Category III.B.2. Survey and analysis of the Nahautl, Mexican and Chicano literature from pre-Columbian period to present.

331 The Chicano Child (3)
Prerequisite: completion of G.E. Category III.C.1. The Chicano child from preschool through grade six. Emphasizes motor, physical, social, intellectual, emotional growth and development and their effect on school adjustment and achievement. Field observation of preschool and grade school children required.

332 The Chicano Adolescent (3)
Prerequisite: completion of the G.E. Category III.C.1 The Chicano adolescent's social, intellectual and emotional growth and development. Bicultural pressures from the barrio, family structure, school and achievement values.

333 Mexican Literature Since 1940 (3)
Literature of Mexico since 1940: Carlos Fuentes, Rodolfo Usigli, Xavier Villarrutia, Juan Jose Arreola, Octavio Paz, Laura Esquivel and Juan Rulfo. Other contemporary authors may be included.

336 Main Trends in Spanish-American Literature (3)
Main currents of Spanish-American literature emphasizing contemporary works. Relation between the artistic expression and the ideological values of the period.

337 Contemporary Chicano Literature (3)
Prerequisite: Chicana/o Studies 106 or 220. Modern Chicano writers in the United States: Alurista, Corky Gonzales, Octavio Romano, El Teatro Campesino and major Chicano magazines and newspapers. Other contemporary writers may be included.

340 Mexican/Chicano Intellectual Thought (3)
Prerequisite: completion of G.E. Category III.B.2. Emergence of the Chicano movement dealing with political, economic and sociological facets. Writings of Nahautl, Spanish, Spanish-American, Chicano and contemporary writers. Not applicable for graduate degree credit.

345 History of the Chicano (3)
Prerequisite: completion of the G.E. Category III.C.1. History of the Chicano from the pre-Columbian period to the present. The Chicanos' changing role in the United States, their cultural identity crisis and their achievements.

350 Mexican Life and Culture (3)
(Same as Latin American Studies 350)

353 Mexico Since 1906 (3)
Prerequisite: completion of G.E. Category III.C.1. Mexican Revolution of 1910, stressing the political, economic and social aspects, as well as its contributions in the fields of art, literature and social reforms.

360 Chicanos and the Law (3)
Relationship between Chicanos and the legal and judicial system, including the administration of justice, Chicano-police relations and prison system.

367 Latino/a Spirituality and Religion (3)
(Same as Comparative Religion 367)
450 The Chicano and Contemporary Issues (3)
Socioeconomic and political problems confronting the Chicano, including proposed solutions. Effect that social institutions have had on the Chicano community.

460 The Chicano and Politics (3)
Theory of urban politics and evaluation of issues that affect the Chicanos and American society. Evaluations and surveys will be made on political organizations in Hispanic-surnamed communities. (Same as Political Science 460)

480 The Immigrant and the Chicano (3)
Mexican immigration to the United States and its social, economic and political impacts on the Chicano and non-Chicano communities and other immigrant groups.

499 Independent Study (1-3)
Prerequisites: senior standing and approval by the department chair and instructor(s) in charge of directing the study. An opportunity to study independently under the guidance of the faculty on a subject of special interest and approved by instructor.

599 Independent Graduate Research (1-3)
Prerequisites: consent of instructor and classified status. Individual research for Chicana and Chicano Studies components in Master of Arts in Bilingual Studies (Spanish), Master of Science in Bilingual Education (Education) and related programs. Maximum of 3 hours credit.
INTRODUCTION

Child and Adolescent Development is a social science concerned with the study of development and the interrelationships between the developing person, family and community. The major is designed to provide students with knowledge about empirically derived biological-physical, socio-emotional and cognitive developmental milestones; individual differences; and common variations in development in order to interact effectively with children, adolescents and families from diverse backgrounds in a variety of educational and service settings. Effective work with and advocacy on behalf of children, adolescents, and families are informed by research, theory, developmental methodologies and practices, fieldwork experience and relevant professional and ethical standards. Moreover, the curriculum provides students with tools to acquire, evaluate, communicate and disseminate information to sustain a lifelong pursuit of developmental inquiry and enable appropriate and effective responses to changing professional demands.

The Bachelor of Science in Child and Adolescent Development provides broad undergraduate preparation for careers in child and adolescent-related professions, including elementary education, special education, early care and education, child/adolescent guidance and a variety of youth-related social service careers. The major also prepares students for graduate study in disciplines such as child development, counseling, developmental psychology and social work.

LEARNING GOALS AND STUDENT LEARNING OUTCOMES

The following goals and learning outcomes have been established for students pursuing a degree in Child and Adolescent Development:

Understanding of theories, concepts and research findings
- Describe and/or explain relevant theories, concepts and related research findings
- Differentiate typical from atypical development
- Describe individual, cultural and environmental differences
- Identify the purpose and structure of community and government systems

Information literacy and research analysis skills
- Identify, access, analyze and synthesize relevant sources
- Critically analyze research studies

Communication skills
- Write in APA style and effectively take purpose and audience into account
- Make effective oral presentations, taking purpose and audience into account

DEPARTMENT CHAIR
Kari Knutson Miller, Ph.D.

DEPARTMENT OFFICE
Education Classroom 105

DEPARTMENT WEBSITE
http://hhd.fullerton.edu/cas

PROGRAMS OFFERED
Bachelor of Science in Child and Adolescent Development
Options in:
- Early Childhood Development
- Elementary School Settings
- Adolescent/Youth Development
- Family and Community Contexts
- Minor in Child and Adolescent Development

FACULTY
Katherine Bono, Ioakim Boutakidis, Nathalie Carrick, Jacqueline Coffman, Leslie Grier, Diana Wright Guerin, Leigh Hobson, Janna Kim, Kari Knutson Miller, Pamela Oliver, James Rodriguez, Mark Runco, Sharon Seidman, Sharon Willmer, Shelli Wynants, Shu-Chen Yen
Professional, ethical and reflective practice with diverse populations

- Apply theories, concepts and research findings to promote child well-being
- Identify relevant ethical and legal issues and the impact of possible actions in real-world situations

ACADEMIC ADVISEMENT

Academic advisement is provided at both the Fullerton and Irvine campuses through regularly scheduled Overview of the Major sessions and individual student advising appointments. During their first semester as a major, students are required to attend an Overview of the Major session and are expected to consult with a department adviser to develop an academic plan to ensure efficient progress towards graduation. Consult the department website or contact the department office for a schedule of Overview of the Major sessions and available individual advisement appointments.

BACHELOR OF SCIENCE IN CHILD AND ADOLESCENT DEVELOPMENT

The Bachelor of Science degree in Child and Adolescent Development requires the successful completion of a minimum of 51 units in the major. The Child and Adolescent Development major consists of a 9-unit basic core completed by all majors and 42 units in one of the following four options: (1) Early Childhood Development, (2) Elementary School Settings, (3) Adolescent/Youth Development, and (4) Family and Community Contexts. The option will be posted on students’ transcripts following the successful completion of required coursework. A grade of “C” (2.0) or better is required in all courses applied to the major. Course prerequisites are strictly enforced.

Basic Core Courses (9 units)
- Child/Adolescent Studies 101 Introduction to Child and Adolescent Development (3)
- Child/Adolescent Studies 201 Child, Family and Community (3)
- Special Ed 371 Exceptional Individual (3)

BACHELOR OF SCIENCE IN CHILD AND ADOLESCENT DEVELOPMENT: OPTION IN EARLY CHILDHOOD DEVELOPMENT (42 UNITS)

The option in Early Childhood Development is designed for students pursuing careers working with young children and their families. In keeping with the National Association for the Education of Young Children’s professional standards for bachelor’s programs and the education requirements of the California Child Development Permit Matrix, the coursework emphasizes children’s early development and learning; strategies to engage in developmentally appropriate practices; creation of early childhood environments rich in language, literacy, and other foundational skills; observation and assessment of young children and their environments; and effective work with diverse populations.

Option-Specific Core Courses (18 units)
- Child/Adolescent Studies 215 Observations in Early Childhood Settings (3)
- Child/Adolescent Studies 305 Advanced Assessment in Early Childhood (3)
- Child/Adolescent Studies 321 Infant/Toddler Development (3)
- Child/Adolescent Studies 322 Preschool-Age Development (3)
- Child/Adolescent Studies 323 Primary-Age Development (3)
- Child/Adolescent Studies 491 Leadership Seminar in Early Childhood (3)

Practicum Courses (6 units)
- Child/Adolescent Studies 140/L Introduction to Early Childhood/Practicum (3)
- Child/Adolescent Studies 464/L Practicum Seminar/Practicum in Early Care and Education (3)

Topical Developmental Courses (18 units)
- Child/Adolescent Studies 341 Working with Parents of Young Children (3)
- Child/Adolescent Studies 346 Modern Culture and Early Childhood (3)
- Nursing 306 Health and Safety for Early Childhood (3)
- Special Ed 400 Early Childhood Special Education (3)

And one class from each cluster
1. Language and Literacy: CAS 351 Language and Literacy Development in Early Childhood (3), READ 340 Promoting Language and Literacy Readiness in Young Children – Reading (3), or SPED 436 Literacy for Early Childhood Special Education Specialists (3)

BACHELOR OF SCIENCE IN CHILD AND ADOLESCENT DEVELOPMENT: OPTION IN ELEMENTARY SCHOOL SETTINGS (42 UNITS)

The option in Elementary School Settings (ESS) is designed for students interested in teaching at the elementary school level and emphasizes an understanding of cognitive, physical, and socio-emotional development, subject-matter knowledge, and consideration of pedagogical strategies and programs that promote academic achievement as well as other positive developmental outcomes for elementary school children.
**Option-Specific Core Courses (18 units)**

- Child/Adolescent Studies 300 Elements of Effective Professional Communication (3)
- Child/Adolescent Studies 301 Inquiry and Methodology in Development (3)
- Child/Adolescent Studies 310 Assessing and Observing Development (3)
- Child/Adolescent Studies 325A Conception through Age 8 (3)
- Child/Adolescent Studies 325B Age 9 through Adolescence (3)
- Child/Adolescent Studies 490T Topical Senior Seminar in Child and Adolescent Development (3)

**Fieldwork Courses (6 units)**

- Child/Adolescent Studies 394/L Practicum Seminar/Practicum in Child and Adolescent Development (3)
- Child/Adolescent Studies 474/L Practicum Seminar/Practicum in Development in School Settings (3)

**Topical Developmental Courses (18 units)**

*One class from each cluster:*

1. **Arts:** ART 380 Art and Child Development (3), DANC 471 Creative Dance for Children (3), MUSC 433 Music in Childhood (3), THTR 402A Dramatic Activities for Children (3)
2. **Kinesiology:** KNES 386 Movement and the Child (3)
3. **Language Arts:** ENGL 341 Children's Literature (3) or THTR 311 Oral Interpretation of Children's Literature (3)
4. **Math:** MATH 303A Fundamental Concepts of Elementary Mathematics (3)
5. **Science:** BIOL 453 Life Science Concepts (3) or GEOL 410 Physical Earth/Space Systems (3)
6. **Developmental Elective:** CAS 326 Optimizing Development of School Age Children (3), CAS 340 Parenting in the 21st Century (3), CAS 345 Child and Adolescent Development in Diverse Family Contexts (3), or 2nd CAS 490T Topical Senior Seminar (3)

**MUL TIPLE SUBJECT TEACHING CREDENTIAL PREPARATION**

A Multiple Subject Teaching Credential is required to teach in California public elementary schools. Completion of both the California Basic Educational Skills Test (CBEST) and the California Subject Examinations for Teachers (CSET) is an entrance requirement for Multiple Subjects Teaching Credential programs. Further information is available from the Center for Careers in Teaching.

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**BACHELOR OF SCIENCE IN CHILD AND ADOLESCENT DEVELOPMENT: OPTION IN ADOLESCENT/YOUTH DEVELOPMENT (42 UNITS)**

The option in Adolescent/Youth Development (AYD) provides advanced understanding of cognitive, physical and socio-emotional development during the adolescent age period. It is designed for students who intend to work with youth in community-based settings and/or to pursue graduate studies related to adolescent development.

**Option-Specific Core Courses (18 units)**

- Child/Adolescent Studies 300 Elements of Effective Professional Communication (3)
- Child/Adolescent Studies 301 Inquiry and Methodology in Development (3)
- Child/Adolescent Studies 310 Assessing and Observing Development (3)
- Child/Adolescent Studies 325A Conception through Age 8 (3)
- Child/Adolescent Studies 325B Age 9 through Adolescence (3)
- Child/Adolescent Studies 490T Topical Senior Seminar in Child and Adolescent Development (3)

**Fieldwork Courses (6 units)**

- Child/Adolescent Studies 394/L Practicum Seminar/Practicum in Child and Adolescent Development (3)
- Child/Adolescent Studies 474/L Practicum Seminar/Practicum in Adolescent and Youth Services (3)
  OR Child/Adolescent Studies 494/L Practicum Seminar/Practicum in Youth and Families in Community Settings (3)

**Topical Developmental Courses (18 units)**

*One class from each cluster:*

1. **Family and Parenting:** CAS 340 Parenting in the 21st Century (3) or CAS 345 Child and Adolescent Development in Diverse Family Contexts (3)
2. **Interpersonal Issues:** HCOM 220 Interpersonal Conflict Management (3) or SOCI 341 Social Interaction (3)
3. **Recreation and Health:** CAS 360 Adolescents and the Media (3) or KNES 387 Movement and the Adolescent (3)
4. **Diversity and Identity:** CHIC 332 The Chicano Adolescent (3), EDSC 340 Diversity in Secondary Schools (3), or SOCI 354 Gender, Sex and Society (3)
5. **Adolescents at Risk:** CAS 365 Adolescent Pregnancy and Parenting (3), CAS 490T At-Risk Adolescents (3), CRJU 425 Juvenile Justice Administration (3), CRJU 455 Gangs and the Criminal Justice System (3), HESC 321 Drugs and Society (3), or SOCI 413 Juvenile Delinquency (3)

**BACHELOR OF SCIENCE IN CHILD AND ADOLESCENT DEVELOPMENT: OPTION IN FAMILY AND COMMUNITY CONTEXTS (42 UNITS)**

The option Family and Community Contexts (FCC) is designed for students planning to work with children, adolescents, and their families in community-based settings and/or preparing for graduate studies in human/child development, counseling, social work or related fields.

**Option-Specific Core Courses (18 units)**

Child/Adolescent Studies 300 Elements of Effective Professional Communication (3)
Child/Adolescent Studies 301 Inquiry and Methodology in Development (3)
Child/Adolescent Studies 310 Assessing and Observing Development (3)
Child/Adolescent Studies 325A Conception through Age 8 (3)
Child/Adolescent Studies 325B Age 9 through Adolescence (3)
Child/Adolescent Studies 490T Topical Senior Seminar in Child and Adolescent Development (3)

**Fieldwork Courses (6 units)**

Child/Adolescent Studies 394/L Practicum Seminar/Practicum in Child and Adolescent Development (3)
Child/Adolescent Studies 494/L Practicum Seminar/Practicum in Youth and Families in Community Settings (3)

**Topical Developmental Courses (18 units)**

One class from each cluster:

1. Abnormal Behavior. PSYC 341 Abnormal Psychology (3) or SOCI 466 Deviant Behavior (3)
3. Biology. BIOL/KNES 210 Human Anatomy and Physiology, BIOL 305 Human Heredity and Development (3), or PSYC 306 Biopsychology (3)
5. Measurement/Statistics. PSYC 201 Elementary Statistics (3) or SOCI 303 Statistics for the Social Sciences (3)

**MINOR IN CHILD AND ADOLESCENT DEVELOPMENT**

A minor in Child and Adolescent Development requires 21 units. A minimum of 12 units of coursework for the minor must be distinct from coursework that is applied to the student's major. No more than 6 units of lower-division coursework may be applied to the minor.

**Core Courses (9 units)**

One developmental survey course (3)
Child/Adolescent Studies 101 Introduction to Child and Adolescent Studies (3)
Child/Adolescent Studies 312 Human Growth and Development (3)
Child/Adolescent Studies 315 Child Development (3)
One developmental context course (3)
Child/Adolescent Studies 201 Introduction to Child, Family, and Community (3)
One developmental depth course (3)
Child/Adolescent Studies 321 Infant/Toddler Development (3)
Child/Adolescent Studies 326 Optimizing development of School Aged Children (3)
Child/Adolescent Studies 330 Adolescence and Early Adulthood (3)
OR approved alternate

Research Methods (3 units)

Child/Adolescent Studies 301 Inquiry and Methodology in Development (3)
OR CAS 305 Advanced Assessment in Early Childhood (3)
OR approved alternate

**Electives (9 units)**

Nine units selected in consultation with department adviser. May include CAS 394/L Practicum Seminar/Practicum in Child and Adolescent Development (3)

**CHILD AND ADOLESCENT STUDIES COURSES**

Courses are designated as CAS in the Class Schedule.

101 Introduction to Child and Adolescent Development (3)

Overview of major concepts and related professional opportunities. Practical applications will be considered within different biological, familial, social and cultural contexts to facilitate understanding of influences on developmental outcomes.

140 Introduction to Early Childhood (2)

Prerequisite: concurrent enrollment in Child/Adolescent Studies 140L. Learn about and plan developmentally appropriate activities in early childhood settings for children ages 0-8 and their families.
140L Introduction to Early Childhood Practicum (1)
Prerequisite: concurrent enrollment in Child/Adolescent Studies 140. First of a year-long practicum sequence for Child and Adolescent Development majors pursuing the Early Childhood Development Option. How to implement developmentally appropriate activities in early childhood settings. Minimum of four hours per week for a total of 60 hours required for the semester. Credit/no credit grade option only.

141 Intermediate Seminar in Early Childhood (2)
Prerequisites: Child/Adolescent Studies 140, 140L. Corequisite, 141L. Builds on an introductory practicum as students learn about and plan developmentally appropriate activities to early childhood settings for children 0-8 and their families.

141L Intermediate Practicum Early Childhood (1)
Prerequisites: Child/Adolescent Studies 140, 140L. Corequisite, 141. Supervised field experience in early childhood setting for children 0-8 and their families. Implementation of developmentally appropriate activities. Minimum of four hours per week for a total of 60 hours required for the semester. Credit/no credit grade option only.

201 Child, Family and Community (3)
Overview of interpersonal relationships between child, family and community members; the interaction among systems, influences of age, gender, diverse abilities, culture, race, ethnicity, socioeconomic and public policy factors, and community resources available to support family systems.

210 Orientation to the Field of Child Development (3)
Introduction to the field of child development. Survey of programs and services for children, adolescents and young adults, and exploration of professional opportunities, organizations and publications.

215 Observations in Early Childhood Settings (3)
Prerequisite: Child/Adolescent Studies 101. Introduces the appropriate application and limits of a variety of observation methods for use with young children and in early childhood settings; several assessment tools will be studied. Hands-on observations will focus on children, interactions, and environments.

300 Elements of Effective Professional Communication (3)
Prerequisite: sophomore standing. Styles of written communication common to child development programs and services. Reporting on theories and research to multiple audiences (e.g., other professionals, parents, community groups) in written and oral formats. Meets upper-division baccalaureate writing course requirement for Child and Adolescent Development majors.

301 Inquiry and Methodology in Development (3)
Prerequisite: sophomore standing. Framework and methods necessary for interdisciplinary study of child development. Conducting library research, reading and writing scientific reports, using descriptive and inferential statistics, developing computer literacy, and exploring developmental methodology and theory. (2 hours lecture, 2.5 hours laboratory)

305 Advanced Assessment in Early Childhood (3)
Prerequisite: Child/Adolescent Studies 101. Facilitates student understanding of relevant literature, observation and assessment strategies, research design and data analysis as relevant to young children. Effective oral and written communication for diverse audiences found in early childhood settings.

310 Assessing and Observing Development (3)
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301. Purposes and methods associated with assessing and observing child and adolescent development. Topics include selection of appropriate methods, survey of standardized measures, ethics, and interpretation and implications of data.

312 Human Growth and Development (3)
Prerequisite: Psychology 101. Biological/physical, socio-emotional, cognitive development across the lifespan. One or more section offered online.

315 Child Development (3)
Prerequisite: completion of the General Education (G. E.) Category III.C.1. Major concepts, principles, theories and research related to cognitive, linguistic, social, emotional and physical development from birth through adolescence; emphasizes developmentally appropriate practices.

321 Infant and Toddler Development (3)
Prerequisite: Child/Adolescent Studies 101. Normative and atypical physical, social, emotional and cognitive development for children 0-3 years of age and implications of infant and toddler child care services with an emphasis on developmentally appropriate practices.

322 Preschool-Age Development (3)
Prerequisites: Child/Adolescent Studies 101, 321. Normative and atypical physical, social, emotional and cognitive development for children 3-6 years of age and implications of preschool child care services with an emphasis on developmentally appropriate practices.

323 Primary-Age Development (3)
Prerequisite: Child/Adolescent Studies 322. Normative and atypical physical, social, emotional and cognitive development for primary-aged children and implications of after-school program services with an emphasis on developmentally appropriate practices.
325A Conception through Age 8 (3)
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301. Research, theories and their application to biological/physical, socio-emotional and cognitive development from conception through age 8.

325B Age 9 through Adolescence (3)
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301, 325A. Research, theories and their application to biological/physical, socio-emotional, and cognitive development from age 9 through adolescence.

326 Optimizing Development of School Age Children (3)
Prerequisite: Child/Adolescent Studies 101 or equivalent. Conditions that impact and facilitate development during middle childhood. These include external (e.g., appropriate support and empowerment across various contexts) and internal assets (e.g., social competence and commitment to learning). Highlights strategies that promote development.

330 Adolescence and Early Adulthood (3)
Prerequisite: Psychology 101. Human development during and following adolescence. Community resources and services for adolescents and their families. Consequences of adolescent experiences for later development.

340 Parenting in the 21st Century (3)
Prerequisite: completion of a G. E. Category III.C.1 course. Goals and patterns of parenting in context of contemporary, multicultural society; identifies changing demands of parenting infants, children and adolescents; summarizes current scholarly research on relation of parenting practices to child development outcomes.

341 Working with Parents of Young Children (3)
Prerequisites: Child/Adolescent Studies 305, 321. Responsibilities and influences of diverse family systems, from the transition to parenting through children completing primary grades. Effective collaboration and communication with parents during early childhood years with the goal of optimizing children's development.

345 Child and Adolescent Development in Diverse Family Contexts (3)
Prerequisites: Child/Adolescent Studies 300, 301. Patterns and processes of child/adolescent development within families of various cultural/ethnic/social contexts. Identifies multiple theoretical and disciplinary perspectives in studying child and family developmental processes, as well as summarizing the current related scholarly literature.

346 Modern Culture and Early Childhood (3)
Prerequisites: Child/Adolescent Studies 305, 322. Impact of cultural diversity, media, family practices and related education policies on young children's development, including cognitive and social skills, and the application of the information in early childhood settings.

351 Language and Literacy Development in Early Childhood (3)
Prerequisites: Child/Adolescent Studies 305, 322. Integrates a deep understanding of early language and literacy development with theory, research and practical strategies for facilitating children's mastery of these skills. Developmental norms, individual and cultural variations, and curricular strategies are addressed.

352 Numeracy and Science in Early Childhood (3)
Prerequisites: Child/Adolescent Studies 305, 323. Theory and research on children's scientific inquiry and numeracy development. Integrates science and mathematics in early childhood settings through interdisciplinary thematic units.

353 Learning and Motivation in Early Childhood (3)
Prerequisites: Child/Adolescent Studies 305, 321, 322. Building on the foundation developmental classes, this class examines theory and research on children's learning, cognition and motivation with an emphasis on practical applications in early childhood settings. Developmental norms, individual and cultural variations, and curricular strategies.

360 Adolescents and the Media (3)
Prerequisite: completion of G. E. Category III.C.1. Summarizes current social, cultural and behavioral research on adolescents and mass media. How teens use, learn, are depicted in and shape cultural meaning from exposure to television and other electronic media.

365 Adolescent Pregnancy and Parenting (3)
Prerequisite: completion of course in G. E. Category III.C.1. Reviews current knowledge base on adolescent pregnancy and the developmental implications for parent and child. Social, educational and health implications of early parenting, and articulates the resources, skills and supports needed to foster success in parenting.

370 Development of African American Children and Youth (3)
Prerequisite: completion of G. E. Category III.C.1. Understanding cognitive and socio-emotional development of African American children and youth is facilitated through comprehensive examinations of significant African and African American cultural and historical experiences; and social influences including families, schools, socioeconomic status, neighborhoods and American society. (Same as Afro 370)

394 Practicum Seminar in Child and Adolescent Development (2)
Prerequisites: Child/Adolescent Studies 101, 201. Corequisite: Child/Adolescent Studies 394L. Classroom analysis of field experience focusing on linkages between theory and practice, and skills and techniques of child development professionals.

394L Practicum in Child and Adolescent Development (1-2)
Corequisite: Child/Adolescent Studies 394. Supervised field experience in agencies, institutions and organizations serving children and families. Minimum of four hours per week for a total of 60 hours required for the semester. Credit/No Credit grade option only. May be repeated once for credit.
**464 Advanced Practicum Seminar in Early Care and Education (2)**
Prerequisites: Child/Adolescent Studies 101, 140, 140L, 201, 215, 305, 321, 322. Corequisite: Child/Adolescent Studies 464L. Classroom analysis of field experience focusing on linkages between theory and practice, and skills and techniques of early childhood development professionals, including adult supervision.

**464L Practicum in Early Care and Education (1)**
Corequisite: Child/Adolescent Studies 464. Supervised field experience in agencies, institutions, and organizations serving young children and families. Minimum of four hours per week for a total of 60 hours required for the semester. Credit/No Credit grade option only.

**474 Practicum Seminar in Development in School Settings (2)**
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301, 310, 325A, 394, 394L. Corequisite: Child/Adolescent Studies 474L. Positive developmental outcomes associated with programs/materials used in elementary school contexts are examined. Developmental theory and research findings are linked to these practice alternatives.

**474L Practicum in Development in School Settings (1)**
Corequisite: Child/Adolescent Studies 474. Supervised field experiences in educational setting serving elementary school-aged children. Minimum of four hours per week for a total of 60 hours for credit. Credit/No Credit grade option only.

**484 Practicum Seminar in Adolescent and Youth Services (2)**
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301, 310, 325A, 394, 394L. Corequisite: Child/Adolescent Studies 484L. Classroom analysis of field experience focusing on linkages between theory and practice, and skills and techniques of adolescent development/youth services professionals.

**484L Practicum in Adolescent and Youth Services (1)**
Corequisite: Child/Adolescent Studies 484. Supervised field experiences in agencies, institutions and organizations serving adolescents and families. Minimum of four hours per week for a total of 60 hours required for the semester. Credit/No Credit grade option only.

**490T Senior Seminar in Child and Adolescent Development (3)**
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301, 310, 325A, 325B. Systematic study of theory, methods and findings concerning a specific developmental topic. Variable topics include Children and Adolescents at Risk, Cognition and Motivation, Controversial Issues in Development, Culture and Ethnicity in Development, Life Span Creativity, Life Span Perspective, Families and Development, Gender and Development, Gifted Intelligence, Working for Change: Legislative Advocacy, Moral Development, Self Concept, and Temperament and Development. May be repeated for credit under different topic.

**491 Leadership Seminar in Early Childhood (3)**
Prerequisites: Child/Adolescent Studies 305, 323, 346, 351, 352, 353. Capstone course examining leadership, assessment and funding for early childhood programs. Prepares students to use their knowledge of data, theory and literature to promote the well-being of young children and families through advocacy, fundraising and professional activities.

**494 Practicum Seminar in Youth and Families in Community Settings (2)**
Prerequisites: Child/Adolescent Studies 101, 201, 300, 301, 310, 325A, 394, 394L. Corequisite: Child/Adolescent Studies 494L. Classroom analysis of field experience focusing on linkages between theory and practice, and skills and techniques of professionals working with parents and families in school and community settings.

**494L Practicum in Youth and Families in Community Settings (1)**
Corequisite: Child/Adolescent Studies 494. Supervised field experience in agencies, institutions and organizations serving parents and families. Minimum of four hours per week for a total of 60 hours required for the semester. Credit/No Credit grade option only.

**496 Student-to-Student Tutorial (1-3)**
Prerequisites: a 3.0 or higher grade-point average and simultaneous enrollment in the course being tutored or previous enrollment in a similar course or its equivalent. Consult “University Curricula” section of this catalog for more complete course description. May be repeated for a maximum of three total units of credit. Only three units may be taken in a single semester.

**499 Independent Study (1-6)**
Individual research project, either library or field, under the direction of a Child and Adolescent Studies faculty member. May be repeated for a maximum of nine units of credit. Only six units may be taken in a single semester.
MISSION, VISION, PROGRAM EDUCATIONAL OBJECTIVES AND OUTCOMES OF THE CIVIL AND ENVIRONMENTAL DEPARTMENT

Mission
- To provide the best engineering program based on a foundation of mathematics, basic and applied science, engineering science, and civil engineering fundamentals
- To produce graduates who have the technical skills required for immediate entry into industry or graduate school
- To facilitate active student participation in research
- To provide service to the profession, the state of California, the country and to the world wide development of engineering
- To prepare students for higher engineering education.

Vision
- To excel in Civil and Environmental engineering education
- To systematically upgrade curricula that emphasize breadth and depth of education, which reflect the current developments in Civil and Environmental engineering
- To engage in research and scholarly activity that enhance student learning while being of benefit to the state, region, and nation

Program Educational Objectives
1. Technical Growth: Graduates will be successful in modern engineering practice, integrate into the local and global workforce, and contribute to the economy of California and the nation.
2. Professional Skills: Graduates will continue to demonstrate the professional skills necessary to be competent employees, assume leadership roles, and enjoy career success and satisfaction.
3. Professional Attitude and Citizenship: Graduates will become productive citizens with high ethical and professional standards, make sound engineering or managerial decisions, and have enthusiasm for the profession and professional growth.

Program Outcomes
After completing the Civil engineering program, graduates should have the following attributes:
1. An ability to apply knowledge of mathematics, science and engineering to design and conduct experiments as well as to analyze and interpret data
2. An ability to design a multidisciplinary system, component or process to meet the desired needs
3. An ability to use the techniques, skills and modern engineering tools necessary for engineering practice
INTRODUCTION

The civil engineering program at CSUF includes the fields of engineering mechanics and structural, geotechnical, hydraulic, environmental, construction, transportation and architectural engineering. Modern civil engineering practices rely heavily upon computer-aided analysis and design. Students at CSUF use micro-computers and the mainframe computer.

“Structural” engineers are designers of buildings, bridges, dams, power plants, offshore structures and many other kinds of systems. These engineers determine, often by computer analysis, the forces that a structure must resist, the appropriate materials and the possible structural types. Structural engineers usually work with a team that includes architects, mechanical and electrical engineers, contractors and owner of the project.

“Engineering Mechanics” courses offered in this area provide strong support for research, consulting and teaching in many fields of civil engineering.

“Geotechnical” engineers analyze the properties of soils and rocks that affect the behavior of structures. They evaluate the potential settlements of buildings, the stability of slopes and fills, and the effects of earthquakes. They take part in the design and construction of foundations, including those of offshore platforms, tunnels and dams.

“Hydraulic” engineers deal with all aspects of the physical control of water. They work to prevent floods, develop irrigation projects, design hydroelectric power systems, manage water resources and predict water runoff.

“Architectural” engineering is a combination of the art of architecture and the science of engineering. The architect conceives of structures as an art form and relies upon the structural engineer to translate his concepts of beauty into structural reality. The architectural engineer has the training to interact with architects and engineers, or to work on his own in designing structures that combine strength and beauty.

“Construction engineering and management” is a wide-ranging specialization that uses technical and management skills to plan and build public and private projects and manage commercial developments.

“Environmental” engineers apply science and engineering principles to minimize the adverse effects of human activity on the environment. They typically deal with water and waste water treatment, air pollution control, solid and hazardous waste management, and groundwater/soil remediation. They also help draft regulations and enforce many federal and state laws to control damage to the environment.

“Transportation” engineers are concerned with the planning, design and control of projects related to transportation of people and goods. They also help draft regulations and enforce many federal and state laws related to transportation.

The undergraduate program is designed to impart knowledge of mathematics and natural sciences to students so that they learn to use the forces of nature and materials economically, while maintaining engineering ethics and high professional standards.

One of the major objectives of this program is to provide design experience to the students gradually from the very beginning years until they graduate, through a variety of courses. During this time, they also learn about safety, reliability, ethics, and socially and globally sensitive problems.

The graduate engineering program is designed for specialization in the areas (also called tracks) of structures, engineering mechanics, geotechnology, hydraulics, construction management and environmental engineering.

High School Preparation

The entering freshman’s preparation should include two years of algebra, geometry, trigonometry, and one year of physics or chemistry. Students deficient in mathematics or chemistry must take special preparatory courses, which will not carry credit for the major. (See Mathematics Section for Entry Level Mathematics test and Math-Science Qualifying Examination requirements.)

Transfer Students

A transfer student shall complete a minimum of 30 units in residence, of which at least 15 units shall be taken in upper-division engineering courses. Work taken at another college or university on which a grade of “D” (1.0) was earned may not be substituted for upper-division courses.

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

The Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700. The undergraduate program requirements for the Bachelor of Science in Civil Engineering comprise four major segments: foundation courses in mathematics and the physical sciences; basic engineering courses; general education courses in the arts, humanities, social sciences, biological sciences and other related areas; and a sequence of elective courses.

Undergraduate students are required to meet with their academic adviser every semester during the first year and at least once a year thereafter. Students are strongly encouraged to see their academic advisers frequently. All courses taken in fulfillment of the requirements for the bachelor’s degree must be taken for a letter grade (grade Option 1). All mathematics and physical science courses required for the degree must be completed with at least a “C-” (1.7) grade, except Math 150A, which must be completed with at least a “C” (2.0) grade, to count towards the degree. Graduate courses are not open to undergraduate students without approval of the program coordinator.
Mathematics and Science Courses (34)
Biology 101 Elements of Biology (3)
Chemistry 115 Introductory General Chemistry (4)
Mathematics 150A Calculus (4)
Mathematics 150B Calculus (4)
Mathematics 250A Multivariate Calculus (4)
Mathematics 250B Introduction to Linear Algebra and Differential Equations (4)
Physics 225, 225L Fundamental Physics: Mechanics and Lab (4)
Physics 226, 226L Fundamental Physics: Electricity and Magnetism and Lab (4)
EGCE 308 Engineering Analysis (3)

Introductory Engineering Courses (9)
EGCE 201 Statics (3)
EGCE 302 Dynamics (3)
EGEE 401 Engineering Economics and Professionalism (3)

General Education Courses
I. Core Competencies (9)
A. Oral Communication (3)
   Honors 101B, Human Comm 100, or Human Comm 102
B. Written Communication (3)
   English 101
C. Critical Thinking (3)
   Honors 101A; Philosophy 105, 106; Psychology 110; Reading 290; or Human Comm 235

II. Historical and Cultural Foundations (9)
A. Development of World Civilization (3)
   History 110A or 110B
B. American History, Institutions and Values (6)
   1. American History (3)
      Afro Ethnic Studies 190, American Studies 201, Chicano 190, History 180, 190, or Honors 201A
   2. Government (3)
      Poli Sci 100

III. Disciplinary Learning (26)
A. Mathematics and Natural Sciences (11)
   1. Mathematics
      Mathematics 150A (4)
   2. Natural Sciences (4)
      a. Physical Science
      Physics 225, 225L
b. Earth and Astronomical Sciences
   Not applicable for engineering majors
c. Life Science
   Biology 101 (3)
B. Arts and Humanities (9)
   1. Introduction to the Arts (3)
      Art 101, 201A, 201B, 311, 312, Dance 101, Music 100, Theater 100
   2. Introduction to the Humanities (3)
      Any lower-division course in this category listed in the current class schedule
   3. Implications, Explorations and Participatory Experience in the Arts and Humanities (3)
      Any upper-division course in this category in the current class schedule
C. Social Sciences (6)
   1. Introduction to the Social Sciences (3)
      EGCE 401
   2. Implications, Explorations and Participatory Experience in the Social Sciences (3)
      Any upper-division course in this category listed in the current class schedule

IV. Lifelong Learning
   This category is not applicable to engineering majors

V. Cultural Diversity
   Take at least one star (*) course in Sections III.B.3 or III.C.2

Upper-Division Writing Requirement
   In addition to the Examination in Writing Proficiency, which is to be taken as soon as 60 units are completed, six units from the following courses are required and must be passed with a grade of “C” (2.0) or better. Laboratory reports are graded on English composition, as well as content.
   EGCE 324L Soil Mechanics Laboratory (1)
   EGCE 325L Structural Analysis Laboratory (1)
   EGCE 377 Civil Engineering Materials Lab (1)
   EGCE 428L Engineering Hydraulics Lab (1)
   EGCE 431L Advanced Structural Lab (1)
   EGCE 463L Precast and Prestressed Concrete Design Lab (1)
   EGCE 465 Planning and Control of Engineering Construction Projects (3)
   EGCE 468 Engineering Construction (3)
CIVIL ENGINEERING
Mathematics and Science Courses (34 units)
Introductory Engineering Courses (9 units)
Civil Engineering Core Courses (42 units)
EGCE 206 Computer-Aided Architectural and Civil Engineering Drafting (1)
EGCE 214 Engineering Surveying (2)**
EGCE 214L Engineering Surveying Laboratory (1)**
EGCE 301 Mechanics of Materials (3)
EGCE 324 Soil Mechanics (3)
EGCE 324L Soil Mechanics Laboratory (1)
EGCE 325 Structural Analysis (3)
EGCE 325L Structural Analysis Laboratory (1)
EGCE 377 Civil Engineering Materials Lab (1)
EGCE 408 Reinforced Concrete Design (3)
EGCE 418 Foundation Design (3)
EGCE 428 Engineering Hydraulics (3)
EGCE 428L Engineering Hydraulics Lab (1)
EGCE 430 Structural Steel Design (3)
EGCE 411 Structural Dynamics (3)
EGCE 431L Advanced Structural Laboratory (1)
EGCE 435 Design of Hydraulic Structures (3)
EGCE 436 Engineering Hydrology (3)
EGCE 463 Precast and Prestressed Concrete Design (3)
EGCE 463L Precast and Prestressed Concrete Design Lab (1)
EGCE 465 Planning and Control of Engineering Construction Projects (3)
EGCE 466 Public Transit Systems Planning and Operations (3)
EGCE 481 Solid Waste Technology and Management (3)
EGCE 482 Liquid Waste Technology and Management (3)
EGCE 493 Structural Systems Emphasis on Highrise Structures (3)
EGCE 497 Senior Projects (1-6)

Technical Electives in Civil Engineering (14 units minimum)
Before enrolling in any elective course, approval of the adviser must be obtained.
EGCE 411 Structural Dynamics (3)
EGCE 431L Advanced Structural Laboratory (1)
EGCE 435 Design of Hydraulic Structures (3)
EGCE 436 Engineering Hydrology (3)
EGCE 463 Precast and Prestressed Concrete Design (3)
EGCE 463L Precast and Prestressed Concrete Design Lab (1)
EGCE 465 Planning and Control of Engineering Construction Projects (3)

EGCE 499 Independent Study (1-6)
Chemistry 125 General Chemistry for Engineers (3)*
EGEE 203 Electric Circuits (3)*
EGME 304 Thermodynamics (3)*
Geological Sciences 376 Engineering Geology (3)*

*C需系主任审批。

CIVIL ENGINEERING WITH ARCHITECTURAL ENGINEERING EMPHASIS
Students wishing to earn an Architectural Engineering Emphasis must fulfill the requirements for the Bachelor of Science in Civil Engineering, in addition to the following:
EGCE 496 Architectural Design (3)
EGCE 463 Precast and Prestressed Concrete Design (3)
AND/OR EGCE 493 Structural Systems for Buildings (3)
Plus five to eight units from: EGCE 411, 431L, 435, 436, 463, 463L, 465, 466, 481, 482, 497, 499, Chemistry 125*, EGEE 203*, EGME 304*, Geological Sciences 376*

*C需系主任审批。

MASTER OF SCIENCE IN CIVIL ENGINEERING
The Master of Science degree in Civil Engineering is intended to meet the needs of students who wish to prepare for careers in areas such as construction and project management, design and analysis of complex systems (including structures such as tall buildings and bridges), environmental engineering, consulting and research. This program also provides excellent preparation for doctoral studies.

The program provides advanced study within the area of civil engineering and allows students to elect coursework, with adviser approval, in the areas of structural engineering, hydraulics/hydrology, geotechnical engineering, engineering mechanics, engineering management or environmental engineering.

Graduates from the M.S. program have obtained employment in various fields, including manufacturing, construction, business, education and government.

Admission Requirements
To qualify for admission to conditionally classified standing, applicants must meet the following university and departmental requirements:
1. Bachelor's degree from a regionally accredited institution
2. Bachelor's degree in Civil Engineering from an institution accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700
3. Minimum grade-point-average of 2.5 in the last 60 semester units
4. Good standing at the last institution attended
Students meeting the above requirements will be admitted to the graduate program in Civil Engineering and will be advanced to classified standing immediately after filing an adviser-approved study plan in the Civil and Environmental Engineering Department office.

Students not meeting the above requirements may be admitted at the discretion of the department chair and will be required to take an additional six or more units of adviser-approved prerequisite coursework. The student must demonstrate potential for graduate study by earning a GPA of 3.0 or higher in these prerequisite courses.

Any student entering the Master of Science degree program without a B.S. in Civil Engineering will also be required to complete deficiency courses prior to beginning coursework for the master’s degree.

Graduate and postbaccalaureate students who do not possess a bachelor’s degree from a postsecondary institution where English is the principal language of instruction should refer to the Admission Requirements section of this catalog for additional international student requirements.

The Civil and Environmental Engineering Department does not require the Graduate Record Exam (GRE).

Application Deadlines
Refer to: www.fullerton.edu/ecs for application information.

Classified Standing
Students meeting the following additional requirements will be advanced to classified standing and are eligible to take graduate courses for which they are qualified.

1. Completion of all deficiency work specified by the graduate adviser with a “B-” (2.7) or better. Students must complete all deficiency courses before starting graduate courses (unless approved by the chair)

2. Development of an approved study plan. Before completing nine units at CSUF toward the M.S. degree, the student must meet with an adviser to prepare a study plan that must be approved by the department chair and Office of Graduate Studies.

3. Fulfillment of the university writing requirement prior to completing nine units at CSUF toward the M.S. degree. Students must demonstrate writing ability commensurate with the baccalaureate degree by successfully completing one of the following:
   A. An upper-division writing requirement at any CSU campus
   B. An upper-division writing course from another university that is equivalent to a course satisfying the CSUF Upper-Division Writing Requirement. Equivalency must be certified by the department chair
   C. Cal State Fullerton Examination in Writing Proficiency (EWP)
   D. A CSUF upper-division or graduate-level course that is certified as meeting the writing requirement and is approved by the department chair. A grade of “C” (2.0) or better is required

Study Plan
The study plan consists of a minimum of 30 units of adviser-approved upper-division or graduate-level coursework which must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

Required Courses (6 units)
EGGN 403 Computer Methods in Numerical Analysis (3) and an additional adviser-approved math-oriented course (3) OR six units adviser-approved electives (for those focusing on environmental and construction areas).

Course Tracks (15 units)
Students are required to select a minimum of 15 units in Civil Engineering. These units may be 400- (subject to approval by the department chair) and 500-level courses and are selected according to each student’s area of interest. Coursework may focus on the following areas: Engineering Mechanics; Geo-technical Engineering; Hydraulics/ Hydrology; Structural Engineering; and Construction Engineering and Management. Upon graduation, students will receive a Masters degree in Civil Engineering. Environmental Engineering track students will receive a Masters degree in Civil Engineering with a concentration in Environmental Engineering.

Other Courses (9 units)
Elective units should be taken in Civil Engineering or a related engineering field and are subject to adviser approval.

Exam/Thesis/Project Option
Subject to approval by the department head, students may select one of the following three options for final review by a department committee:
1. Oral comprehensive examination
2. EGCE 598 Thesis
3. EGCE 597 Project

Students enrolling in less than six units of Independent Study/Thesis/Project will be required to take an oral comprehensive exam. Students enrolling in six units of thesis or project may defend their thesis or project instead of taking an oral comprehensive exam.

Advancement to Candidacy
Advancement to candidacy and completion of requirements for the degree include:
1. Filing a graduation check prior to the beginning of the final semester (deadlines are listed in the class schedule)
2. Completing study plan coursework with a minimum overall GPA of 3.0
3. Successfully completing a comprehensive examination or oral defense of a thesis or project
4. Recommendation by the Civil and Environmental Engineering Department faculty and Office of Graduate Studies
CONCENTRATION IN ENVIRONMENTAL ENGINEERING

Required Concentration Courses (15 units)

EGCE 481  Solid Waste Technology and Management (3)
EGCE 482  Liquid Waste Technology and Management (3)

Adviser-approved Environmental Engineering courses, which may include Thesis, Project or Independent Study (9)

Electives (15 units)

Adviser-approved electives must include a minimum of six units in non-Environmental Engineering courses.

Students enrolling in less than six units of Independent Study/Thesis/Project will be required to take an oral comprehensive exam. Students enrolling in six units of thesis or project may defend their thesis or project instead of taking an oral comprehensive exam.

CIVIL AND ENVIRONMENTAL ENGINEERING COURSES

Courses are designated as EGCE in the class schedule

201 Statics (3)


206 Computer-Aided Architectural and Civil Engineering Drafting (1)

Prerequisite: Math 125. Architectural and civil engineering drawing with the aid of computer-aided drafting techniques; grading plans, engineering drawings (including standard structural, electrical and hydraulic details) of buildings, bridges, dams and civil engineering structures. Bill of Materials. (3 hours laboratory)

214 Engineering Surveying (2)


214L Engineering Surveying Laboratory (1)

Corequisite: EGCE 214. Field practice of measuring distance, difference of elevation, and horizontal and vertical angles using tapes, EDM, automatic levels, theodolites and total stations. (3 hours laboratory)

301 Mechanics of Materials (3)


302 Dynamics (3)

Prerequisites: Math 250A and EGCE 201. Kinematics and kinetics of particles and rigid bodies, kinetics of rigid bodies in three dimension, Newton’s laws, work and energy, impulse and momentum. Solution of problems using vector approach.

305 Failure of Building and Structure Due to Earthquakes and After Effects (3)

Prerequisites: one course from General Education Category III.A.1 Math, or III.A.2 Natural Science. Geological aspects of earthquakes as they apply to building safety; introduction to earthquake-related problems and building damages cause by historic earthquakes. Destruction aspects of earthquakes, preparedness for large earthquakes and how to protect structural and non-structural parts of buildings. (Same as Geology 305)

308 Engineering Analysis (3)

Prerequisites: Physics 226 and Math 250B or equivalent. Fundamentals and engineering applications of Fourier transforms, Laplace transforms, complex analysis, vector analysis; engineering applications. (Same as EGEE/EGGN/EGME 308)

324 Soil Mechanics (3)

Prerequisite: EGCE 301. Soil properties and soil action as related to problems encountered in engineering structures; consolidation, shear strength, stability and lateral earth pressures.

324L Soil Mechanics Laboratory (1)

Prerequisites: English 101 and EGCE 324. Behavior and properties of soils. Application to foundation design, liquefaction and seepage.

325 Structural Analysis (3)

Prerequisite: EGCE 301. Forces and displacements in statically determinate and indeterminate elastic structures by force and displacement methods. Approximate methods of analysis. Matrix formulation of structural analysis and computer applications. Introduction to structural design.

325L Structural Analysis Laboratory (1)

Prerequisites: English 101 and EGCE 325. Principles of model analysis and similitude. Influence lines for reactive and internal forces; generalized displacements of statically indeterminate structures. Nonprismatic members. (3 hours laboratory)

377 Civil Engineering Materials Laboratory (1)

Prerequisites: EGCE 324 and 325. Behavior and properties of most common materials, e.g., steel, concrete, wood, masonry and asphalt. Mix design of asphalt and concrete. Determination of strain and stress using strain gages. Specimen testing according to ASTM. Material properties determination. Safety, reliability, and design considerations. (3 hours laboratory)

401 Engineering Economics and Professionalism (3)

(Same as Computer Engineering and Electrical Engineering 401)
408 Reinforced Concrete Design (3)
Prerequisite: EGCE 325. Corequisite: EGCE 377 or equivalent. Design for bending, shear, axial force, torsion and combined loadings. Beam, column, slab and foundation design for ultimate strength and serviceability requirements. Prestressed concrete design. Safety, reliability and cost considerations. Design project conforming to latest ACI code. Professional computer program. (2 hours lecture, 3 hours lab)

411 Structural Dynamics (3)
Prerequisites: EGCE 308 and 325. Free and forced vibrations of discrete and continuous systems. Matrix formulation and normal coordinates analysis. Response of structures to impulse and earthquake loads. Application to structural design problems and comparison with code prescribed forces.

418 Foundation Design (3)
Prerequisites: EGCE 324 and 408. Footings and retaining walls design. Mat and piled foundations for structures. Design project to standards of professional practice using latest codes and standards. Consideration for safety, reliability and cost.

428 Engineering Hydraulics (3)

428L Engineering Hydraulics Laboratory (1)
Prerequisites: English 101 and EGCE 428. Introduction to experimental hydraulics in open channel and pipe flows, including measuring discharge, depth, velocity, force and friction coefficients. Hydraulic model laws and report writing. (3 hours laboratory)

430 Structural Steel Design (3)
Prerequisite: EGCE 325. Corequisite: EGCE 377 or equivalent. Design for bending, torsion, shear, axial forces, combined loadings. Design of built-up girders, composite construction. Design of shear and moment connections. Design project using professional practice standards. LRFD method. Safety, reliability and cost considerations. Professional computer program. (2 hours lecture and 3 hours lab)

431L Advanced Structural Laboratory (1)
Prerequisites: EGCE 325L and either EGCE 408 or EGCE 430. Fundamentals of earthquake engineering and soil structure interaction; design of lateral bracing for model buildings. (3 hours laboratory)

432 Computer-Aided Analysis and Design in Civil Engineering (3)
Prerequisites: EGCE 206, 324 and 325. Computer-aided analysis and design in various branches of civil engineering. Introduction of finite element methods with computer techniques. Application of professional computer programs. (2 hours lecture, 3 hours laboratory)

435 Design of Hydraulic Structures (3)
Prerequisite: EGCE 428. Applications of hydraulic principles to design of various structures, including spillways, energy dissipators, outlet works, storm drains, culverts and water distribution systems. Use of computers in design process.

436 Engineering Hydrology (3)
Corequisite: EGCE 428. Hydrologic cycle with applications to hydrologic design of engineering structures. Rainfall, stream flow, ground water, surface runoff, hydrographs, flood routing, frequency distributions and design hydrographs.

441 Environmental Engineering (3)
Prerequisites: Biology 101 EGCE 308. Planning and controlling the environment; wastewater treatment and disposal; solid waste management; air pollution; radiation protection; housing and residential environment.

463 Precast and Prestressed Concrete Design (3)
Prerequisite: EGCE 408. Prestressed concrete design and analysis for conventional and lateral loading. Designing reinforced and prestressed structural and architectural elements. Safety and economy. Connection design for earthquake and wind loadings. Design projects using professional practice standards including latest codes. (2 hours lecture and 3 hours laboratory)

463L Precast and Prestressed Concrete Design Lab (1)
Prerequisites: EGCE 408 and EGCE 463 or equivalent. Behavior of prestressed and reinforced concrete members subjected to the different types of loadings. Observing elastic and ultimate strength behavior, deflection crack propagation and collapse. Observing prestressing operation and camber. (3 hours laboratory)

465 Planning and Control of Engineering Construction Projects (3)
Prerequisite: senior standing. Overview of construction project management; construction scheduling fundamentals: bar charts, CPM, PERT; schedule control: manual vs. computer systems, reports, schedule maintenance; cost control: code of accounts, control base, budgets, forecasting, reports, computer systems; applications in construction projects.

466 Public Transit Systems Planning and Operations (3)
Prerequisite: senior standing in Civil Engineering. Urban passenger transportation modes, paratransit, special modes, vehicles characteristics and motion, highway transit mode, rail transit mode, new concepts, transit system performance (capacity, productivity, efficiency and utilization, organization and financing).

468 Engineering Construction (3)
481 Solid Waste Technology and Management (3)
Prerequisite: EGCE 441 or equivalent. Process dynamics and kinetics; thermal, physical, chemical and biological treatment operations; immobilization process; residual management and treatment process train selection.

482 Liquid Waste Technology and Management (3)
Prerequisite: EGCE 441 or equivalent. Process dynamics; reactions and kinetics; reactor engineering and process design; pretreatment operations and physical, chemical and biological treatment operations; residual management and treatment process train selection.

493 Structural Systems Emphasis on Highrise Structures (3)
Prerequisite: EGCE 408 or 430. Corequisite: EGCE 418. Structural concepts and systems for buildings and complex structures and their behavior under loads. Roof, floor, wall systems. Characteristics and design concepts of complex structures and high-rise buildings. Design project. Latest building codes and computer application. Sustainability and green building. (2 hours lecture and 3 hours laboratory)

494 Design of Civil Engineering Structures (3)

494L Civil Engineering Structural Laboratory (1)
Corequisite: EGCE 494. Design of bridges according to AASHTO code. Design project to the standards of professional practice. (3 hours laboratory)

496 Architectural Design (3)
Prerequisite: EGCE 408 or 430 or senior standing or consent of instructor and department head. History of architectural design. Systems-based design process: aesthetic, functional, environmental and behavioral aspects. Urban planning and design. Case studies. Architectural design project to the standards of professional practice.

497 Senior Projects (1-3)
Prerequisites: senior standing in engineering and formal approval by adviser and department head. Independent design projects. Formal report to be submitted after completion of project work.

499 Independent Study (1-3)
Prerequisites: senior standing in engineering and formal approval by adviser and department head. Special topics in civil engineering. Formal report to be submitted after completion of independent study.

501 Analytical Methods for the Design of Civil Engineering Systems (3)
Prerequisite: graduate standing or equivalent. Applying linear and dynamic programming principles to the design of pipelines, irrigation systems, water-resources and traffic-flow control problems. Probabilistic network analysis. First order and advanced first order second moment reliability methods. Probabilistic design.

509 Theory of Plates and Shells (3)

510 The Finite Element Method (3)
Prerequisites: EGCE 517 and 533 or equivalent. Formulating finite elements for analyzing plane stress and strain problems, axisymmetric bodies, plates and shells. Conforming and non-conforming shape functions. Computer applications to complex structural systems under static and dynamic loads.

515 Geo-Environmental Engineering (3)
Prerequisite: EGCE 436 or equivalent. Geo-environmental properties and soil action related to problems encountered in waste management engineering; physico-chemical soil properties, shear strength as applied to landfill design and lateral earth pressures on braced excavation; contaminant migration and partitioning in unsaturated soils.

517 Theory of Elasticity (3)

532 Earthquake Engineering (3)
Prerequisites: EGCE 411 and 533 or equivalent. Earthquake motions; response spectra; computational methods and computer applications for response of structural systems. Energy absorption capacity of materials and structural components. Soil structure interaction. Seismic design and evaluation of current building codes.

533 Matrix Methods of Structural Analysis (3)

534 Construction Methods and Equipment for Buildings (3)
Prerequisites: EGCE 408 and 430. Methods and equipment for constructing high-rise buildings, space structures, folded plates, shells and suspension systems. Modularization. Quality control and construction failures.
537 Groundwater and Seepage (3)
Prerequisite: EGCE 436 or equivalent. Equations governing flow of liquid in porous media. Seepage through dams and under structures, flow in confined and unconfined aquifers, steady and unsteady flow, well fields, flow nets, computer solutions, sea water intrusion, recharge, groundwater pollution.

538 Construction Methods and Equipment for Heavy Construction Engineering (3)
Prerequisites: EGCE 408 and 418. Methods and equipment for constructing foundations, highways, airfields, bridges, ports, harbors, dams, nuclear power plants and industrial facilities. Quality control and construction failures.

539 Preconstruction Design Evaluation (3)
Prerequisite: EGCE 534 or equivalent. Cost benefit, preconstruction scheduling and constructability modifications in design, specifications and construction methods. Value Engineering.

546 Coastal Pollution Engineering (3)
Prerequisite: EGCE 436 or equivalent. Storm water runoff, best management practices for storm water runoff, waste water discharge to lakes, rivers and oceans, wetland construction and management, remediation of contaminated sediments.

549 Theory of Elastic Stability (3)
Prerequisites: EGCE 509 and 517 or equivalent. Critical buckling loads of columns, beam-columns, frames, plates and shells. Lateral stability of beams. Torsional buckling of open wall sections.

550 Major Commercial Project Development and Management (3)
Prerequisite: any 400-level management course approved by the department head. Process of major commercial project development; macroeconomics aspects; project initiation and implementation, construction management systems, schedule, cost and quality control, control of long-lead equipment and materials, construction disputes and claims, case studies.

556 Construction Cost Control, Scheduling and Planning (3)
Prerequisite: EGCE 465 or 468 or equivalent. Systems approach for estimating, scheduling, cost comparison, risk analysis and cost control. Project feasibility studies and alternative approaches. Project control, baseline establishment, cost and claim management.

557 Total Cost Management of Capital Projects (3)
Prerequisite: EGCE 465 or equivalent. Management and cost control of large capital projects. Capital cost estimation, value prediction and control, cost and schedule control and management of mega projects.

559 Environmental and Public Transportation Regulations (3)
Prerequisite: EGCE 441 or equivalent. Environmental regulations, clean air act, intermodal surface transportation efficiency act of 1991, Federal Transit Administration project planning guidelines, planning for public transit and environmental requirement, developing required environmental documents; procedure for major investment studies; future of public transportation. Project.

563 Advanced Prestressed and Reinforced Concrete Design (3)

566 Design of Tall Buildings (4)
Prerequisite: EGCE 408 or 430; EGCE 533 or equivalent. Characteristics, design criteria and safety provisions of tall buildings. Selecting, optimizing and analyzing framing systems. Design standards, constructability, wind and seismic considerations. Design project to the standards of professional practice. Computer application.

575 Expert Systems in Construction Engineering (3)
Prerequisite: any 400-level management course approved by the department head. Expert systems and artificial intelligence techniques in construction engineering; expert systems for: safety evaluation of structures during construction, site selection, construction decision making, and construction schedule analysis; project monitoring; claims and disputes.
583 Air Pollution Control Engineering (3)
   Prerequisite: EGCE 441. Formation and control of air pollutants. Provides a strong foundation for designing and developing engineering solutions, devices and systems for industrial air pollution prevention and control.

597 Project (1-6)
   Prerequisites: Classified graduate status and formal approval of Civil Engineering Graduate Committee, graduate adviser and department head.

598 Thesis (1-6)
   Prerequisites: classified graduate status and formal approval of Civil Engineering Graduate Committee, graduate adviser and department head. (Maximum of 3 units per semester)

599 Independent Graduate Research (1-3)
   Prerequisites: classified graduate status and formal approval of Civil Engineering Graduate Committee, graduate adviser and department head.
INTRODUCTION

Effective ethical communications are essential for the well being of a democratic society. Thus, there is a need for persons trained in the theory and practice of informing, instructing and persuading through communications media. The educational goals of the programs leading to the Bachelor of Arts in Communications are to:

- Ensure that all majors are exposed to a broad liberal education
- Provide majors with a clear understanding and a global perspective of the role of communications media in society
- Prepare majors desiring communications-related careers in the mass media, business, government and education by educating them in depth in one of the specialized concentrations within the department

ADVISERS

Undergraduate: All full-time faculty serve as undergraduate advisers. Students may find their assigned concentration adviser in the Communications Department Office, College Park 400.

Graduate: Diane Witmer, College Park 400 or College Park 650-29. Additional advising services are available in the College of Communications Advising Center, CP-425.

BACHELOR OF ARTS IN COMMUNICATIONS

The Communications major totals 48 units: 12 units of core requirements; 24 units in a chosen concentration (advertising, entertainment studies, journalism, photocommunications and public relations); and 12 units of collateral upper-division coursework in other departments. All prerequisite courses must be completed with a grade of “C” (2.0) or better.

Collateral requirements: All Communications majors must complete 12 units (4 courses) of upper-division coursework outside of Communications. These courses are listed on advising materials available in College Park 400. These units may be taken as part of a minor or another major. Students electing to pursue a minor or a second major as part of the collateral requirement should consult the catalog on minors and multiple majors to ensure that they have the required numbers of distinct units.

Every major must take a minimum of 80 units outside Communications, out of the 120 units required for graduation. Of this 80 units, 65 must be in the traditional liberal arts, humanities and sciences. Any courses from the following departments meet the liberal arts requirement: Afro Ethnic, American Studies, Anthropology, Asian American, Biology, Chemistry, Chicana/o, Comparative Literature, Economics, English, Comparative Religion, Geography, Geological Science, Human Communication, History, Liberal Studies, Linguistics, Math, Philosophy, Physics, Political Science, Psychology, Sociology, Women's Studies and all foreign languages. See advisers for additional qualifying courses. Students should consult the College of Communications Advisement Center and their concentration adviser early in their coursework to be sure they meet these requirements.
Grade-Point Average Requirements: Three grade-point averages, each 2.0 or higher, are required for graduation:
1. An average based on all units attempted, including those attempted at other institutions
2. An average based on all units attempted at CSUF
3. An average based on all units attempted in the major

Communications Core

The communications core provides background and perspective appropriate to all the departmental concentrations and an understanding of the role of communicators and their contributions to the development of high standards of professionalism.

Nine units of required coursework:
Communications 233 Mass Communications in Modern Society (3)
Communications 407 Communications Law (3)
Communications 425 History and Philosophy of American Mass Communication (3)

Plus three units from:
Communications 300 Visual Communication (3)
Communications 310 Mass Media Ethics (3)
Communications 333 Mass Media Effects (3)
Communications 410 Principles of Communication Research (3)
Communications 422 Communications Technologies (3)
Communications 426 Global Media Systems (3)
Communications 480 Persuasive Communications (3)

Communications Concentrations

Every communications major must select and complete 24 units of coursework in a major concentration.

ADVERTISING CONCENTRATION

The objective of the advertising concentration is to prepare students for entry-level positions in one or more of the four basic advertising activities: creative (copy, layout design), media planning and buying, research, and management. Students are provided with knowledge and skills needed for work with an advertiser, advertising agency, the print and broadcast media, or support service industry.

Communications 350 Principles of Advertising (3)
Communications 351 Writing for the Advertising Industry (3)
Communications 352 Advertising Media (3)
Communications 353 Advertising Creative Strategy and Execution I (3)
Communications 451A, B or C Advertising Campaigns (3)
Communications 495 Mass Media Internship (3)

Plus six units from: Communications 317, 358, 361, 380, 410, 415T, 446, 450, 452, 453, 454, 455 or 456. At least three of the six units must be 450 or higher.

ENTERTAINMENT STUDIES CONCENTRATION

Courses in this concentration introduce students to theory, industry trends and practices, and the social implications of entertainment and tourism. The concentration is designed to prepare students for career opportunities in entertainment communication and management in a growing range of sectors in the entertainment industry and communication field.

Communications 101 Writing for Mass Media (3)
Communications 346 Introduction to Entertainment and Tourism Studies (3)
Communications 446 Entertainment and Society (3)
Communications 449 Capstone in Entertainment and Tourism Studies (3)

Plus one of the following: Communications 301, 334, 351, 362 or 471


*Course may count either as a core elective or as a concentration elective, but not as both.

JOURNALISM CONCENTRATION

The principal objective of the journalism concentration is to provide the skills and practice necessary for careers in the print, broadcast and online media. Specifically, the concentration objectives are to: (1) provide experience in writing various types of news stories, and to develop skills in reporting and news gathering techniques; (2) develop critical acumen necessary to check news stories for accuracy and correctness; (3) develop skills in graphics or photography that complement the journalistic writing skills; (4) provide actual on-the-job experience by working on the campus newspaper and through an internship; and (5) add breadth and depth to the professional's specialized skills through collateral courses.

The concentration includes three emphases: print, broadcast journalism and visual journalism.

Journalism Concentration Core:
Communications 101 Writing for the Mass Media (3)
Communications 495 Mass Media Internship (3)

Print Journalism Emphasis
Communications 201 Reporting for Mass Media I (3)
Communications 202 Reporting for Mass Media II (3)
Communications 332 Editing and Design (3)
Communications 471 News Media Production (3)

Broadcast Journalism Emphasis
Communications 201 Reporting for Mass Media I (3)
Communications 202 Reporting for Mass Media II (3)
Communications 372  TV News Production (3)
Communications 472  Advanced Electronic News Production (3)
Plus six units from: Communications 335, 371, 380, 435, 436, 438T.

Visual Journalism Emphasis
Communications 319 Visual Reporting (3)
Communications 380 Interactive Media Design (3)
Communications 409 Advanced Visual Reporting (3)
Communications 471 News Media Production (3)
Plus six units from: Communications 332, 380, 436, 438T.

PHOTOCOMMUNICATIONS CONCENTRATION

The photocommunications concentration provides a comprehensive study of the aesthetics, theories and practices of contemporary photography for professional careers in magazine and newspaper photojournalism, and advertising/commercial photography.

Communications 101 Writing for the Mass Media (3)
Communications 217 Introduction to Photography (3)
Communications 319 Visual Reporting (3)
Communications 321 Studio Photography (3)
Communications 495 Mass Media Internship (3)
Plus six units from:
Communications 326, 340, 358, 380, 409, 471
Plus one of the following:
Communications 301, 334 or 362

PUBLIC RELATIONS CONCENTRATION

The concentration provides preparation in both theory and practice of two-way communication and management counsel for prospective professional public relations careers in business, industry, agency, government and nonprofit sectors of society.

Communications 101 Writing for Mass Media (3)
Communications 361 Principles of Public Relations (3)
Communications 362 Public Relations Writing (3)
Communications 464 Public Relations Management (3)
Communications 495 Mass Media Internship (3)
Plus one writing course from:
Communications 301, 334, 471
Plus three (3) units from:
Communications 410*, 465, 467, 468, 469 or 497T
Plus three (3) units from:
Communications 317, 346, 350, 358, 363, 380, 410*, 434, 437, 446, 465, 467, 468, 469 or 497T.

*Course may count either as a core elective or as a concentration elective, but not as both.

WRITING REQUIREMENTS

All communications majors must satisfy both departmental and university writing requirements. For the department Writing Requirement, each concentration requires one or more writing courses. Consult an advisor or concentration checklist.

University Writing Requirement: The coursework portion of the university's upper-division baccalaureate writing requirement for communications majors may be met by satisfactory completion of any one of Communications 301, 334, 335, 351, 362, 371, 435, 436, 438T or 471. Students must earn a "C" (2.0) or better in the course that is used to fulfill the university's upper-division writing requirement.

INTERNSHIP REQUIREMENTS

The Department of Communications has always recognized the beneficial attributes of an internship. Students intern at sites in Orange and Los Angeles counties, as well as at national and international sites. Examples of internship sites include newspapers, magazines, television and radio stations, public relations and advertising agencies, health-related institutions, nonprofit organizations, film production companies, publishers, education offices, high-tech industries, and cities and businesses with communications needs.

Students can view course syllabus on the website at https://commsec.fullerton.edu/internship for a full understanding of the internship program. Applications are approved by the Communications Faculty Internship Coordinator (located at College Park 460-24) through the online site before a student registers with Titan. Deadlines for applications are March 15 (summer); May 15 (fall); October 15 (spring). Internship coursework must be completed within the term it is taken. Incompletes are discouraged. Students are encouraged to seek advice from the Communications Faculty Internship Coordinator (located at College Park 460-24) early in their academic career to gain the highest level of professional growth from their internship experience.

Students must meet the following prerequisites:
• Communications major
• Senior standing 2.25 GPA overall and in major
• Specific prerequisites for each area of concentration – which are NOT TO BE TAKEN CONCURRENTLY WITH THE INTERNSHIP. They include:

Advertising
Required: Communications 350, 351, 352, 353
Recommended: Communications 358

Entertainment Studies
Required: Communications 346, 446

Journalism
Required: Communications 471 or 372
Recommended: Communications 334, 335

Photocommunications
Required: Communications 217, 319, 321.
Recommended: Communications 326 or 409.
Public Relations

Required: Communications 361, 362.
Recommended: Communications 358, 363, 464.

Students with the equivalent of one year of full-time employment in the area of their concentration may petition out of the Internship by taking a different 400-level class approved by their faculty adviser. International students must obtain approval of the International Education and Exchange Office.

Students who do not meet the 2.25 GPA may be asked to petition out of the Communications 495 class and take a different 400 level class approved by their faculty adviser.

Applications and information can be obtained at the Department of Communications Internship Office in College Park 460-24.

COMMUNICATIONS MINORS

The department offers three options for a communications minor for students NOT majoring in communications. Students majoring in communications cannot minor in communications.

MINOR IN ADVERTISING

The minor in Advertising requires 21 units as follows:

Lower Division (3 units)
Communications 233 Mass Communications in Modern Society (3)

Advertising courses (12 units)
Communications 350 Principles of Advertising (3)
Communications 352 Advertising Media (3)
Communications 353 Creative Strategy and Execution I (3)
Communications 451A, B or C Advertising Campaigns (3)

Electives (6 units)
Two adviser-approved courses from Communications 380, 407, 415T, 425, 450, 452, 453, 454, 455, 456 or 480.

MINOR IN JOURNALISM

The Minor in Journalism requires 21 units. Required Journalism courses for a Minor in Journalism, unlike the Minor in Advertising, must be taken in sequence. Each course builds upon the other. The three required journalism courses provide a core of information for beginning journalism students. Students can then specialize in print or broadcast journalism. A stint on the Daily Titan, Communications 471 News Media Production, takes the place of an internship. However, students who plan to pursue a career in professional print journalism are encouraged - but not required - to obtain an internship before applying for a job.

Communications Core Requirements (6 units)
Communications 233 Mass Communications in Modern Society (3)
Plus three units from: Communications 310, 407 or 425 (3)

Journalism Concentration Requirements (9 units)
Communications 101 Writing for the Mass Media (3)
Communications 201 Reporting for Mass Media I (3)
Communications 202 Reporting for Mass Media II (3)

Electives (6 units)
Choose six units from one of the following specializations:

Print Journalism Track
Required: Communications 471 News Media Production (3)
Plus three units from: Communications 332, 334, 335, 380, 434, 435, 436, 437 or 438T.

Broadcast Journalism Track
Required: Communications 372 Television News Production (3)
Plus three units from: Communications 335, 371, 380, 435, 436, 438T or 472.

MINOR IN PUBLIC RELATIONS

The minor in Public Relations offers students the opportunity to engage in a systematic program of study in the field of public relations, to complement their major field of study. The program requires 21 units.

Required Courses (15 units)
Communications 101 Writing for the Mass Media (3)
Communications 233 Mass Communications in Modern Society (3)
Communications 361 Principles of Public Relations (3)
Communications 362 Public Relations Writing (3)
Communications 464 Public Relations Management (3)

Electives (6 units)
Two courses from Communications 407, 410, 425, 465, 467, 468, 469, 480, 497T.

MASTER OF ARTS IN COMMUNICATIONS

The Master of Arts in Communications is designed to provide advanced study in communications theory and research, and offers an opportunity to integrate all aspects of the field into a single degree. Students select courses from advertising, entertainment and tourism, journalism, public relations and television-film, as well as related courses outside the department. The program prepares the student to apply advanced communication concepts, research development skills and theories relevant to the use of communications media for a wide variety of purposes.

The program prepares the graduate to apply advanced communications concepts, research and development skills, and relevant theories of communications media for a wide variety of purposes. These studies serve those whose careers involve the use of mediated messages to inform, instruct and persuade, as well as those seeking doctoral degrees. Coursework is highly applicable to a wide range of careers in business, industry, government, education, mass media and entertainment. Graduates who complete the Master of Arts in
Communications are eligible for journalism and communications teaching positions in community colleges.

Students enter one of two concentrations: the M.A. in Communications with a Concentration in Professional Communications or the M.A. in Communications with a Concentration in Mass Communications Research and Theory. The purpose of the Concentration in Professional Communications is to enable student mastery of appropriate knowledge of communications theory and application to support future career objectives. This program is designed for students who want a professional orientation and provides curricular specialization through additional coursework. Students complete the degree through an applied project or comprehensive examinations at the end of their coursework. The purpose of the Concentration in Mass Communications Research and Theory is to develop scholarly research abilities and knowledge of communications theory and application to support future teaching and scholarship objectives. It includes two research methods courses, as well as a proposal, development and oral defense of master’s thesis.

Prerequisite Courses

All graduate students need the following prerequisite courses or their equivalents taken at CSUF or another accredited university. Sufficient and appropriate professional experience may be substituted for one or more of these prerequisite courses. Such determinations are made by the graduate coordinator.

- Communications writing (Comm 201, 301, 351 or 362)
- Introductory course in communications or area of specialty (Comm 233, 332, 350 or 361)
- Comm 410, Principles of Communication Research

These prerequisite courses are to be completed before taking graduate coursework to provide the necessary background.

MASTER OF ARTS IN COMMUNICATIONS
CONCENTRATION IN PROFESSIONAL COMMUNICATIONS

Admission Requirements:

1. Baccalaureate from a four-year accredited institution
2. Minimum undergraduate GPA of 2.75 for last 60 units of study with 3.0 in major
3. Minimum GRE score to meet university requirements with minimum of 500 on verbal portion
4. If preparatory work was in a language other than English, a minimum TOEFL score of 550 (paper) or 213 (computer) or 79-80 (Internet-based)
5. At least one year of professional experience related to the field of communications

The following courses or their equivalents must be completed before undertaking graduate courses:

- Communications Writing (Comm 201, 301, 351 or 362)
- Introductory course in communications or area of specialty (Comm 233, 332, 350 or 361)
- Comm 410 Principles of Communication Research

Note: Undergraduate prerequisite courses must be completed and do not count toward the graduate degree.

University writing requirements must be met as described on the Graduate Studies Web site: http://www.fullerton.edu/graduate/general.htm

A study plan must be filed before the first 9 units of coursework are completed.

Normally, an applicant must meet grade-point average requirements listed above, meet the university requirements, and satisfactorily complete the Graduate Record Examination General Test and TOEFL (if appropriate) prior to admission. Students must also submit three letters of recommendation and an essay (approximately 1,000 words) outlining reasons for pursuing the master’s degree at Cal State Fullerton. A resume is required of applicants to the professional concentration. Consult the department graduate program adviser or the department Web site at http://communications.fullerton.edu/graduate/comm. for details regarding additional admission requirements.

Application Deadlines

The deadline for completing online applications: For Fall admission: Feb. 1 of the same year; for Spring admission: Nov. 1 of
Graduate Standing: Classified

A student admitted in conditionally classified standing may be granted classified standing upon the development of an approved study plan and satisfactory completion of prerequisite coursework. Satisfactory coursework or its equivalent in the following may be taken concurrently with degree requirements if not completed prior to classification:

1. Communications writing (Comm 201, 301, 351 or 362)
2. An introductory course in communications (Comm 233, 332, 350 or 361)
3. Comm 410 Principles of Communication Research (3)

Study Plan

The student is required to complete 30 units of approved studies with a minimum grade-point average of 3.0, including 21 units in 500-level communications courses. A maximum of nine units may comprise 400-level courses appropriate to the student’s area of interest.

The candidate must develop a program of study in consultation with Department of Communications graduate adviser. The candidate must plan the thesis (6 units) or project (3 units) with a committee. The committee includes at least two faculty members from the Department of Communications.

Study plan requirements include the following:

CONCENTRATION IN MASS COMMUNICATIONS RESEARCH AND THEORY

Core Courses (9 units)
Comm 500 Theory and Literature of Communications (3)
Comm 508 Humanistic Research in Communications (3)
Comm 509 Social Science Research in Communications (3)
Elective Courses (15-21 Units)
A total of 15 units consisting of

- A minimum of 1 unit and maximum of 3 units of Comm 599, Independent Study
- A minimum of 6 units of 500-level courses (including Comm 599) and maximum of nine units of 400-level courses

Note: 400-level courses are optional. All courses may be 500-level. Undergraduate prerequisite courses must be completed, and do not count toward the graduate degree. Graduate students must complete at least one additional assignment beyond that required of undergraduate students in 400-level courses.

Exit Options:
Comm 597 Project
One 3-unit course leading to the successful completion and presentation of an applied project and one 3-unit 500-level elective course.
OR Comprehensive Examination
Six hours written essay exams and two three-unit 500-level elective courses.

For further information and advisement, please consult the graduate program adviser or the department website.

CONCENTRATION IN PROFESSIONAL COMMUNICATIONS

Core Courses (9 units)
Comm 500 Theory and Literature of Communications (3)
Comm 507 Communication Research Design and Analysis (3)
Comm 508 Humanistic Research in Communications (3)
OR Comm 509 Social Science Research in Communications (3)
OR Comm 525 Advanced Communications Management (3)
OR Comm 534 American Media History (3)

A total of 15-21 units (depending on exit option) consisting of a minimum of six units of 500-level courses and maximum of nine units of 400-level courses.

Note: 400-level courses are optional. All courses may be 500-level. Undergraduate prerequisite courses must be completed, and do not count toward the graduate degree. Graduate students must complete at least one additional assignment beyond that required of undergraduate students in 400-level courses.

Exit Options:
Comm 597 Project
One 3-unit course leading to the successful completion and presentation of an applied project and one 3-unit 500-level elective course.
OR Comprehensive Examination
Six hours written essay exams and two three-unit 500-level elective courses.

For further information and advisement, please consult the graduate program adviser or the department website.

COMMUNICATIONS COURSES

Courses are designated as COMM in the class schedule.

101 Writing for Mass Media (3)
Prerequisites: English 101 or equivalent with a grade of “C” (2.0) or better; typing ability. Principles and practices of writing for major types of mass communications media. Content, organization, conciseness and clarity (2 hours lecture, 2 hours laboratory).

201 Reporting for Mass Media I (3)
Prerequisite: Comm 101 or equivalent. Develop expertise in news reporting, including computer-assisted reporting and writing techniques, with an emphasis on print and Web reporting and writing. Students will have an opportunity to write for the Daily Titan.

202 Reporting for Mass Media II (3)
Prerequisite: Comm 101. Develop expertise in advanced news reporting and writing techniques, with an emphasis on the Web, radio and television. Learn basics of visual journalism storytelling, including basic elements of shooting videotape, recording audio, editing video and audio tape, and building news websites. Opportunities to contribute to the Daily Titan, Titan Online and/or OC News will be provided.
217 Introduction to Photography (3)
Cameras, accessories, materials, exposure, image processing, printing, finishing, composition, filters, flash, studio techniques and special subject treatments and applications. (2 hours lecture, 2 hours activity)

233 Mass Communication in Modern Society (3)
Prerequisite: completion of General Education (G.E.) Category III.C.1. Newspapers, magazines, films, radio and television; their significance as social instruments and economic entities in modern society. One or more sections offered online

300 Visual Communication (3)
Prerequisite: completion of G.E. Categories III.B.1 or III.B.2. Social and cultural analysis of the meaning, production and consumption of visual information in a modern media society. Still, moving, television, graphic design, cartoon and computer images will be analyzed in terms of technical, commercial and cultural considerations.

301 Writing for Broadcasting and Film (3)
Prerequisites: English 101 or equivalent with a grade of “C” (2.0) or better; typing ability. Theory and principles of writing in the broadcast and film media. (2 hours discussion, 1 hour activity)

310 Mass Media Ethics (3)
Prerequisite: junior standing. Moral and professional conduct within various communications contexts. Examine cases involved with advertising, broadcast journalism, film, photojournalism, print journalism, public relations, television and the World Wide Web.

317 Digital Foundations (3)
Prerequisite: completion of G.E. Category III.B.1 or III.B.2. Convergence of the basic principles and practices of digital photography, digital imaging, graphic design and webpage production for creative visual problem solving.

319 Visual Reporting (3)
Prerequisite: Comm 317. Image creation for publication in print and/or screen media. Convergence of the basic principles and practices of digital photography, digital imaging, graphic design and webpage production for journalism-based visual problem solving. (2 hours lecture, 3 hours laboratory)

321 Studio Photography (3)
Prerequisite: Comm 317. Creative and effective use of images in print and/or screen publications within advertising, public relations, entertainment studies and other commercial, persuasive communication contexts. (2 hours lecture, 3 hours laboratory)

326 Advanced Studio Photography (3)
Prerequisite: Comm 321. Students will prepare an advanced portfolio of images for print and/or screen publications that demonstrates their ability to produce professional quality illustrative assignments within advertising, public relations, entertainment studies and other commercial, persuasive communication contexts. (2 hours lecture, 3 hours laboratory)

332 Editing and Design (3)
Prerequisite: Comm 201. Principles and practice of newspaper editing: copy improvement, headline writing, news photos and cutlines, wire services, typography, copy schedules and control, page design and layout, law and ethics. (2 hours lecture, 3 hours laboratory)

333 Mass Media Effects (3)
Prerequisite: completion of G.E. Category III.C.1. The role mass media communications play in all human activity with heavy emphasis on the effects of mass media on the political, social and economic fabric of America.

334 Feature Article Writing (3)
Prerequisite: Comm 101 with a grade of “C” (2.0) or better. Nonfiction writing for newspapers and magazines; sources, methods and markets.

335 Public Affairs Reporting (3)
Prerequisite: Comm 201 with a grade of “C” (2.0) or better. Comm 407 recommended. Reporting public interest news such as courts, education, finance, government, police and urban problems.

340 Photography in Advertising and Public Relations (3)
Prerequisites: junior standing and Comm 326. Advertising and public relations photography. Materials and techniques for producing photographs with visual impact suitable for photo reproduction. Students will prepare a portfolio of photographs. (2 hours lecture, 3 hours activity)

346 Introduction to Entertainment and Tourism Studies (3)
Introduction to the entertainment industry. Apply entertainment and persuasion theory. Learn about career opportunities in entertainment-related fields. Explore tasks, skill sets, demands and rewards associated with different entertainment professions. (Same as Theatre 346)

350 Principles of Advertising (3)
Functions, strategies, ethics, technology and media relevant to the advertising industry, as well as concepts in international, intercultural and integrated marketing communication.

351 Writing for the Advertising Industry (3)
Prerequisite: English 101. Develop written communications and critical thinking skills essential for success in all advertising-related careers. Compose persuasive letters, reports, proposals and news releases. Grammar and language skills. Students must achieve a “C” (2.0) or better to continue taking advertising courses.

352 Advertising Media (3)
Prerequisites: Comm 350 and junior standing. Plan, execute and control advertising media programs. Basic data and characteristics of the media. Buying and selling process, techniques and methods in media planning process. Audience measurement and media analysis.
353 Advertising Creative Strategy and Execution I (3)
Prerequisites: English 101, Comm 350, and junior standing. Write copy and lay out advertisements, based on study of sales appeals, attention factors and illustrations. (2 hours lecture, 2 hours activity)

358 Graphics Communications (3)
Prerequisite: junior standing. Printing processes, publication formats, copy preparation, copy-fitting techniques, layout principles, paper selection and distribution methods. (2 hours lecture, 2 hours activity)

361 Principles of Public Relations (3)
Prerequisite: junior standing. Social, behavioral, psychological, ethical, economic and political foundations of public relations, and the theories of public relations as a communications discipline.

362 Public Relations Writing (3)
Prerequisites: Comm 101 and 361, both with a grade of "C" (2.0) or better; junior standing; typing ability. Communications analysis, writing for business, industry and nonprofit organizations. Creating effective forms of public relations communication.

363 Desktop Publishing (3)
Prerequisite: completion of any one of Comm upper-division writing courses. Editing functions and techniques involved in creative development of publications for business, industry and nonprofit organizations and institutions, including magazines, newspapers, newsletters and brochures.

371 Radio News Production (3)
Prerequisite: Comm 202. Writing, producing, planning, taping, editing and evaluating radio news.

372 TV News Production (3)
Prerequisite: Comm 202. Writing, production and evaluation of television news. Discussion of TV reporting techniques and problems. Cover events and produce TV news in lab. (2 hours lecture, 2 hours lab)

380 Interactive Media Design (3)
Prerequisite: Comm 317. Underlying design concepts and production techniques for creating interactive multimedia presentations for educational lessons, commercial applications and online publications.

407 Communications Law (3)
Prerequisites: Comm 233 and junior standing. Anglo-American concept of freedom of speech and press; statutes and administrative regulations affecting freedom of information and publishing, advertising and telecommunication. Libel and slander, rights in news and advertising, contempt, copyright and invasion of privacy. One or more sections offered online.

409 Advanced Visual Reporting (3)
Prerequisite: Comm 319. Advanced visual reporting. Extensive use of cameras for photographic reporting; evaluation and preparation of pictures for publication for both print and screen media. Field/laboratory experience in digital photography and processing. (2 hours lecture, 3 hours laboratory)

410 Principles of Communication Research (3)
Prerequisites: Comm 233 and junior standing. Research methods used to assess the effects of print, broadcast and film communications on audience attitudes, opinions, knowledge and behavior. Research design and data analysis in communications research.

415T Current Issues in Advertising (3)
Prerequisites: Comm 233, 350 or 361; permission of instructor. Variety of current advertising topics in all fields of communications. Professional problems, global issues, critical analysis and special skills are presented to supplement the curriculum and enhance the understanding of, and appreciation for, advertising concepts.

422 Communications Technologies (3)
Prerequisite: Comm 233. Issues surrounding communications technologies. Recent developments in technology, impact of government, industry and economic factors, historical overview and implications for social change. Technological developments. Applications to all areas of mass communications.

425 History and Philosophy of American Mass Communication (3)
Prerequisites: Comm 233 and junior standing. American mass communication; newspapers and periodicals through radio and television; ideological, political, social and economic aspects. Not available for graduate degree credit.

426 Global Media Systems (3)
Prerequisites: Comm 233 and junior standing. Major mass communication systems, both democratic and totalitarian, and the means by which news and propaganda are conveyed internationally.

433 Working in the Magazine Industry (3)
Prerequisite: Comm 233. Overview of the inner workings of the magazine industry. How the magazine industry functions and what is involved in the creation and production of magazines.

434 Magazine Editing and Production (3)
Prerequisite: Comm 334. Students produce Tusk, the magazine of Cal State Fullerton, and learn about the dynamics of magazine production and the magazine industry. Students work together in a professional setting to produce a high quality magazine.

435 Opinion Writing (3)
Prerequisites: English 101 or equivalent with a grade of "C" (2.0) or better, upper-division writing course, and junior standing. Techniques of editorial writing and opinion writing, including personal essays, for print, broadcast and Internet. Role of punditry in television news and on TV and radio talks shows, and how this might affect public perceptions of the media.

436 Reporting on the Entertainment Industry (3)
Prerequisite: Comm 101. Developing expertise in reporting and writing on the entertainment industry. Understanding the economics, business models, legal aspects and culture of the industry.
437 Advanced Magazine Writing (3)
Prerequisite: Comm 334. Practical experience in reporting and writing long, in-depth feature articles for professional magazines. Challenges of researching and writing for specialized audiences and the business of freelancing. Techniques for improving clarity, brevity, cohesion and emphasis.

438T Specialized Reporting (3)
Prerequisite: Comm 201 or 202. Varied topic course designed to teach advanced reporting and writing skills in specialized areas. Combine an awareness of techniques and resources with an abundance of writing models and field experiences.

446 Entertainment and Society (3)
Prerequisites: Comm 233; Comm/Business Admin/Thtr 346. In-depth exploration of the role of entertainment in modern society. Audience uses, motivations and individual preferences for entertainment. Theories and research regarding the form and function of entertainment and entertainment media.

447 Tourism and Travel (3)
Prerequisites: Comm 346, 350, 361, Management 339, Marketing 351 or Theatre 200. Concepts, tools and techniques necessary for understanding the tourism and travel industry and its promotional communications. Trends and issues of tourism and travel and the unique problems and opportunities of this field.

448T Entertainment Industry Studies (3)
Prerequisites: Comm 233; Comm/Business Admin/Thtr 346. Variable topics course focusing on specific entertainment industries, issues, organizations, trends and/or functions. May be repeated twice with a different topic.

449 Capstone in Entertainment and Tourism Studies (3)
Prerequisite: Comm 346 or equivalent. Prepares for careers in the entertainment industry by combining theory with applied principles and analytical skills in examining and developing case studies. Students plan and execute their own campaigns and projects. One or more sections offered online. (Same as Theatre 449)

450 Advertising and Brand Communication Management (3)
Prerequisites: Comm 352 and 353. Theory and techniques for planning, directing and evaluating advertising and brand communication programs, with emphasis on media-message strategies. Managerial approach with case studies to the solution of brand communications problems.

451A Advertising Campaigns – AAF Competition (3)
Prerequisites: Comm 352, 353 and consent of instructor. Advertising campaigns, including applied research, writing and utilization of print and electronic mass media. Design of complete campaigns from idea to prediction readiness.

451B Advertising Campaigns – Local Focus (3)
Prerequisites: Comm 350, 352, 353. Advertising campaigns, including applied research, writing and utilization of print and electronic mass media. Design complete campaigns from idea to prediction readiness.

451C Advertising Campaigns – TitanCom Agency (3)
Prerequisites: Advertising majors – Comm 350, 352, 353; Public Relations majors – Comm 361, 362. Advertising campaigns, including applied research, writing and utilization of print and electronic mass media. Design complete campaigns from idea to prediction readiness.

452 Advanced Media Strategy and Tactics (3)
Prerequisite: Comm 352. Further education in advertising media. Integrate theories from related disciplines, such as communications, marketing and psychology to illustrate better ways to use media as a competitive tool in business.

453 Advertising Creative Strategy and Execution II (3)
Prerequisites: Comm 353 and 358. Advanced advertising projects involving application and execution of creative advertising strategies for mass media, including theory and practice of writing copy, and preparing comprehensive layouts and completed scripts. Group discussions, labs and individual conferences.

454 Advertising Media Sales (3)
Prerequisites: Comm 350 and 353; or Comm 332 and either 217 or 358; or Marketing 351 and any 300-level graphics, layout or design course. Prepares for careers in advertising media sales, including radio, television, newspaper, magazine, new media and the Internet. Personal sales techniques and media sales strategies are presented for each medium.

455 Internet Advertising and Promotional Communications (3)
Prerequisites: Comm 350, 352 and 353. Internet advertising and marketing issues and ideas. Evaluate, develop and execute Internet-based advertising and promotional campaigns.

456 Advertising Account Planning (3)
Prerequisites: Comm 353 and 410. Apply principles of research, consumer behavior and creative concept development to advertising and brand communication campaigns. Field study and case application facilitate the process of the planner’s consumer advocacy function.

464 Public Relations Management (3)
Prerequisites: Comm 361, 362 and junior standing. Analyze systems and strategies for planning public relations campaigns and solving/preventing problems. Individual, team case studies, in corporate development of proposals; actual use of tools in addition to role playing presentations to management.
465 Entertainment Public Relations (3)
Prerequisites: Comm 361, Comm/Business Admin/Thtr 346. Public relations strategies and tactics as used in the entertainment industry, including media relations, talent relations, special events, high visibility techniques, presentation and dealing with adverse situations.

467 Public Relations Agency Seminar (3)
Prerequisites: Comm 101, 361 and junior standing. Psychology and functions of client counseling, proposal writing, new business development, agency management, servicing clients, evaluation of methods, reporting results, and legal and ethical concerns.

468 Corporate and Nonprofit Public Relations (3)
Prerequisites: Comm 101 and 361. Public relations strategies and tactics used in today's increasingly sophisticated and maturing corporate and nonprofit marketplaces. This advanced course, which relies heavily on professional guest speakers and in-class simulations/exercises, encompasses a host of specific topics, such as fundraising, corporate and social responsibility, media relations, and technology and ethical issues.

469 Crisis Communications (3)

471 News Media Production (3)
Prerequisites: Comm 201, 319, 321 or 380. Class members constitute the editorial staff of the university newspaper and receive training in print, online and magazine-style journalism. Meets four hours per week for critiques in news reporting, writing, editing and makeup, followed by production. (More than 9 hours laboratory)

472 Advanced Electronic News Production (3)
Prerequisite: Comm 372. Advanced news writing and production for television, radio and web. Students develop their electronic news production skills by working on "OC News," daily television, radio and web newscasts. (2 hours lecture, 3 hours lab.) May be repeated once for credit.

480 Persuasive Communications (3)
Prerequisites: Comm 233 and junior standing. Persuasive communications applied to mass communication. The communicator, audience, message content and structure, and social context in influencing attitudes, beliefs and opinions.

481 Advanced Interactive Media Design (3)
Prerequisite: Comm 380. Interactive media design for various platforms and design topics such as interactive narratives, experience design, usability and accessibility and productive interaction. Students will learn to use current interactive media protocols to develop projects for interactive audiences.

495 Mass Media Internship. (3)
Prerequisites: senior standing; communications major; 2.25 GPA overall and in major; and Comm 319, 321 or 380. Visit the website at: https://commtvinternship.fullerton.edu/commAndRtvStudents.htm for further details. Supervised internship according to concentration. Selected from a wide variety of communications media, industries, agencies and nonprofit organizations. Applications must be made through the department coordinator one semester prior to entering the program. See the department section titled "Internship Requirements" in this catalog or the internship website. (Credit/No Credit Only)

496 Student-to-Student Tutorial (1-3)
Prerequisites: consent of instructor and previous superior performance in a similar or equivalent course. Under faculty supervision, provides tutorial assistance in a communications course. May involve small group demonstrations and discussions, individual tutoring and evaluation of student performance as appropriate. May be repeated for a maximum of four units either separately or in combination with Comm 499.

497T Event Planning and Management (3)
Prerequisite: one of the following: Comm 346, 350, 361, Business Admin 301 346. Plan, produce and promote public events to meet communication objectives. Hands-on applications to COMM Week, film festivals or other events. May be repeated once for extra elective units only.

499 Independent Study (1-3)
Prerequisite: consent of department chair. Individually supervised mass media projects and research on campus and in the community. May involve newspaper and magazine publishers, radio and television stations, and public relations agencies. May be repeated up to a maximum of four units either separately or in combination with Comm 499.

500 Theory and Literature of Communications (3)
Prerequisite: conditional classified status. Theories and research on communication processes and effects; source, media, message, audience and content variables; types, sources and uses of communication literature. Graduate seminar.

507 Communications Research Design and Analysis (3)
Pre- or corequisite: Comm 500. Develops a working knowledge of data collection and analysis techniques in both quantitative and qualitative research methods. Material and presentation are developed for practical application to all professional fields of communication.

508 Humanistic Research in Communications (3)
Prerequisites: Comm 410 and 500. Humanistic methods of study in communications: historical research and critical analysis applied to problems, issues and creative works in communication. Graduate seminar.
509 Social Science Research in Communications (3)
Prerequisites: Comm 410 and 500. Social-scientific research design and analysis and the study of communication processes and effects. Graduate seminar.

515T Professional Problems in Specialized Fields (3)
Prerequisite: Comm 500. Selected topics and issues in the field of mass communications. Subjects vary each semester. May be repeated with a different topic.

516 Media Audience Behavior (3)
Prerequisite: Comm 500. In-depth analysis of the types, attitudes and behaviors of media audiences. Theories from psychology, marketing, anthropology and communications are integrated for comprehensive understanding of why people consume media and performance. Appropriate for all Communications disciplines.

517 Ethical Problems of the Mass Media (3)
Prerequisite: Comm 500. Criticisms of specific functions of the mass media and public relations. Consists of three sections: history of criticism; problem areas of the media; and practitioner response to criticism.

518 Public Relations Theory (3)
Prerequisite: Comm 500. Cutting edge communication and organizational theories and vital emerging issues influencing the field of public relations. Special focus on contemporary public relations models and practitioner roles. One or more sections offered online.

519 Communications and Governance in America (3)
Prerequisite: Comm 500. Relationships between systems of communications, particularly new communication technologies, and governmental institutions and processes within the American setting. How technological change relates to patterns of decision-making, management and the content and flow of information among public officials.

520A News-Editorial (3)
Prerequisites: Comm 500 and six units of study plan courses in area of specialization. Under supervision of a faculty member, plan, design, conduct and evaluate a team project in their field of specialization.

520B TV/Film (3)
Prerequisites: Comm 500 and six units of study plan courses in area of specialization. Under supervision of a faculty member, plan, design, conduct and evaluate a team project in their field of specialization.

520C Public Relations (3)
Prerequisites: Comm 500, 518 and six units of study plan courses in area of specialization. Under supervision of a faculty member, plan, design, conduct and evaluate a team project in their field of specialization.

525 Advanced Communications Management (3)
Prerequisite: Comm 500. Up-to-date assessment of general management and communications management techniques, and helps equip for management positions in advertising, journalism, public relations and broadcasting.

527 Politics and Mass Media (3)
Prerequisite: Comm 500. Nature of the relationship between the mass media and politics. Particular attention to the role and impact of the mass media in political election campaigns and policy making.

530 Communications Technologies (3)
Prerequisite: Comm 500. Emerging communications technologies that are transforming professional practices associated with various communications industries. Recent technological developments, corporate and government policies affecting their use, and social consequences of current and projected applications. One or more sections offered online.

534 American Media History (3)
Prerequisite: Comm 500. History of American mass media, from McCarthy to the present – a period that marked the birth of television and the maturation of investigative journalism in shaping American attitudes about government and society.

536 International Communications (3)
Prerequisite: Comm 500. Comparative examination of communications policies and practices in different national settings. Provides future practitioners with an understanding of cross-national variations in communication policies and how they shape communication industries and practices.

541 Film Criticism (3)
Prerequisite: Comm 500. Graduate foundation course in screenwriting that examines methods of evaluating and critiquing motion picture screenplays and films for a variety of Hollywood genres.

550 Advertising in Modern Society (3)
Prerequisite: Comm 500. Assessing the impact of advertising on society, the culture and economy. Philosophical rather than technical examinations of critical issues and problems, such as economic and social effects of advertising, effects of value and life styles, ethics and regulation.

595 Graduate Mass Media Internship (3)
Prerequisites: Comm 500, and Comm 508 or 509, and consent of graduate adviser. Supervised practical work experience with media outlets, advertising and promotion agencies, public relations firms, film companies, etc. Involves cooperative efforts of departmental faculty and employers. Exposure to current and innovative techniques in research, management and creative activities while offering practical experience.
597 Project (3)
Prerequisite: consent of graduate coordinator. Completion of creative project in a sequence beyond regularly offered coursework.

598 Thesis (3 or 6)
Prerequisite: consent of graduate coordinator. Completion of a thesis in a sequence beyond regularly offered coursework.

599 Independent Graduate Research (1-3)
Prerequisite: consent of graduate coordinator. Individually supervised mass media projects or research for graduate students. May be repeated.
INTRODUCTION

Comparative Religion examines the spiritual quest of humankind, especially as it has manifested itself in the world’s living religions. These include Hinduism, Buddhism, Sikhism, Judaism, Christianity, Islam and other less familiar traditions. No other academic field looks at the origins, sacred writings, rituals, beliefs and world views of the various religions for their own sake rather than as an aspect of another field of study.

Within a public university, religion must be approached with academic objectivity and without favoritism for any one tradition. Yet, religion must also be studied with sensitivity and empathy for the millions of believers whose lives are shaped by their faith. Comparative Religion is also an interdisciplinary field that draws on the work of social scientists, historians, philosophers and literary scholars in attempting to understand the religious quest. Hence, studying religious traditions develops habits of mind that are very important for life in our multicultural society. Furthermore, a familiarity with the world’s religions is necessary for an understanding of church-state issues in America and of geo-political conflicts in South Asia, the Middle East and elsewhere.

The Bachelor of Arts in Religious Studies is designed for those who: (1) want a humanities undergraduate background focusing on religion as a preparation for further study in such fields as education, law, social work, counseling and government service; (2) wish to pursue graduate studies in religion with the aim of teaching and/or doing research in the subject; (3) are considering a career in various religious ministries or in religious education.

Because the major consists of 36 units of coursework (less than some other fields), it may be possible to add a second major in, for example, Communications, History, Human Services or Philosophy. Such double majors may strengthen a student’s job preparation or background for graduate studies.

Minors in religion are offered in three areas depending on a student’s particular interest: Religious Studies (comparative emphasis), Christian Studies (an emphasis on Christianity in its many forms) and Jewish Studies (an emphasis on the Judaic tradition).

Mission and Goals

Mission

To describe and interpret the developments, worldviews and practices of religious traditions in a non-sectarian, academic manner for the benefit of students, faculty from other fields and the greater Orange County community.

Goals

1. To offer classes in the worlds’ religions within the General Education framework and for majors and minors;
2. To teach in a scholarly and non-sectarian manner;
3. To conduct scholarly research that contributes to an understanding of the varieties of religious thought and experience;
4. To investigate in a scholarly manner the impact of the varieties of religious thought and experience on contemporary society.
Awards in Comparative Religion

Two graduating seniors are recognized each year with the James O’Shea/Joseph Kalir Award for Outstanding Scholarship by a graduating senior, and the James Parkes/Morton Fierman Award for Student Achievement (for service to the department and university and/or for interfaith work within and outside the university). The Donald Gard Award is given annually to a non-graduating Religious Studies major for academic achievement. In addition, the Althea and Robert McLaren Award recognizes the student (majoring or minor- ing in religious studies) judged to have written the outstanding essay in a Comparative Religion class in a particular year.

International Learning Opportunities in Comparative Religion

The Religious Studies major within the Department of Comparative Religion requires the study of the world's religions, thereby necessitating an examination of religion in other cultural and national settings. This is particularly true of courses dealing with Asian religions such as Hinduism and Buddhism, and a predominantly Middle Eastern faith—Islam. Moreover, the Department encourages students to study abroad. See the department chair or undergraduate adviser if interested.

Graduate Study

The department works cooperatively with the Department of Religion in the Claremont Graduate School. Please contact the chair or undergraduate adviser about specific cooperative arrangements.

BACHELOR OF ARTS IN RELIGIOUS STUDIES

The Bachelor of Arts in Religious Studies requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. Each course counted toward the major must be completed with a grade of “C” (2.0) or higher.

The religious studies major requires a total of 36 units distributed as follows:

Lower-Division Requirements (9 units)

1. Introduction to the Study of Religion (3 units), one of the following:
   - Comparative Religion 105 Religion and the Quest for Meaning (3)
   - Comparative Religion 110 Religions of the World (3)

2. Introduction to Western Religious Traditions (3 units), one of the following:
   - Comparative Religion 200 Introduction to Christianity (3)
   - Comparative Religion 201 Introduction to the New Testament (3)
   - Comparative Religion 210 Introduction to Judaism (3)
   - Comparative Religion 250 Introduction to Islam (3)

3. Introduction to Non-Western Religious Traditions (3 units), one of the following:
   - Comparative Religion 270T Introduction to the Asian Religions (3)
   - Comparative Religion 280 Introduction to Buddhism (3)

Upper-Division Requirements (27 units)

4. Methods and Concepts (6 units), both of the following:
   - Comparative Religion 300 Methods of Studying Religion (3)
   - Comparative Religion 485T Major Religious Thinkers and Concepts (3)*

5. The Development of Western Religious Thought (6 units), two of the following:
   - Comparative Religion 345A History and Development of Early Christian Thought (3)
   - Comparative Religion 345B History and Development of Modern Christian Thought (3)
   - Comparative Religion 346A History and Development of Jewish Thought: Biblical and Rabbinical Eras (3)
   - Comparative Religion 346B History and Development of Jewish Thought: Medieval and Modern Eras (3)
   - Comparative Religion 349A History and Development of Islamic Thought: The Beginning to 1258 (3)
   - Comparative Religion 349B History and Development of Islamic Thought: 1259 to Modern Times (3)

6. The Development of Non-Western Religious Thought (6 units), two of the following:
   - Afro-Ethnic/Comparative Religion 325 African American Religions and Spirituality (3)
   - Comparative Religion 337 American Indian Religions and Philosophy (3)
   - Comparative Religion 347A Hindu Tradition to 400 B.C.E. (3)
   - Comparative Religion 347B Hindu Tradition from 400 B.C.E. (3)
   - Philosophy 350 Asian Philosophy (3)
   - Comparative Religion 354T Topics in Buddhism (3)

*May be taken only after completion of 15 units in Comparative Religion, including Comparative Religion 105 or 110 and 300, and junior standing.
Comparative Religion 370 New Religious Movements in the U.S.A. (3)
History/Comparative Religion 465A History of India (3)
History/Comparative Religion 465B History of India (3)
7. The Experience of Religion (6 units), two of the following:
Comparative Religion 305 Contemporary Practices of the World's Religions (3)
Comp Lit/Comparative Religion 312 The Bible as Literature (3)
Comparative Religion 335 Judaism, Christianity, and Islam Compared (3)
Philosophy/Comparative Religion 348 Philosophy of Religion (3)
Comparative Religion 358 Comparative Mysticism (3)
Comparative Religion 367 Latino/a Spirituality and Religion (3)
Comparative Religion 375 Conceptions of the Afterlife (3)
Comparative Religion 380 Religion and Violence (3)
Comparative Religion 381 Religion and Politics in the United States (3)
Comparative Religion 397 Religion and Science (3)
Comparative Religion 400 Religion, the Media, and Contemporary Culture (3)
Sociology/Comparative Religion 458 Sociology of Religious Behavior (3)
8. Textual Studies (3), one of the following:
Comparative Religion 330T Hebrew Scriptural Studies (3)
Comparative Religion 331T New Testament Studies (3)
Comparative Religion 401T Studies in Religious Texts (3)
Writing Requirement
The course requirement of the university upper-division baccalaureate writing course is met through Comparative Religion 485T. It is highly recommended that students majoring in Religious Studies pursue the study of classical languages such as Arabic, Greek, Hebrew, Latin, and Sanskrit when such courses are offered.

MINOR IN RELIGIOUS STUDIES
Students minoring in Religious Studies are required to take 21 units in Comparative Religion, distributed as follows:

Lower-Division Requirements (9 units)
Introduction to the Study of Religion (3 units), one of the following:
Comparative Religion 105 Religion and the Quest for Meaning (3)
Comparative Religion 110 Religions of the World (3)
Introduction to Western Religious Traditions (3 units), one of the following:
Comparative Religion 200 Introduction to Christianity (3)
Comparative Religion 201 Introduction to the New Testament (3)
Comparative Religion 210 Introduction to Judaism (3)
Comparative Religion 250 Introduction to Islam (3)
Introduction to Non-western Religious Traditions (3 units), one of the following:
Comparative Religion 270T Introduction to the Asian Religions (3)
Comparative Religion 280 Introduction to Buddhism (3)

Upper Division (12 units)
Core Requirements (3 units)
Comparative Religion 300 Methods of Studying Religion (3)
Elective Courses (9 units)
Any nine units of upper-division courses in Comparative Religion. It is highly recommended that students minoring in Religious Studies pursue the study of classical languages such as Arabic, Greek, Hebrew, Latin, and Sanskrit when such courses are offered.

MINOR IN CHRISTIAN STUDIES
Students minoring in Christian Studies are required to take 21 units, distributed as follows:

Required Courses (12 units), each of the following:
Comparative Religion 200 Introduction to Christianity (3)
Comparative Religion 300 Methods of Studying Religion (3)
Comparative Religion 345A History and Development of Early Christian Thought (3)
Comparative Religion 345B History and Development of Modern Christian Thought (3)
Elective Courses (9 units), three of the following:
Comparative Religion 201 Introduction to the New Testament (3)
Comp Lit/Comparative Religion 312 The Bible as Literature (3)
Afro Ethnic/Comparative Religion 325 African-American Religions and Spirituality (3)
Comparative Religion 331T New Testament Studies (3)
Comparative Religion 335 Judaism, Christianity, and Islam Compared (3)
Comparative Religion 350T Major Christian Traditions (3)
Comparative Religion 358 Comparative Mysticism (3)
Comparative Religion 367 Latino/a Spirituality and Religion (3)
Comparative Religion 375 Conceptions of the Afterlife (3)
Comparative Religion 380 Religion and Violence (3)
Comparative Religion 381 Religion and Politics in the United States (3)
Comparative Religion 400 Religion, the Media, and Contemporary Culture (3)
Comparative Religion 401T Studies in Religious Texts* (3)
History/Comparative Religion 417B Roman Empire (3)
History 420 The Byzantine Empire (3)
History/Comparative Religion 421A History of the Christian Church to the Reformation (1517) (3)
History/Comparative Religion 421B  History of the Christian Church from the Reformation to the Present (3)
History/Comparative Religion 425B  The Reformation (3)
Sociology/Comparative Religion 458  Sociology of Religious Behavior (3)
History/Comparative Religion 483  American Religious History (3)
Comparative Religion 485T  Major Religious Thinkers and Concepts (3)*
Comparative Religion 499  Independent Study (3)*

It is highly recommended that students minoring in Christian Studies pursue the study of classical languages such as Greek, Hebrew, and Latin when such courses are offered.

*When content pertains to the Christian tradition.

MINOR IN JEWISH STUDIES

Students minoring in Jewish Studies are required to take 21 units, distributed as follows:

Required Courses (12 units), each of the following:
Comparative Religion 210  Introduction to Judaism (3)
Comparative Religion 300  Methods of Studying Religion (3)
Comparative Religion 346A  History and Development of Jewish Thought: Biblical and Rabbinical Eras (3)
Comparative Religion 346B  History and Development of Jewish Thought: Medieval and Modern Eras (3)

Elective Courses (9 units), three of the following:
Comp Lit/Comparative Religion 312  The Bible as Literature (3)
Comparative Religion 330T  Hebrew Scriptural Studies (3)
Comparative Religion 358  Comparative Mysticism (3)
Comparative Religion 380  Religion and Violence (3)
Comparative Religion 381  Religion and Politics in the United States (3)
Comparative Religion 400  Religion, the Media, and Contemporary Culture (3)
Comparative Religion 401T  Studies in Religious Texts* (3)
History/Comparative Religion 405  History of the Jews (3)
History/Comparative Religion 406  The Holocaust (3)
Sociology/Comparative Religion 458  Sociology of Religious Behavior (3)
History 467  The Middle East in the 19th Century (3)
History 468  The Middle East in the 20th Century (3)
Comparative Religion 485T  Major Religious Thinkers and Concepts (3)*
Comparative Religion 499  Independent Study (1-3)*

*When content pertains to the Jewish tradition.

COMPARATIVE RELIGION COURSES

Courses are designated as CPRL in the class schedule.

105  Religion and the Quest for Meaning (3)
Nature of religious experience as the human pursuit of meaning and transcendence, exploring its central themes, phenomena, and questions; its principal types of figures and communities; and its major categories of sacred rituals, objects, seasons, and places.

110  Religions of the World (3)
Introduction to at least five religious world views from a historical and comparative perspective, with descriptive analysis of their belief system, moral code and symbolic rituals: Judaism, Christianity, Islam, Hinduism and Buddhism. One or more sections offered online. (Same as Philosophy 110)

200  Introduction to Christianity (3)
Overview of the Christian tradition, including Orthodox, Roman Catholic and Protestant expressions. Foundational councils, creeds, scriptures, ideas and worship styles. One or more sections offered online.

201  Introduction to the New Testament (3)
Textual and historical study of the origins and content of the New Testament in the context of first-century Christianity.

210  Introduction to Judaism (3)
The Jewish tradition – its scriptures, laws, customs, holidays and world view in their historical setting.

246A  Basic Hatha Yoga (2)
(Same as Kinesiology 246A)

246B  Intermediate Hatha Yoga (2)
(Same as Kinesiology 246B.)

250  Introduction to Islam (3)
Religion of Islam, its background and main teachings: the rise of Islam; the caliphate; Islamic theology, teachings, mysticism and philosophy.

270T  Introduction to the Asian Religions (3)
Main teachings of a major South Asian, Far Eastern or “Oriental” religion per semester. Such religions as Jainism, Hinduism, Taoism, Shintoism, and Zoroastrianism will be discussed. May be repeated for credit with different subject matter.

280  Introduction to Buddhism (3)
Introduction to the origins and development of Buddhism. Discussion of the major teachings found in all traditions of Buddhism, the three major traditions of Buddhism and the position of Buddhism in the U.S.

300  Methods of Studying Religion (3)
Prerequisite: Comp Religion 110. Academic study of religion to include the definition, functions and varieties of religion; the methods used to study it; and key figures who have shaped the development of this discipline.
301 Sanskrit (3)
(Same as Linguistics 301)

305 Contemporary Practices of the World’s Religions (3)
Prerequisite: completion of General Education (G. E.) Category III.B.2. Comparative study of how the beliefs, practices and moral codes of the world’s major religions influence the way nations and individuals behave in the spheres of daily life, culture, ethics, business and politics.

312 The Bible as Literature (3)
(Same as Comp Lit 312)

315 Modern Islamic Thought (3)
(Same as Asian Amer 315)

325 Asian Pacific Americans and Religion (3)
(Same as Asian Amer 322)

325 African-American Religions and Spirituality (3)
(Same as Afro Ethnic Studies 325)

330T Hebrew Scriptural Studies (3)
Specific areas of Hebrew Scriptures, such as major and minor prophets, Psalms, values of wisdom writers, books of the Old Testament. May be repeated for credit with different subject content.

331T New Testament Studies (3)
Specific areas of the New Testament, such as the Synoptic Gospels, Pauline Corpus, Johannine Corpus, etc. May be repeated for credit with different subject matter.

335 Judaism, Christianity and Islam Compared (3)
Comparative study of the three great monotheistic traditions: Judaism, Christianity and Islam; their beliefs, practices, and structures.

337 American Indian Religions and Philosophy (3)
(Same as Afro-Ethnic Studies 337)

345A History and Development of Early Christian Thought (3)
Prerequisites: completion of the G. E. Categories III.B.1 and III.B.2. Historical study of the diversity of Christian beliefs, movements and key figures from New Testament times to the late Middle Ages, including such topics as important creeds and councils, spiritual movements, and central figures such as Augustine and Aquinas.

345B History and Development of Modern Christian Thought (3)
Prerequisites: completion of the G. E. Categories III.B.1 and III.B.2. Historical study of the diversity of Christian beliefs, movements and key figures from the late Middle Ages to the present, including such topics as the context and thinkers of the Reformation era, post-Reformation controversies, and recent debates and trends.

346A History and Development of Jewish Thought: Biblical and Rabbinical Eras (3)
Prerequisites: completion of G. E. Categories III.B.1 and III.B.2. Hebrew Scriptures in their historical context, of the development of rabbinical Judaism and the Talmud, and of Judaism in the Christian and Muslim worlds down to the close of the Spanish "Golden Age" (1150).

346B History and Development of Jewish Thought: Medieval and Modern Eras (3)
Prerequisites: completion of G. E. Categories III.B.1 and III.B.2. Maimonides’ legacy, the impact of mysticism, rise of anti-Semitism, emancipation of European Jews, the Holocaust, Israel’s founding and history, and contributions of Jews to American culture.

347A Hindu Tradition to 400 B.C.E. (3)
Prerequisite: Comp Religion/Philosophy 110 or completion of G. E. Category III.B.2. Hindu thought in its earliest period. Subjects will include an overview of Vedic literature, especially its religious content and the major rituals of the early Veda; philosophical developments in the Upanisads or later Veda; and related sacred writings. One or more sections offered online.

347B Hindu Tradition from 400 B.C.E. (3)
Prerequisite: Comp Religion 105 or 110 or completion of G. E. Category III.B.2. Hindu thought after the Vedic period. Subjects will include the beginnings of Hindu philosophies, classical Hindu practice, devotionalism, modern or neo-Hindu groups appearing in the 19th century, and the contributions of thinkers such as Ramakrishna and Gandhi.

347C American Indian Religions and Philosophy (3)
(Same as Afro Ethnic Studies 347C)

348 Philosophy of Religion (3)
(Same as Philosophy 348)

349A History and Development of Islamic Thought: The Beginning to 1258 (3)
Prerequisites: Comp Religion 105, 110 or 250 or equivalent. Islamic theology, law, culture and spirituality up to the close of the classical period in 1258. Interpretation of the Qur’an, formation of Hadith literature, development of Islamic law, divisions within Islam, rise of mysticism, contributions to science and art.

349B History and Development of Islamic Thought: 1259 to Modern Times (3)
Prerequisites: Comp Religion 105, 110 or 250 or equivalent. Islamic thought from the close of the classical period to the present, with emphasis on 20th century developments. Emergence of modern Middle East, reform movements, Islamic response to nationalism and modernity, recent Islamic resurgence.

350T Major Christian Traditions (3)
Prerequisite: completion of G. E. Category III.B.2. Catholicism, Protestantism, Eastern Christianity or Post-Reformation Communities; historical development and self-understanding, liturgy, creeds, moral norms, canon laws and outstanding figures. May be repeated for credit with different content.

354T Topics in Buddhism (3)
Prerequisites: Comp Religion 105, 110 or 280. Historical survey of Buddhist doctrines, schools and practices in a particular region or regions, which are: South Asia, Tibet, China, Japan, Korea and Southeast Asia. May be repeated for credit with different content. (Same as Philosophy 354T)
358 Comparative Mysticism (3)
Prerequisites: Comp Religion 105, 110 or equivalent. Comparative survey of mysticism as a recurring phenomenon within major religious traditions. Included are selected writings and representative male and female figures, analyzed from philosophical and psychological viewpoints. Definitions, terms, metaphors, techniques, and stages of the mystical experience.

367 Latino/a Spirituality and Religion (3)
Prerequisite: completion of G. E. Category III B.2. National and international expressions of Latino/a religiosity – from popular religion to Marian devotion to curanderismo – are explored through film, historical documents, poetry, theology, art, sociology and ethnic studies. (Same as Chicana/o 367)

370 New Religious Movements in the U.S.A. (3)
Beliefs, history, ritual and organizational make-up of non-traditional modern religions in America, such as Scientology, the Unification Church, Hare Krishna (ISKCON) and Rajneesheism as presented by guest speakers. Discussion of “cult,” “sect” and the occult will comprise portion of course.

375 Conceptions of the Afterlife (3)
Prerequisite: completion of the G. E. Category III B.2; Comp Religion 110 recommended. How selected religious traditions have sought to answer the question “What happens when I die?” Resurrection, reincarnation, immortality of the soul, heaven and hell will be discussed.

380 Religion and Violence (3)
Prerequisite: completion of G. E. Categories III B.2 and III C.1. Interdisciplinary exploration of major theories, developments and documents connected to the relationship between religious practices and motivations for engaging in, preventing or rejecting violent behavior.

381 Religion and Politics in the United States (3)
Prerequisite: completion of G. E. Category III C.1. Relationship of politics and religion, especially in the U.S. The colonial and constitutional experience, Supreme Court decisions on religious issues, the principal theorists of moral discourse in the public forum, contemporary issues of concern. (Same as Political Science 381)

397 Religion and Science (3)
Prerequisite: completion of the G. E. Category III A.2 and III B.2. Historical and contemporary interaction of religion and science through a study of religious thought and scientific method. Topics will include the scientific revolution, evolutionary theory and Quantum physics as these relate to religious faith.

400 Religion, the Media, and Contemporary Culture (3)
Prerequisite: American Studies 201 or Communications 233 or History 180 or Comp Religion 105 or 110. Religion reporting in the secular media; the religious press in America; the influence of the media, both secular and religious, on the shaping of society’s values; ethical dilemmas faced by reporters.

401T Studies in Religious Texts (3)
Prerequisite: Comp Religion 105 or 110. Study and interpretation of a selected portion of the scriptures of a particular religion, for example, the Hebrew Bible/Old Testament, the New Testament, the Qur’an, the Veda, the Pali Canon.

405 History of the Jews (3)
(Same as History 405)

406 The Holocaust (3)
(Same as History 406)

417B Roman Empire (3)
(Same as History 417B)

421A History of the Christian Church to the Reformation (1517) (3)
(Same as History 421A)

421B History of the Christian Church From the Reformation to the Present (3)
(Same as History 421B)

425B The Reformation (3)
(Same as History 425B)

458 Sociology of Religious Behavior (3)
(Same as Sociology 458)

465A History of India (3)
(Same as History 465A)

465B History of India (3)
(Same as History 465B)

466A Islamic Civilization: Arab Era (3)
(Same as History 466A)

466B Islamic Civilization: Imperial Age (3)
(Same as History 466B)

483 American Religious History (3)
(Same as History 483)

485T Major Religious Thinkers and Concepts (3)
Prerequisites: 15 units in Comp Religion, including Comp Religion 105 or 110 and 300, and junior standing or approval of undergraduate adviser. Religious thinkers and concepts dealing with Western, Eastern and non-traditional religious ideas from ancient to modern times. Fulfills university upper-division baccalaureate writing requirement. May be repeated with different content.

499 Independent Study (1-3)
Supervised research projects in Comparative Religion to be taken with consent of instructor and the department chair. May be repeated for credit.
INTRODUCTION

The undergraduate program in Computer Engineering at CSUF provides students with a strong theoretical and practical background in the computer hardware and software aspects of computer-based systems, along with the engineering analysis, design and implementation skills necessary to work between the two. The curriculum is based on an engineering philosophy, with emphasis on hardware more than software. Topics integrated into the curriculum include digital systems, computer organization and architecture, processor interfacing techniques, VHDL design, advanced electronics and embedded system design. Elective courses required by the program allow students to specialize in key engineering technology and computer science areas. The program also requires two semesters of multidisciplinary senior design project. The computer engineering program is designed to develop an ability to apply design and analysis knowledge to the practice of computer engineering in an effective and professional manner.

The proliferation of embedded systems in an increasing array of industrial products assures a ready market for graduates in the computer engineering discipline. Computer engineers are employed in a wide range of industries, including VLSI chip design and manufacturing, autonomous systems, consumer electronics, expert systems, smart devices, digital signal processing (DSP) systems, computer manufacturing from PDAs to super computers, and automatic controls. A majority of products, such as airplanes, automobiles, home appliances, consumer electronics, robots etc., use computers and employ computer engineers in their designs. Computer engineers are also needed in the design and implementation of computer networks for business, industrial and governmental institutions.

COMPUTER ENGINEERING PROGRAM MISSION STATEMENT

The undergraduate program in Computer Engineering is committed to providing students with a strong theoretical and practical understanding in the hardware and software aspects of computer-based systems, along with the engineering analysis, design and implementation skills necessary to solve problems using computer engineering principles and techniques. The program prepares students for productive, dynamic and rewarding careers in computer engineering and for entry into graduate programs.

PROGRAM EDUCATIONAL OBJECTIVES

The Computer Engineering program has established the following Program Educational Objectives:

1. Technical Growth: Graduates will be successful in modern engineering practice, integrate into the local and global workforce, and contribute to the economy of California and the nation

2. Professional Skills: Graduates will continue to demonstrate the professional skills necessary to be competent employees, assume leadership roles, and enjoy career success and satisfaction

3. Professional Attitude and Citizenship: Graduates will become productive citizens with high ethical and professional standards, make sound engineering or managerial decisions, and have enthusiasm for the profession and professional growth
PROGRAM OUTCOMES

The learning outcomes for the Computer Engineering program are:

1. An ability to apply knowledge of mathematics, science and engineering
2. An ability to design and conduct experiments, as well as to analyze and interpret data
3. An ability to design a system, component or process, to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
4. An ability to function on multidisciplinary teams
5. An ability to identify, formulate and solve computer engineering problems
6. An understanding of professional and ethical responsibility
7. An ability to communicate effectively
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
9. A recognition of the need for, and an ability to, engage in, lifelong learning
10. A knowledge of contemporary issues
11. An ability to use the techniques, skills and modern engineering tools necessary for engineering practice

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Entering freshmen should have a preparation that includes two years of algebra, geometry, trigonometry, and one year of physics. Students deficient in mathematics or physics must take special preparatory courses, i.e., Mathematics 125 or Physics 115, which will not carry credit for the degree. (See also the Undergraduate Students Section of the University Catalog for Statewide Placement Tests and requirements.)

The degree program assumes that the student has already obtained a working knowledge of personal computing fundamentals and applications, including word processing, spreadsheets, database systems, e-mail systems, the World Wide Web and presentation graphics. Students without this knowledge may be required to take up to three additional units of coursework beyond those normally required. These additional three units will not carry credit for the degree.

The Bachelor of Science degree in Computer Engineering requires 129 units. These 129 units include 59 units of required courses in computer engineering/computer science/electrical engineering/general engineering, six units of elective courses in computer engineering/computer science/electrical engineering, 34 units of foundation courses in mathematics and science, and 49 units of courses (30 unduplicated units) in General Education.

Courses taken toward the major or toward the requirements in related fields must be taken on a traditional (letter grade) basis, unless the course is offered only on a non-traditional (credit/no credit) basis, or if the course is passed by a challenge examination. Students must maintain at least a 2.0 grade point average in all college-level units attempted, in all units attempted at CSUF and in all units attempted in the major. Mathematics 150A and Math 270A must be completed with at least a “C” (2.0) grade. All other mathematics and physical science courses required for the degree must be completed with at least a “C minus” (1.7) grade to count as prerequisite courses to engineering courses or as credit towards the degree. All core courses in the major must be passed with a “C minus” (1.7) or better.

Placement Examination

Students with a working knowledge of a high-level programming language such as C++ are encouraged to take the Computer Science placement examination to qualify for a Comp Sci 120 waiver.

Computer Engineering Core (59 units)

Comp Sci 120 Introduction to Programming (3)
Comp Sci 121 Programming Concepts (3)
Comp Sci 131 Data Structures Concepts (3)
Comp Sci 253U Workshop in UNIX (1)
Comp Sci 332 File Structures and Database Systems (3)
Comp Sci 351 Operating Systems Concepts (3)
Comp Sci 471 Computer Communications (3)
EGCP 180 Digital Logic and Computer Structures (3)
EGCP/EGEE 280 Microcontrollers (3)
EGCP/EGEE 281 Designing with VHDL (2)
EGCP 371 Modeling and Simulation of Signals and Systems (3)
EGCP 381 Computer Design and Organization (4)
EGCP/EGCE/EGEE 401 Engineering Economics and Professionalism (3)
EGCP 441 Advanced Electronics for Computer Engineers (4)
EGCP 450 Embedded Processor Interfacing (4)
EGCP 470 Multidisciplinary Projects in Computer Engineering-I (1)
EGCP 471 Multidisciplinary Projects in Computer Engineering-II (2)
EGEE 203 Electric Circuits (3)
EGEE 203L Electric Circuits Laboratory (1)
EGEE 303 Electronics (3)
EGEE 303L Electronics Laboratory (1)
EGEE 323 Engineering Probability and Statistics (3)

Technical Electives (6 units)

The electives shall constitute a coherent body of study consistent with the student’s professional and educational objectives. Students take six units (nine units if student receives a waiver for CPSC 120) of adviser-approved elective courses. Students may choose the elective courses from a suggested list of courses in computer engineering, computer science and electrical engineering. The electives may also include an adviser-approved free elective.

Wireless Communication

Comp Sci 433 Data Security and Encryption Techniques (3)
EGEE 443 Electronic Communication Systems (3)
EGEE 460 Introduction to Cellular Mobile Communications Systems (3)
Very Large Scale Integration (VLSI) and Optics
EGEE 410 Electro-Optical Systems (3)
EGEE 455 Microelectronics and Nano Devices (3)
EGEE 465 Introduction to VLSI Design (3)
EGEE 480 Optical Engineering and Communications (3)
Microprocessors and Microcomputer Systems
Comp Sci 459 Micro-Computer Software Systems (3)
Control Systems and Systems Engineering
EGEE 416 Feedback Control Systems (3)
EGEE 424 Computer Simulation of Continuous Systems (3)
EGEE 425 Introduction to Systems Engineering (3)
Global Positioning Systems (GPS)
EGEE 483 Introduction to Global Positioning Systems (GPS) (3)
EGEE 483L Global Positioning Systems Laboratory (2)
Software Engineering
Comp Sci 362 Foundations of Software Engineering (3)
Comp Sci 462 Software Design (3)
Comp Sci 463 Software Testing (3)
Comp Sci 464 Software Architecture (3)
Comp Sci 466 Software Process (3)
Database System Design
Comp Sci 431 Database and Applications (3)
Comp Sci 473 Web Programming and Data Management (3)
Comp Sci 474 Distributed Computing using Web Service and .NET Remoting (3)
Multimedia and Digital Game Development
Comp Sci 386 Introduction to Game Design and Production (3)
Comp Sci 484 Principles of Computer Graphics (3)
Comp Sci 486 Game Programming (3)
Comp Sci 487 Advanced Game Programming (3)
Comp Sci 489 Game Development Project (3)
Intelligent Systems
Comp Sci 335 Problem Solving Strategies (3)
Comp Sci 481 Artificial Intelligence (3)
Comp Sci 483 Data Mining and Pattern Recognition (3)
EGEE 430 Fuzzy Logic and Control (3)
Current Topics
EGCP 463 Current Topics in Computer Engineering (3)
Free Elective
Adviser-approved upper division course (3)

Requirements in Related Fields (34 units)
Mathematics Requirement (19 units)
MATH 150A Calculus (4)
MATH 150B Calculus (4)
MATH 250A Multivariate Calculus (4)
MATH 250B Introduction to Linear Algebra and Differential Equations (4)
MATH 270A Mathematical Structures I (3)

Science Requirement (15 units)
Physics 225 Fundamental Physics: Mechanics (3)
Physics 226 Fundamental Physics: Electricity and Magnetism (3)
Physics 227 Fundamental Physics: Waves, Optics, and Modern Physics (3)
Physics 225L, 226L, 227L Fundamental Physics: Laboratory (1, 1, 1)
Biology 101 Elements of Biology (3)

General Education Courses
I. Core Competencies (9)
A. Oral Communication (3)
   Honors 101B, Human Comm 100 or Human Comm 102
B. Written Communication (3)
   English 101
C. Critical Thinking (3)
   Honors 101A, Human Comm 235, Philosophy 105, 106; Psychology 110 or Reading 290
II. Historical and Cultural Foundations (9)
A. Development of World Civilization (3)
   History 110A, 110B, Honors 210A or Honors 210B
B. American History, Institutions and Values (6)
   1. American History (3)
      Afro Ethnic 190, American Studies 201, Chicana/o 190, History 180, 190, or Honors 201A
   2. Government (3)
      Honors 201B or Poli Sci 100
III. Disciplinary Learning (33)
A. Mathematics and Natural Sciences (18 units)
   1. Mathematics
      Mathematics 150A (4) and 270A (3)
   2. Natural Sciences
      a. Physical Science
         Physics 225, 225L, 226 and 226L
      b. Earth and Astronomical Sciences
         Not applicable for engineering majors
      c. Life Science
         Biology 101
   3. Implications and Explorations in Mathematics and Natural Sciences
      Not applicable for engineering majors
B. Arts and Humanities (9)
   1. Introduction to the Arts (3)
      Art 101, 201A, 201B, 311, 312, Dance 101, Music 100 or Theater 100
   2. Introduction to the Humanities (3)
      Any lower-division course in this category listed in the current class schedule
3. Implications, Explorations and Participatory Experience in the Arts and Humanities (3)
   Any upper-division course in this category listed in the current class schedule

C. Social Sciences (6)
1. Introduction to the Social Sciences (3)
   EGCP/EGCE/EGEE 401
2. Implications, Explorations and Participatory Experience in the Social Sciences (3)
   Any upper-division course in this category listed in the current class schedule

IV. Lifelong Learning
   This category is not applicable to computer engineering majors

V. Cultural Diversity
   Take at least one star (*) course in Sections III.B.3 or III.C.2

Upper-Division Writing Requirement
   In addition to the Examination in Writing Proficiency (EWP), completing both of the following courses fulfills the upper-division English writing requirement:
   EGCP 441 Advanced Electronics for Computer Engineers (4)
   EGCP 471 Multidisciplinary Projects in Computer Engineering – II (2)
   Written work for the two courses must meet professional standards. Both courses must be passed with a grade of “C” (2.0) or better to satisfy the writing requirement.

COMPUTER ENGINEERING COURSES
   Computer Engineering Courses are designated as EGCP in the class schedule.

180 Digital Logic and Computer Structures (3)
   Prerequisites: Comp Sci 120 and Math 270A. Binary number system and arithmetic, computer codes, Boolean algebra, logic gates, K-map minimization, sequential circuits, memory devices, state diagram and table, computer architecture, memory, Arithmetic Logic Unit, and control unit. (2 hours lecture, 2 hours laboratory)

280 Microcontrollers (3)
   Prerequisite: EGEE 245 or EGCP 180. Microcontrollers, microcontroller programming model and instruction set, assembler directives, writing and debugging microcontroller assembly language routines, microcontroller memory system, microcontroller communication systems. (1 hour lecture, 4 hours laboratory) (Same as EGEE 280)

281 Designing with VHDL (2)
   Prerequisites: Comp Sci 120 or 121; and EGEE 245 or EGCP 180. Introduction to various modeling methods, timings, events, propagation delays and concurrency, the language constructs, data representations and formats, and physical attributes. (1 hour lecture, 2 hours laboratory) (Same as EGEE 281)

371 Modeling and Simulation of Signals and Systems (3)
   Prerequisites: EGEE 303 and Math 250B. Modeling and simulation of physical systems, mathematical description of systems, transfer functions, poles and zeros, frequency response, continuous and discrete-time convolution, continuous and discrete Fourier transforms, Laplace and Z transforms, Fast Fourier Transforms, simulation using Matlab.

381 Computer Design and Organization (4)
   Prerequisites: EGCP 281 and EGEE 303. Computer system, central processing unit (CPU) organization and design, instruction set and addressing modes, microprogrammed control unit design, cache memory, internal memory, virtual memory, input/output interfacing, parallel processors, superscalar processors (2 hours lecture, 4 hours laboratory).

401 Engineering Economics and Professionalism (3)
   (Same as EGCE 401/EGEE 401)

441 Advanced Electronics for Computer Engineers (4)
   Prerequisites: EGCP 281 and EGEE 303. High speed CMOS, biCMOS, CPLDs, FPGAs, A/D, D/A, transducers and optics; integration of these devices into complete systems. (2 hours lecture, 4 hours laboratory)

450 Embedded Processor Interfacing (4)
   Prerequisites: EGCP 280, 381, 441, EGEE 323 and CPSC 351. Techniques of interfacing based on speed, timings, synchronization, noise, cross-talk, hazards and race conditions. Interfacing specifications of the processor data, address and control buses. (2 hours lecture, 4 hours laboratory)

463 Current Topics in Computer Engineering (3)
   Prerequisites: junior/senior standing in computer engineering and consent of instructor. Exploration of topics of contemporary interest from the perspective of current research and development in computer engineering. Lectures by guest professionals.

470 Multidisciplinary Projects in Computer Engineering - I (1)
   Corequisite: EGCP 450. First course in the two-course senior design sequence. Student teams develop a hardware/software project, from conception through implementation and testing, under an instructor’s supervision. Teams first explore technology issues related to the projects and then prepare complete design proposals. (1 hour lecture)

471 Multidisciplinary Projects in Computer Engineering - II (2)
   Prerequisite: EGCP 450 and 470. Second course in the two-course senior design course in which student teams develop a hardware/software project under the supervision of the instructor. Emphasizes development of design skill, based upon previous and current courses and laboratory experience. (4 hours laboratory)

499 Independent Study (1-3)
   Prerequisite: application for independent study approved by the instructor and the Computer Engineering Program Coordinator. Independent study or research under the direction of a full-time faculty member. May be repeated for a maximum of three units of credit.
INTRODUCTION

The undergraduate computer science program at Cal State Fullerton offers students a comprehensive foundation that will permit them to adapt to new technologies and new ideas. The program spans a wide range, from its theoretical and algorithmic foundations to cutting-edge developments in bioinformatics, communications systems, databases, robotics, intelligent systems, software engineering, and other exciting areas.

The program provides students with a comprehensive background to take on varied categories of work. They are offered the necessary theories, principles and practices to design and implement software that permits them to take on challenging programming jobs. They have the opportunity to become well-equipped to devise new ways to use computers. Computer scientists working in research and development are striving to make robots practical aides that demonstrate some aspects of intelligence, using databases to discover new knowledge, and using computers to help map human DNA, as well as the DNA of other animals. The theoretical foundations available in the program provides the background to help develop effective ways to solve computing problems. This background allows students to determine the best possible ways to store information in databases, send data over networks, and display complex images.

The Bachelor of Science degree in Computer Science is accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

MISSION

The mission of the Computer Science Department is to provide students with a strong fundamental knowledge of Computer Science and the practical skills to adapt as technology changes.

EDUCATIONAL OBJECTIVES

The Computer Science program is designed to provide the student with the foundations of the discipline as well as the opportunity for specialization. Six objectives are addressed:

- development of the ability to work effectively as an individual or as a team member to produce correct, efficient, well-organized and documented programs in a reasonable time
- development of the ability to recognize problems that are amenable to computer solutions, and knowledge of the tools necessary for solving such problems
- development of the ability to assess the implications of work performed
- development of an understanding of basic computer architecture and operations
- preparation to pursue in-depth training in one or more application areas, or further education in computer science
- development of the ability to communicate effectively

DEPARTMENT CHAIR
James Choi

VICE CHAIR
Mariko Molodowitch

DEPARTMENT OFFICE
Computer Science 522

DEPARTMENT WEBSITE
http://cs.fullerton.edu

PROGRAMS OFFERED
Bachelor of Science in Computer Science
Master of Science in Computer Science
Minor in Computer Science
Master of Science in Software Engineering

FACULTY
BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Each Computer Science major is required to complete a minimum of 124 units, including general education. The degree program assumes that the student has already obtained a working knowledge of personal computing fundamentals and applications, including word processing, spreadsheets, database systems, e-mail systems and presentation graphics.

Computer Science Placement Examination

A Computer Science student with prior coursework in computer programming should take the Computer Science Placement Examination. This exam is given two times per semester and is used to assess the student's background and assure proper enrollment in the appropriate course. Students new to programming should enroll in CPSC 120.

Computer Science Core (46 units)

Lower-Division Core (18 units)
- Computer Sci 120 Introduction to Programming (3)
- Computer Sci 121 Programming Concepts (3)
- Computer Sci 131 Data Structures Concepts (3)
- Computer Sci 223H Visual Basic Programming (3)
  OR Computer Sci 223J Java Programming
  OR Computer Sci 223N C# Programming (3)
- Computer Sci 240 Computer Organization and Assembly Language (3)
- Computer Sci 254 UNIX and Open Source Systems (3)

Upper-Division Core (28 units)

Students must take and pass the Examination in Programming Proficiency (EPP) before taking upper-division Computer Science courses. Students who do not pass the EPP will be required to take Computer Science 301 Programming Lab Practicum (2).

- Computer Sci 311 Technical Writing for Computer Science (3)
- Computer Sci 315 Social and Ethical Issues in Computing (1)
- Computer Sci 323 Programming Languages and Translation (3)
- Computer Sci 332 File Structures and Database Systems (3)
- Computer Sci 335 Problem Solving Strategies (3)
- Computer Sci 351 Operating Systems Concepts (3)
- Computer Sci 362 Foundations of Software Engineering (3)
- Computer Sci 440 Computer System Architecture (3)
- Computer Sci 471 Computer Communications (3)
- Computer Sci 481 Artificial Intelligence (3)

Elective Track Requirements (15 units)

Each student selects an Elective Track to support specific career goals.

Multimedia and Digital Game Technologies
- Computer Sci 386 Introduction to Game Design and Production (3)
- Computer Sci 484 Principles of Computer Graphics (3)
- Computer Sci 486 Game Programming (3)

Scientific Computing

Completing the Mathematics courses listed below also meets the requirements for a minor in Mathematics.

- Math 250A Multivariate Calculus (4)
- Math 250B Introduction to Linear Algebra and Differential Equations (4)
- Math 340 Numerical Analysis (3)
- Math 370 Mathematical Model Building (3)

Computer Engineering

With the approval of an academic adviser, students may develop a track based on their career goals or specific academic interests or specific themes. A custom track consists of 15 units of upper-division Computer Science or related courses. At least nine units must be 400-level Computer Science courses with no more than three units selected from courses numbered 490-499. In addition to courses already listed in the other tracks, students may also include the following courses:

- Computer Sci 303 Multimedia Concepts (3)
- Computer Sci 322L Introduction to Computer-Aided Design (3)
- Computer Sci 376 Client/Server Systems with Java (3)
- Computer Sci 433 Data Security and Encryption Techniques (3)
- Computer Sci 459 Micro-Computer Software Systems (3)
- Computer Sci 483 Data Mining and Pattern Recognition (3)
- Computer Sci 485 Computational Bioinformatics (3)
- Computer Sci 491T Variable Topics in Computer Science (3)
- Computer Sci 495 Internship in Computer Science (1–3)
- Computer Sci 499 Independent Study (1–3)
Requirements in Mathematics and Science (30)

**Mathematics Requirement (18 units)**
- Mathematics 150A,B  Calculus (4,4)
- Mathematics 270A,B  Mathematical Structures (3,3)
- Mathematics 338  Statistics Applied to Natural Sciences (4)

**Science Requirements (12 units)**
- **Physical Science (8 units)**
  - One of the following combinations:
    - Physics 225  Fundamental Physics: Mechanics (3)
    - Physics 225L  Fundamental Physics: Laboratory (1)
    - Physics 226  Fundamental Physics: Electricity and Magnetism (3)
    - Physics 226L  Fundamental Physics: Laboratory (1)
    - OR Chemistry 120A  General Chemistry (5)
    - Chemistry 125  General Chemistry for Engineers (3)
    - OR Geological Sci 101  Physical Geology (3)
    - Geological Sci 101L  Physical Geology Laboratory (1)
    - Geological Sci 201 and 201L  Earth History and Laboratory (4)
- **Biological Science (4 units)**
  - Biology 101  Elements of Biology (3)
  - Biology 101L  Elements of Biology Laboratory (1)

**MINOR IN COMPUTER SCIENCE**
A minor in Computer Science requires at least 15 units, including the following required courses:
- Computer Sci 120  Introduction to Programming (3)
- Computer Sci 121  Programming Concepts (3)
- Computer Sci 131  Data Structures Concepts (3)
- Computer Sci 313  The Computer Impact (3)
- Three units of adviser-approved upper-division Computer Science.

**General Education**
Because of high unit requirements for a major in Computer Science, there is a six-unit exemption in General Education. Students are strongly urged to consult with an adviser in the Academic Advising Center, UH-123 to help develop their General Education program.

**Minimum Academic Requirements**
Courses taken toward the core, elective track, required mathematics and science, and General Education Categories IA, IB, IC, and III.A.1 must be taken on a traditional (letter grade) basis.
A grade of “C” (2.0) or better is required in courses taken in fulfillment of General Education Categories
- IA  Oral Communication
- IB  Written Communication
- IC  Critical Thinking
- III.A.1 Mathematics and for the Upper Division Writing Requirement (CPSC 311 Technical Writing for Computer Science).

Students must maintain at least a 2.0 average in all college-level units attempted, in all units attempted at CSUF, and in all units attempted in the major.
A grade of “C-” (1.7) or higher is required in all courses applied to the core. Exception: up to six units of credit with grades in the range “D-” (0.7) through “D+” (1.3) may be earned in elective track, mathematics and science courses only.

**MASTER OF SCIENCE IN COMPUTER SCIENCE**

**Admission to Graduate Standing: Conditionally Classified**
A bachelor’s degree from an accredited institution with a grade-point average of at least 2.5 in the last 60 semester units attempted is required. Any deficiencies must be made up and will require six or more units of adviser-approved coursework with at least a 3.0 average in addition to those required for the degree.

**Application Deadlines**
The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

**Classified Graduate Standing**
Achievement of this status requires the following:

1. Approval of a formal study plan (see description below) by the Computer Science Graduate Committee and the Associate Vice President for Graduate Studies and Research (or designee)
2. Satisfactory completion of no more than nine units on the study plan
3. Satisfactory completion of the following courses or equivalents including prerequisites: Computer Science 121, 131, 240, 323, 335, 351, 362 and Mathematics 270A,B, 338
4. Competency in written communication in English must be demonstrated by a passing score on the California State University Examination in Writing Proficiency. The requirement must be satisfied before the student can be classified and before 500-level courses may be attempted. The student who fails to pass the EWP test may complete Computer Science 311 (Technical Writing for Computer Science) with a grade of “B” (3.0) or better as an alternative to the EWP requirement

Talented professional computer scientists have traditionally come from a diversity of undergraduate preparations. The listed courses have been carefully selected to provide an adequate basis for graduate work, while not unfairly precluding admission of persons without a bachelor’s degree in computer science. It should be noted, however, that each of these courses has prerequisites and the student without preparation in a closely related degree may have considerable work to complete beyond the courses listed here. Reference should be made to the catalog descriptions for prerequisites of each course deficiency.
Students with knowledge equivalent to any or all of these prerequisite courses are encouraged to satisfy such prerequisites by advanced placement examinations. Consult a Computer Science graduate adviser for further information.

**Study Plan**

Prior to admission to classified graduate standing in Computer Science, the student with the aid of a Computer Science graduate adviser shall prepare and submit for approval by the Computer Science Department graduate committee a formal study plan consisting of a minimum of 30 units of 400-level and graduate coursework.

This shall include Computer Science 440, 462, 589, 597 or 598; one of 541, 542, 543, 544, 545, 546, 547 or 548; and 15 units of electives (nine units must be at the 500 level). At least 15 units shall represent courses offered by the Department of Computer Science. Courses offered by other disciplines, not listed here, and related to the student’s objectives in Computer Science may be approved by petition to the Department of Computer Science.

All coursework in the study plan must be completed with a GPA of at least 3.0.

**Graduate Student Advisement**

The graduate program adviser provides overall supervision of the graduate program. The individual student chooses an adviser from the full-time faculty of the Computer Science Department on the basis of the student’s particular interests and objectives.

**COMPUTER SCIENCE COURSES**

Courses are designated as CPSC in the class schedule.

Prerequisites for Computer Science courses may be waived only by department petition.

103 Introduction to Personal Computer Applications (3)
Introduction to use and application of personal computers: word processing, spreadsheets, database systems, e-mail systems and World Wide Web. Evaluation of personal computers and software. (2 hours lecture, 2 hours laboratory)

120 Introduction to Programming (3)
Corequisite: Math 125. Introduction to the concepts underlying all computer programming; design and execution of programs; sequential nature of programs; use of assignment, control, and input/output statements to accomplish desired tasks; design and use of functions. Structured and object-oriented methodologies. (1.5 hours lecture, 3.0 hours laboratory)

121 Programming Concepts (3)
Prerequisite: Computer Sci 120 or passing score on Computer Science Placement Exam. Introduction to programming of digital computers; subroutines, functions and structure of algorithms; elementary input/output; arrays; strings and data types; documentation. (2 hours lecture, 2 hours laboratory)

131 Data Structures Concepts (3)
Prerequisites: Computer Sci 121 or sufficient score on the Computer Science Placement Exam, high school computer applications, and three years high school mathematics including trigonometry. Data structures: linked lists, stacks, queues, arrays, sequential text files, text formatting.

223H Visual BASIC Programming (3)
Prerequisite: Computer Sci 131. Elements of Visual BASIC, forms and controls, properties, mouse events, multiple-document interface, processing files, accessing databases, dynamic data exchange, object linking and embedding. (2 hours lecture, 2 hours laboratory)

223J Java Programming (3)
Prerequisite: Computer Sci 131. Characteristics of Java: portable, robust, secure, object-oriented, high performance; using the Java environment; server administration; types, expressions, and control flow; classes, interfaces, and packages; threads; exceptions; class libraries; Java for the Internet; tools, the Java Virtual machine. (2 hours lecture, 2 hours lab per week)

223N C# Programming (3)
Prerequisite: Computer Sci 131. Characteristics of C#, object-oriented design concepts, control structures, methods, arrays, classes, objects, inheritance, polymorphism, exception handling, graphical user interfaces, multithreading, characters, strings, files, streams. Rudiments of the Unified Modeling Language. Software development assignments. (2 hours lecture, 2 hours laboratory)

240 Computer Organization and Assembly Language (3)
Prerequisites: Computer Sci 131 and either Math 270A or 280. Digital logic and architecture of a computer system, machine level representation of data, memory system organization, structure of low-level computer languages; machine, assembly and macro language programming: principles of assembler operation, input-output programming, interrupt-exception handling. Laboratory programming assignments. (2 hours lecture, 2 hours laboratory)

253U Workshop in UNIX (1)
Prerequisite: Computer Sci 121 or General Engineering 205. Workshop in the use of the UNIX operating system. Offered Credit/No Credit only. (2 hours activity)

254 UNIX and Open Source Systems (3)
Prerequisite: Computer Sci 131. UNIX operating systems, various open source applications and systems, open source programming languages and open source software development techniques.

301 Programming Lab Practicum (2)
Prerequisites: Computer Sci 131 and 253U (or 254). Intensive programming covering concepts learned in lower-division courses. Procedural and object oriented design, documentation, arrays, classes, file input/output, recursion, pointers, dynamic variables, data and file structures.
303 Multimedia Concepts (3)
Prerequisites: Computer Sci 121 and completion of the General Education (G.E.) critical thinking requirement. Components and issues associated with multimedia technology, applications of multimedia and its evolution. Laboratory activities include developing a multimedia application using a PC-based authoring tool. (2 hours lecture, 2 hours laboratory)

311 Technical Writing for Computer Science (3)
Prerequisite: English 101. Corequisite: Computer Sci 301. Practice in developing documentation skills as used in the computer field. Topics include proposals, feasibility studies, user guides and manuals, business communication and technical presentation. Case studies in professional ethics. Written and oral reports required.

313 The Computer Impact (3)
Prerequisites: upper-division standing and one course from G.E. Category III.A.1. Effect of computer use on individuals and organizations. Side effects of innovative technology and the resulting changes to organizations, social institutions, and human perceptions of events. Personal responsibility, legal ramifications and educational implications. Hands-on use of e-mail and the World Wide Web.

315 Social and Ethical Issues in Computing (1)
Prerequisite: Computer Sci 311. Relevant issues that responsible professionals will face in a complex technological society. Professional ethics, computer control, piracy, encryption, benefits and downside of computers, privacy and computer crimes. Written and oral reports required.

322L Introduction to Computer Aided Design (3)
(Same as Mechanical Engineering 322L)

323 Programming Languages and Translation (3)
Prerequisites: Examination in Programming Proficiency. Basic concepts of programming languages and principles of translation. Topics include history of programming languages, various programming paradigms, language design issues and criteria, development of practical translators for modern programming languages.

332 File Structures and Database Systems (3)
Prerequisite: Computer Sci 131. Fundamental theories and design of database systems, the Structured Query Language (SQL), basic concepts and techniques of data organization in secondary storage. Topics include introduction to database systems, ER model, relational model, index structures, and hashing techniques.

335 Problem Solving Strategies (3)
Prerequisites: Examination in Programming Proficiency, Math 270B and 338. Complexity classes, including undecidable and NP-complete problems. Problem solving strategies applied to parallel and distributed processing, numerical computation, and artificial intelligence. Greedy methods, divide-and-conquer, dynamic programming, approximation and search methods.

351 Operating Systems Concepts (3)
Corequisite: Examination in Programming Proficiency or Computer Science 301. Resource management, memory organization, input/output, control process synchronization and other concepts as related to the objectives of multi-user operating systems.

362 Foundations of Software Engineering (3)
Prerequisites: Computer Sci 311 and Examination in Programming Proficiency. Basic concepts, principles, methods, techniques and practices of software engineering. All aspects of the software engineering (CASE) tools are used.

376 Client/Server Systems with Java (3)

386 Introduction to Game Design and Production (3)
Prerequisite: Computer Sci 131. Current and future technologies and market trends in game design and production. Game technologies, basic building tools for games and the process of game design, development and production.

431 Database Systems (3)
Prerequisites: Computer Sci 332 and Examination in Programming Proficiency. Database design and applications, database programming using SQL and other languages, query optimization, transaction management.

433 Data Security and Encryption Techniques (3)
Prerequisites: Computer Sci 311, 351 and Math 270B. System security and encryption. Current issues in security, encryption and privacy of computer based systems.

440 Computer System Architecture (3)
Prerequisite: Computer Sci 240. Computer performance, price/performance, instruction set design and examples. Processor design, pipelining, memory hierarchy design and input/output subsystems.

451 Advanced Operating Systems (3)
Prerequisite: Computer Sci 351. Internal structures of a modern operating system. Specific topics include processes, process communication, file systems, networking, and the I/O system. There will be several programming assignments which will utilize calls and other low-level interfaces.

459 Micro-Computer Software Systems (3)
Prerequisite: Computer Sci 351. Design and implementation of software. Analysis of a micro-computer operating system and working on a team to implement a significant programming assignment.

462 Software Design (3)
Prerequisite: Computer Sci 362. Concepts of software modeling, software process and some tools. Object-oriented analysis and design and Unified process. Some computer-aided software engineering (CASE) tools will be recommended to use for doing homework assignments.
463 Software Testing (3)
Prerequisite: Computer Sci 362. Software testing techniques, reporting problems effectively and planning testing projects. Students apply what they learned throughout the course to a sample application that is either commercially available or under development.

464 Software Architecture (3)
Prerequisite: Computer Science 362. Basic principles and practices of software design and architecture. High-level design, software architecture, documenting software architecture, software and architecture evaluation, software product lines, and some considerations beyond software architecture.

466 Software Process (3)
Prerequisite: Computer Sci 362. Practical guidance for improving the software development and maintenance process. How to establish, maintain and improve software processes. Exposure to some common process models, such as CMM, CMMI, PSP and TSP.

471 Computer Communications (3)
Prerequisite: Computer Sci 351. Introduction to digital data communications. Terminology, networks and their components, common-carrier services, telecommunication facilities, terminals, error control, multiplexing and concentration techniques.

473 Web Programming and Data Management (3)
Prerequisite: Computer Sci 332. Various techniques for developing Web-based database applications using software engineering methodology. Introduce concept and architecture of Web servers, Web database design techniques, client/server side programming, and Web applications tools and techniques.

474 Distributed Computing Using Web Service and .NET Remoting (3)
Prerequisite: Computer Sci 473. Concepts of distributed computing and Web services, the applications of XML and Web services, distributed applications development techniques with Web services and .NET Remoting.

476 Java Enterprise Application Development (3)
Prerequisites: Computer Sci 223J and 351. Concepts and architecture of the J2EE platform, component technologies, platform roles, platform services, services technologies, communication technologies, Enterprise Java Beans (EJBs) and Java enterprise application development using Web logic or Web sphere.

481 Artificial Intelligence (3)
Prerequisite: Computer Sci 335. Use of computers to simulate human intelligence. Topics include production systems, pattern recognition, problem solving, searching game trees, knowledge representation and logical reasoning. Programming in AI environments.

483 Data Mining and Pattern Recognition (3)
Prerequisite: Computer Sci 335. Classification techniques, discriminant functions, training algorithms, potential function theory, supervised and unsupervised learning, feature selection, clustering techniques, multidimensional rotations and rank ordering relations.

484 Principles of Computer Graphics (3)
Prerequisites: Examination in Programming Proficiency and Math 150B and 270B. Examination and analysis of computer graphics, software structures, display processor organization, graphical input/output devices, display files. Algorithmic techniques for clipping, windowing, character generation and viewpoint transformation.

485 Computational Bioinformatics (3)
Prerequisites: upper-division standing, Biology 101 and Computer Sci 131. Algorithmic approaches to biological problems. Specific topics include motif finding, genome rearrangement, DNA sequence comparison, sequence alignment, DNA sequencing, repeat finding and gene expression analysis.

486 Game Programming (3)
Prerequisite: Computer Sci 386; corequisite, Computer Sci 484. Principles of game programming (2D game development techniques) and multimedia entertainment techniques (sound, animation, etc.).

487 Advanced Game Programming (3)
Prerequisite: Computer Sci 486. Building on the techniques learned from the previous game development course (2D Game Development, sound, animation), students learn more advanced game programming techniques (3D Game Development, real-time rendering, physics simulation).

489 Game and Development Project (3)
Prerequisite: Computer Sci 487; corequisite: Computer Sci 481. Develop realistic games based on the theories and techniques learned from the previous classes. Work independently (or by teams). Students will present and demonstrate their work regularly.

491T Variable Topics in Computer Science (1-3)
Prerequisites: junior or senior standing and consent of instructor. Lectures and/or workshop covering various current Computer Science topics. Course may be repeated for up to 3 units. Course topics may be taken only once.

495 Internship in Computer Science (1-3)
Prerequisites: Computer Science or related major and consent of instructor. Practical experience relevant to computer science in government or private agencies. Written and oral reports required.

499 Independent Study (1-3)
Prerequisite: approval by the computer science chair. Special topic in Computer Science, selected in consultation with and completed under the supervision of instructor.

531 Advanced Database Management (3)
Prerequisite: Computer Sci 431. Implementation techniques for query analysis, data allocation, concurrency control, data structures, and distributed databases. New database models and recent developments in database technology. Student projects directed to specific design problems.
541 Systems and Software Standards and Requirements (3)

542 Software Verification and Validation (3)
Prerequisite: Computer Sci 362 or equivalent work experience. How to ensure that a high quality software product is developed. Theory and practice of software verification and validation (V&V), such as software integrity levels, Minimum V&V tasks for each software integrity level, walkthroughs, inspections and Cleanroom. Software testing topics: white- and black-box testing, boundary value analysis, equivalence class partitioning, unit testing, functional testing and how to create test plans.

543 Software Maintenance (3)
Prerequisite: Computer Sci 362 or equivalent work experience. Theory and practice of maintaining large-scale software and how to construct maintainable software. Maintenance framework, along with maintenance process, process management and maintenance measures. Topics include fundamentals of software change, implications of software change, maintenance process models, program understanding, reusability for maintenance, reverse engineering, maintenance testing, software configuration management and tools in maintenance.

544 Advanced Software Process (3)
Prerequisite: Computer Sci 362 or equivalent work experience. Advanced guidance for defining and improving the software development process. Concepts of software maturity framework, principles of process improvement and software process assessment. Current topics such as CMMI and SCAMPI.

545 Software Design and Architecture (3)
Prerequisite: Computer Sci 362 or equivalent work experience. Advanced software design and architecture principles focusing a software engineering approach to the development process. Topics include architecture business cycle, quality attributes, attribute-driven design method, architectural styles, design patterns, software product lines and component-based design.

546 Modern Software Management (3)
Prerequisite: Computer Sci 362 or equivalent work experience. Modern project management methodologies and techniques. Software development process, Planning, estimating, organizing, directing, monitoring, controlling software projects and managing risks. Other related software management issues, such as infrastructure, quality software development, project and product metrics, and external factors.

547 Software Measurement (3)
Prerequisite: Computer Sci 362 or equivalent work experience. Current software measurement practices. Topics include: how to establish an effective software metrics program in a software organization; how to measure software product, project and process; how to apply Statistical Process Control and other statistical techniques in software development process. High maturity concepts defined in CMMI model will be discussed. Stresses a practitioner-based approach.

548 Professional, Ethical and Legal Issues for Software Engineers (3)
Prerequisite: Computer Sci 362 or equivalent work experience. Professional, legal and ethical issues pertaining to software engineering. Topics include professional codes of ethics, intellectual property laws, computer privacy and human-computer interaction. Relevant regulatory documents and their applications.

551 Operating Systems Design (3)
Prerequisite: Computer Sci 351. Design and evaluation techniques for controlling automatic resource allocation, providing efficient programming environments and appropriate user access to the system, and sharing the problem solving facilities.

558 Advanced Computer Networking (3)
Prerequisite: Computer Sci 471. System-oriented view of computer network design, protocol implementation, networking, high-speed networking, network management, computer network performance issues.

566 Advanced Computer Graphics (3)
Prerequisite: Computer Sci 484. Three-dimensional: reflection models, shading techniques, rendering process, parametric representation, ray tracing, radiosity, texture, anti-aliasing, animation, color science.
572 Survey of Pharmaceutical and Medical Devices Technology (3)
Prerequisites: enrollment in the Program for Applied Biotechnology Studies (PABS) Master of Biotechnology (MBt) degree program or consent of instructor, and MGMT 540. Corequisites: concurrent enrollment in two other PABS MBt degree survey courses: Survey Molecular Biology and Pharmacology/Toxicology (BIOL 570) and Survey Mathematical Modeling and Bioinformatics (BIOL 571). Technologies involved in the development of drug and medical devices, factors considered in designing medical devices, characteristics of good drug manufacturing practices and validation processes necessary to meet regulatory requirements. Students will work collaboratively to solve problems. (Same as Biology 572)

583 Expert Systems Design Theory (3)
Prerequisite: Computer Sci 481. Knowledge representation and search strategies for expert systems; logic programming; expert system tools. Project.

585 Artificial Neural Networks (3)
Prerequisite: Computer Sci 481. Principles of neural networks; neural networks paradigms, software implementations, applications, comparison with statistical methods, use of fuzzy logic; project.

589 Seminar in Computer Science (3)
Prerequisites: one 400-level course in Computer Science and passing score on the Examination in Writing Proficiency. Research methods in computer science. Student presentations covering current topics, research advances, updating of concepts and verifications of principles of computer science. (Examples: large-scale parallelism, Internet security, design for user interfaces, computers in instruction).

597 Project (3)
Prerequisites: classified graduate standing, approval of the computer science graduate adviser and Computer Sci 589.

598 Thesis (3)
Prerequisites: classified graduate standing, approval of the computer science graduate adviser and Computer Sci 589.

599 Independent Graduate Research (1-3)
Prerequisites: classified graduate standing, approval of the computer science department chair and Computer Sci 589. Special topic in computer science, selected in consultation with and completed under supervision of a full-time faculty member.
INTRODUCTION

The Department of Counseling offers a program leading to the Master of Science in Counseling emphasizing community counseling. The program is approved by the California State Board of Behavioral Sciences (BBS) to meet the educational requirements preparing students for state licensure as Marriage and Family Therapists (MFT). We are also nationally accredited by The Council for Accreditation of Counseling and Related Educational Programs (CACREP).

Our emphasis is on training clinicians who can serve the needs of individuals and families in their communities. We train students to provide brief and long-term counseling while maintaining professional identities as counselors and marriage and family therapists.

The program strongly emphasizes a multicultural perspective. We prepare counselors who will be sensitive to the diverse heritages, lifestyles and special needs of individuals and families. Both our student body and faculty encompass a wide range of backgrounds and values.

Our theoretical orientation is grounded in humanistic, relational and integrative principles. This means that we are respectful of different counseling philosophies, flexible in our approaches depending on client and student needs, and united in our belief that relationships remain at the core of all helping encounters. We also believe that counselors can best help people by understanding the relationship of emotional distress to family dynamics and to the social and cultural contexts that shape their lives.

MASTER OF SCIENCE IN COUNSELING

Admission Requirements

The Department of Counseling accepts students once a year for its on-campus and every two years for its off-campus programs. The Department welcomes applicants from diverse academic, social and cultural backgrounds. International, minority, underrepresented and older students, and students with disabilities are encouraged to apply.

Preparation for the counseling profession is rigorous and multifaceted, necessitating the student’s development in interpersonal, self-reflective and academic realms. Admission is therefore based upon indicators of the applicant’s potential for becoming an effective counseling practitioner including, but not limited to, grade point average (GPA), letters of reference, personal statement, departmental interview and potential for success based on personal and professional evaluation of qualification, and is at the sole discretion of the Counseling Department’s Admissions Committee.

Admission is not based upon any single factor but on a composite assessment of all factors. The following are required for consideration to the program:

1. An acceptable bachelor’s degree (or equivalent) from a regionally accredited institution
2. A minimum GPA of 3.0 for the undergraduate degree
3. A minimum GPA of 3.0 in four prerequisite behavioral science courses (or equivalents): counseling theory, research methods or statistics, abnormal psychology
Applicants must apply to the University and to the Department of Counseling.

1. University application. Apply online to the university and mail one set of official transcripts from all colleges/universities to:
   Admissions and Records
   California State University, Fullerton
   P.O. Box 6900
   Fullerton, CA 92834-6900
   The application codes are: For on-campus program: COUNSELING (MARRIAGE FAMILY THERAPY)
   For off-campus program: COUNSELING (GARDEN GROVE CENTER) The online URL is www.csumentor.edu.

2. Department of Counseling application. Send three letters of recommendation, personal statement and a copy of all transcripts to:
   Department of Counseling
   California State University, Fullerton
   P.O. Box 6868
   Fullerton, CA 92834-6868
   No separate department application form is required.

All required materials must be received by the University Office of Admissions and Records and by the Department of Counseling office by the deadline date. Late applications will not be reviewed.

For more information about admissions, please contact our Prospective Student Adviser at 657-278-3042, or e-mail us at applycounseling@fullerton.edu.

Application Deadlines
Applications are due March 1 for the fall semester on-campus program and Nov. 1 for the spring semester off-campus program. For further information, contact the Department of Counseling at 657-278-3042 or email us at applycounseling@fullerton.edu. Also check the Department of Counseling website for information on deadlines: http://hhd.fullerton.edu/counsel.

Advisement
All successful applicants are initially admitted as conditionally classified graduate students. They are invited to attend an orientation session before classes begin, and are encouraged to join the Graduate Counseling Students Association (GCSA).

Each student is assigned to an adviser upon admission to the department. Advisers provide academic assistance, help students develop official study plans, recommend them for classified standing and advancement to candidacy, and monitor their progress throughout the duration of enrollment.

Students should consult their adviser on a regular basis. It is especially important to initiate contact with an adviser as soon as possible during the first semester of enrollment to verify enrollment in any remaining prerequisite courses and to discuss preclassification requirements.

The department requires that students take at least six units per semester. Students working full time are strongly advised against taking more than six units per semester because of the demanding nature of the program; however, students should be aware of time limits for completing the degree and the possibility that they may be unable to enroll in a specific course because of class size limits or other factors.

Classification and Advancement to Candidacy
Admission to the department as a conditionally classified student does not guarantee advancement to classified standing.

Each student undergoes a comprehensive evaluation in the semester prior to his or her beginning Practicum (Counseling 530). This evaluation determines advancement to classified standing and to candidacy. Advancement requires a 3.0 GPA and the faculty’s ongoing assessment of the student’s aptitude and suitability for the counseling profession, progress in skill development, interpersonal and cultural sensitivity, readiness to see clients, and ethical and professional conduct. A student who receives more than two grades below “B-” (2.7) is automatically disqualified from the program. Students may also be placed on administrative academic probation for reasons other than cumulative and/or study plan GPA and may be disqualified under certain conditions, including failure to demonstrate a level of...
professional competence or fitness commensurate with the standards of the counseling discipline. See the “Graduate Regulations” section of this catalog for details concerning advancement to classified standing, candidacy, probation and disqualification.

**Curriculum**

The curriculum comprises 60 units (plus an optional one-unit child abuse workshop required for licensure). Full-time students typically take three to four courses during the fall and spring semesters, and one or two summer courses. Part-time students typically take two to three courses during fall and spring semesters and one course in the summer. In the semester prior to beginning their first practicum, students apply for Classified Standing. Classified students are designated trainees by the state MFT licensing board, and begin to provide counseling services and accrue hours toward the 3,000 hours required for state licensure.

- **COUN 500** The Counseling Profession (3)
- **COUN 502** Career Counseling (3)
- **COUN 511** Pre-Practicum (Basic Counseling Skills) (3)
- **COUN 518** Human Development and Functioning (3)
- **COUN 520** Modes of Individual Counseling (3)
- **COUN 521** Research in Counseling (3) (first half of the final research project)
- **COUN 522** Techniques of Brief Treatment and Assessment (3)
- **COUN 523** Counseling and Culture (3)
- **COUN 524** Child and Adolescent Counseling (3)
- **COUN 525** Psychopharmacology (3)
- **COUN 526** Professional Ethical and Legal Issues in Counseling (3)
- **COUN 527** Systems of Family Counseling (3)
- **COUN 528** Groups: Process and Practice (3) (Same as Human Services 350)
- **COUN 530** Beginning Practicum (3) (fieldwork in a community agency)
- **COUN 535** Addictions (3)
- **COUN 560** Appraisal in Counseling (3)
- **COUN 562** Couples Counseling (3)
- **COUN 584** Advanced Practicum (3)
- **COUN 590** Advanced Counseling Techniques (3)
- **COUN 597** Final Project (3) (second half of the final research project)

**MARRIAGE AND FAMILY THERAPY (MFT) LICENSURE**

To practice as a Marriage and Family Therapist in California, a license issued by the State Board of Behavioral Sciences (BBS) is required. Our 60-unit program with the MFT concentration is designed to prepare students to meet licensure requirements (Business and Professions Code, Section 4980.37). Students should note that licensure requirements extend beyond those of the M.S. degree and include an internship and passing official BBS examinations.

It is the student’s responsibility to keep informed about licensure requirements as they are subject to change from time to time. An authoritative source of information is Statutes and Regulations Relating to the Practice of Marriage and Family Therapy, Licensed Clinical Social Work, and Licensed Educational Psychology issued by the Board of Behavioral Sciences and available on the BBS website, [http://www.bbs.ca.gov](http://www.bbs.ca.gov).

For further information, write to the Board of Behavioral Sciences, Department of Consumer Affairs, 400 R Street, Suite 3145, Sacramento, CA 95814-6240, or call them at 916-445-4933.

Students are designated trainees by the BBS and can accrue licensing hours after they have been classified by the department and begin their fieldwork practicum. A student can count psychotherapy received after they have begun their first semester in the program (maximum of 100 hours of psychotherapy equals 300 hours towards the 3,000 required to take the MFT license examination). Upon graduation, students have 90 days to register with the BBS as an intern. It is advisable to write to the BBS for a registration packet early (e.g., at the beginning of the last semester).

**COUNSELING COURSES**

Courses are designated as COUN in the class schedule.

- **252** Career and Life Planning (3)  
  Prerequisite: introductory course in Oral Communication and English Composition. Career planning is a continual process that occurs over the lifespan. Focus is on career, personal and educational awareness. Strategies include integrating skills, abilities, interests and values into the career search. Emphasis on decision-making and goal setting.

- **350** Leadership Skills and Personal Development (3)  
  (Same as Human Services 350)

- **380** Theories and Techniques of Counseling (3)  
  (Same as Human Services 380)

- **449** Seminar on Child Abuse (1)  
  Prerequisite: Human Services 201 or Child/Adolescent Studies 301. Presents characteristics of child abuse and a review of current laws, appropriate procedures for intervention, and methods of community networking and referral.

- **500** The Counseling Profession (3)  
  Prerequisite: graduate standing. The study of counseling as a mental health profession, including its history, current functions and future directions. Examination of the counselor as a professional, including educational goals, personal values, and cultural understandings. Opportunity to observe master counselors at work.

- **502** Career and Lifestyle Development (3)  
  Prerequisite: completion of or concurrent enrollment in Counseling 500. Survey of career and lifestyle development throughout the lifespan. Major theories and strategies in career counseling. Integration of knowledge of career development with the practice of counseling.
511 Pre-Practicum (3)
Prerequisite: completion of or concurrent enrollment in Counseling 500; or admission to the Concentration in School Nursing. Basic counseling skills, including establishing a therapeutic relationship, facilitating client self-exploration and understanding how one's values influence the counseling process. Crisis intervention also will be addressed. Extensive role play practice.

518 Human Development and Functioning (3)
Prerequisites: completion of or concurrent enrollment in Counseling 500 and 511. Integrated study of human development from infancy to old age and its effect upon individuals, couples, and family relationships. Emphasis on relevance to counseling. Role of human sexuality in lifespan development will be addressed.

520 Modes of Individual Counseling (3)
Prerequisite: Counseling 511. Advanced study of major theoretical frameworks in counseling, including models of personality, definitions of individual dysfunction and approaches to treatment. Practice in case conceptualization and application of theories to counseling.

521 Research in Counseling (3)
Pre- or corequisite: Counseling 530 or consent of faculty. Applied research methods and program evaluation. Comparative review and synthesis of inquiry approaches. Completion of literature review for anticipated Counseling 597 project. Instructional fee required.

522 Techniques of Brief Treatment and Assessment (3)
Prerequisites: Counseling 511 and 518. Advanced study of the latest edition of the Diagnostic and Statistical Manual of Mental Health Disorders (DSM) with emphasis on detection and assessment of alcohol and substance, spousal or partner, elder, and child abuse, and human sexual dysfunction. Review of brief treatment models.

523 Counseling and Culture (3)
Prerequisites: Counseling 500 and 511. Theory, research, and techniques related to counseling people from diverse cultural backgrounds. Emphasis on role plays and skills applications.

524 Child and Adolescent Counseling (3)
Prerequisites: Counseling 500, 511, 518; and 520 concurrent. Course provides an overview of child/adolescent development theories and counseling frameworks, with emphasis on utilizing strategies, examination of ethical issues, and explores assessment techniques to evaluate the range of disruptive behaviors.

525 Psychopharmacology for Counselors (3)
Prerequisites: Counseling 500, 511, 518. Corequisite, 522. Course introduces counseling students to the biochemical basis of behavior and a general knowledge of the effects and side effects of the major classes of psychotropic drugs. Such knowledge is to make appropriate referrals and a comprehensive approach to treatment.

526 Professional, Ethical and Legal Issues in Counseling (3)
Prerequisite: Counseling 522. Pre- or corequisite, Counseling 523. Ethical and legal standards as related to critical professional issues, including child abuse, spousal or partner abuse, elder abuse, and substance abuse. The relationship and integration of values for the counselor’s role in practice, training, supervision, test usage, and consultation.

527 Systems of Family Counseling (3)
Prerequisite: Counseling 511. Survey of family systems models, including Adler, Satir, Bowen, Haley, Minuchin, and others.

528 Groups: Process and Practice (3)
Prerequisites: Counseling 500 and 511. Basic issues and concepts related to group process. Demonstration of group leadership skills with an emphasis on self-reflection.

530 Practicum (3)
Prerequisites: classified standing; Counseling 520, 523, 524, 526, 527; consent of fieldwork coordinator; and completion of or concurrent enrollment in Counseling 528. Supervised clinical practice with adults, families and children in approved community agencies. A minimum of 105 contact hours of counseling required for course completion.

535 Addictions Counseling (3)
Prerequisites: Counseling 500 and 511. Addresses etiology and treatment of addictive behaviors, (e.g., substance abuse, gambling). Theories linking addiction to biological, psychological, and other factors will be evaluated critically with an emphasis on developing effective recovery and relapse prevention programs.

560 Appraisal in Counseling (3)
Prerequisite: Counseling 522. Theories and applications of psychological testing and other means of appraisal, as they relate to the practice of community-based counseling and marriage and family therapy.

562 Couples Counseling (3)
Prerequisite: Counseling 527. The treatment of couples, including overview of current theories, assessment, goal-setting, interventions, ethical issues, and diversity issues. Assessment and treatment of spousal abuse. Study of sexual dysfunctions and sex therapy.
584 **Advanced Practicum (3)**
Prerequisites: Counseling 530 and consent of Fieldwork Coordinator. Advanced supervised clinical practice with adults, families, and children in approved community agencies. A minimum of 105 contact hours of counseling required for course completion.

590 **Advanced Counseling Techniques (1-3)**
Prerequisites: classified standing; completion of Counseling 530. This course focuses on case conceptualization and the integration of advanced techniques into the student's repertoire of counseling skills. Case presentations and analysis of videotaped sessions will be emphasized. Must be taken as part of the year-long practicum experience. May be taken four times for credit.

597 **Research Project (3)**
Prerequisites: Counseling 521 and consent of faculty adviser. Capstone program experience; taken final semester. Student conducts original research relevant to the counseling field.

598 **Thesis (1)**
Prerequisites: Counseling 530; consent of graduate program adviser. Independent research culminating in a thesis. Recommended for pre-doctoral students. May be repeated for credit.

599 **Independent Study (1-3)**
Prerequisite: consent of instructor or graduate program adviser. Research and development in counseling pursued independently with periodic conference with instructor. May be repeated for credit.
INTRODUCTION

Criminal Justice is the study of the causes, consequences and control of crime. Like other new and developing fields, criminal justice is difficult to define, as it draws from a number of different disciplines, including psychology, public administration, philosophy, political science, sociology and law.

The program leading to the Bachelor of Arts in Criminal Justice is designed to acquaint pre-service and in-service students with the principles and practices of criminal justice in America. Although the department’s curriculum allows for the development of depth in one of the subject’s substantive subsystems (i.e., law enforcement, courts or corrections), the overriding objective is to familiarize students with activities in all the above areas.

The department is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. In this regard, the department provides preparation for employment with a related agency and/or further study (e.g., law school).

ADVICEMENT

Students are urged to attend a New Major Advisement Session prior to their first semester at the university as a Criminal Justice major. This is particularly important for community college transfers. Failure to do so may delay graduation. The department’s New Major Advisement Sessions are regularly and frequently scheduled. See the bulletin board or call the division office for details.

AWARDS IN CRIMINAL JUSTICE

Graduating seniors are eligible for the Academics Award, Activities Award, Overall Achievement Award and William Hobbs Scholarship for outstanding law-related coursework. The Dan Byrnes Scholarship is given annually to an undergraduate who plans a career in law enforcement.

BACHELOR OF ARTS IN CRIMINAL JUSTICE

The Criminal Justice degree requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. For the major, every student must complete the core courses (21 units) and a minimum of 12 units from the elective curriculum. In addition, each student is required to complete nine units in a correlated curriculum. Effective Fall 2005, new Criminal Justice majors must achieve a grade of “C” (2.0) or better in all 15 courses in the curriculum to earn their bachelor’s degree.

For additional information regarding the Criminal Justice program and its courses, check with the Division office in University Hall 511.
Core Curriculum (21 units)
Crim Just 300  Introduction to Criminal Justice (3)
Crim Just 310A  Criminal Law: Substantive (3)
Crim Just 315  The Enforcement Function (3)
Crim Just 320  Introduction to Public Management and Policy (3)
Crim Just 330  Crime and Delinquency (3)
Crim Just 340  Criminal Justice Research Methodology (3)
Crim Just 345  Corrections (3)

Elective Curriculum
Twelve units in Criminal Justice

Correlated Curriculum (9 units)
Courses in the related fields shall be selected by the student in consultation with an adviser. The purpose of this requirement is to allow for an awareness of the disciplines contributing to the creation of ”criminal justice” as a separate subject. Upper-division courses in such fields as philosophy, political science, psychology and public administration are included. For a list of courses that can count in this regard, check with the Division office.

Writing Requirement (3 units)
One of the following courses:
Crim Just 350  Writing for Criminal Justice (3)
English 301  Advanced College Writing (3)
English 365  Legal Writing (3)

For further information on these alternatives, please see a Criminal Justice adviser.

MINOR IN CRIMINAL JUSTICE
The Minor in Criminal Justice consists of a total of 18 units, including three required and three elective courses to be chosen from the Criminal Justice curriculum. The required courses are:
Crim Just 300  Introduction to Criminal Justice (3)
Crim Just 310A  Criminal Law: Substantive (3)
Crim Just 330  Crime and Delinquency (3)

CRIMINAL JUSTICE COURSES
Courses are designated as CRJU in the class schedule.

300  Introduction to Criminal Justice (3)
Underlying ideological issues confronting America’s system of criminal justice, with an emphasis on key concepts in conflict (law and order, rehabilitation vs. retribution, etc.) One or more sections offered online.

310A  Criminal Law: Substantive (3)
Prerequisite: Crim Just 300. General doctrines of criminal liability in the United States and the classification of crimes as against persons, property and the public welfare. Concept of governmental sanction of the conduct of the individual.

310B  Criminal Law: Procedural (3)
Prerequisite: Crim Just 300. Legal problems associated with the investigation of crime, acquisition of evidence, commencement of a criminal proceeding, prosecution and defense of charges, sentencing and appeal. Development of existing procedures and examination of current efforts for reform.

315 The Enforcement Function (3)
Prerequisite: Crim Just 300. Historical and philosophical development of the enforcement function at federal, state and local levels; community controls, political pressures and legal limitations pertaining to law enforcement agencies at each level of government; police policies and problems vis-à-vis the administration of justice as a system.

320  Introduction to Public Management and Policy (3)
(Same as Political Science 320)

322 Leadership for Public Service (3)
(Same as Political Science 322)

330 Crime and Delinquency (3)
Prerequisite: Crim Just 300. Overview and analysis of the evolving and conflicting purposes and practices associated with the topics of criminology, crime and delinquency, with an emphasis on contemporary strategies for the prevention, remediation and control of crime and delinquency.

340 Criminal Justice Research Methodology (3)
Prerequisite: Crim Just 300. Elementary statistics including descriptive, measurements and tests; data collection methods for effort evaluation and program prediction; systems analysis techniques.

345 Corrections (3)
Prerequisite: Crim Just 300. Overview and analysis of the evolving and conflicting purposes and practices associated with the adult corrections systems, with an emphasis upon contemporary strategies for treating/punishing offenders while incarcerated, as well as while in the community.

350 Writing for Criminal Justice (3)
Prerequisite: Crim Just 300. Principles of research and writing in criminal justice, including framing and clarifying research questions, using and assessing research resources and developing writing skills for criminal justice research. Meets upper-division writing requirement for Criminal Justice majors, or concentration elective.

385 Minorities and the Criminal Justice System (3)
Prerequisite: completion of General Education Category II and Category III.C.1; Crim Just 300 recommended. Introduction to the issues surrounding the charges of overt and indirect institutionalized racism in the criminal justice system. Overview of patterns of criminal behavior among minority groups in the U.S. will be discussed.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>404</td>
<td>Capital Punishment (3)</td>
<td>Prerequisites: Crim Just 300 and upper division standing. Introduction to the issues relating to the use of capital punishment in the U.S., and focuses on the arguments in support of and opposition to the death penalty. (Same as Political Science 404)</td>
</tr>
<tr>
<td>405</td>
<td>Criminal Justice Policy (3)</td>
<td>Prerequisites: Crim Just 300 and 330. Not open to students who have studied Criminal Justice policy as Crim Just 475T. Evolving purposes and practices associated with the development of criminal justice policies, principally in the United States. Particular topics, such as sentencing legislation, illustrate the development, adoption and impact of public policy on criminal justice systems.</td>
</tr>
<tr>
<td>422</td>
<td>Human Resources Management (3)</td>
<td>(Same as Political Science 422)</td>
</tr>
<tr>
<td>425</td>
<td>Juvenile Justice Administration (3)</td>
<td>Prerequisite: Crim Just 300. Definitions of “delinquency” and the related responses of the interested institutions (police, courts and correction); the juvenile court (past and present), and prevention and correction programs (practicing and proposed).</td>
</tr>
<tr>
<td>430</td>
<td>Women and Crime (3)</td>
<td>Prerequisite: Crim Just 300 or Philosophy 302. Women as criminals and victims, gender differences in criminal behavior and the role of women as professionals in the criminal justice system.</td>
</tr>
<tr>
<td>455</td>
<td>Gangs and the Criminal Justice System (3)</td>
<td>Prerequisites: Crim Just 300. Causal factors of, and legal solutions to, gang-related crime in the United States. Relevance of sociological, psychological, economic and educational deviance theories to justice intervention strategies.</td>
</tr>
<tr>
<td>462</td>
<td>Crime Analysis (3)</td>
<td>Prerequisites: Crim Just 300 and 340. Crime analysis function within the law enforcement organization; how to develop, implement and operate a crime analysis unit, and discuss the nexus between crime analysis, field and investigative operations, and administrative bureaus.</td>
</tr>
<tr>
<td>465</td>
<td>Law, Punishment and Justice (3)</td>
<td>Prerequisite: Crim Just 300. Theoretical scholarship in criminal justice is increasingly concerned with law in relation to delivery of justice and practices of punishment. Examines the rule of law, questions whether justice is different from law and reviews the role punishment plays.</td>
</tr>
<tr>
<td>470</td>
<td>Sex, Crime and Culture (3)</td>
<td>Prerequisite: Crim Just 300. Analysis of rationale for law’s concern with sexual conduct, developed via discussion of selected offenses and offenders. Lectures and guest speakers also present opposing perspectives regarding the role of law enforcement, courts and correction. Research and reform will be reviewed.</td>
</tr>
<tr>
<td>472</td>
<td>The Judicial Process (3)</td>
<td>Prerequisites: Crim Just 300 or Political Science 375. Nature, functions and roles of courts. Roles of major participants in the American legal system, including judges, attorneys and citizens. Administration of justice as a system. (Same as Political Science 472)</td>
</tr>
<tr>
<td>475T</td>
<td>Topics in Administration of Justice: A Seminar (3)</td>
<td>Prerequisite: Crim Just 300. Current social, legal and practical problems confronting police, courts and corrections. Variable topic class with specific subjects to be announced each semester. May be repeated for credit with different content up to a maximum of 9 units.</td>
</tr>
<tr>
<td>485</td>
<td>Search, Seizure and Interrogation I (3)</td>
<td>Prerequisite: Crim Just 300. Analysis of the laws that apply in common street search-and-seizure and interrogation situations in California; how they have evolved, and what developments are anticipated.</td>
</tr>
<tr>
<td>486</td>
<td>Search, Seizure and Interrogation II (3)</td>
<td>Prerequisite: Crim Just 300. An analysis of the laws that apply in some search-and-seizure and interrogation situations, such as those involving the border patrol and College officials.</td>
</tr>
<tr>
<td>492</td>
<td>Pre-law Internship (3)</td>
<td>(Same as Political Science 492)</td>
</tr>
<tr>
<td>495</td>
<td>Internships (3)</td>
<td>Prerequisites: Crim Just 300 or senior standing and consent of instructor. Criminal justice professions; eight to 20 hours per week as a supervised intern in a public agency or related organization. In addition to the job experience, interns meet in a weekly three-hour seminar.</td>
</tr>
<tr>
<td>499</td>
<td>Independent Study (1-3)</td>
<td>Prerequisites: at least 12 units of criminal justice and consent of adviser. Student selects an individual research project, either library or field. Conferences with adviser as necessary, culminating in one or more papers. May be repeated for credit.</td>
</tr>
</tbody>
</table>
INTRODUCTION

A recent Wall Street Journal article titled “The Hot Major for Undergrads is Economics” stated, “In a global economy filled with uncertainty, many students see economics as the best vehicle for promising good pay and security.”

As a scholarly discipline, economics is over two centuries old. The nature of economic analysis has been described by John Maynard Keynes as “...a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessors to draw correct conclusions.”

Economic issues are powerful enough to shape the world. Slowly but surely, economic issues make their way to your pocketbooks. Many pressing social issues have their roots in economics. Microeconomic principles set the foundation for business. Macroeconomic policies shape the destinies of nations. Keynes put it a little more eloquently when he said, “The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else.”

Economics is a fascinating major that helps you develop analytical skills that are applicable to a wide range of jobs. Economists work in Wall Street; banking, finance and insurance; all aspects of business; multinational corporations; real estate; utility companies; non-profits; regulation, city, state and federal government agencies; international agencies like the International Monetary Fund and the World Bank; sports, health and aging; and in academia.

According to the National Association of Business Economists (NABE), “The key skills of the economic analyst compared to other business analysts is the ability to link industry/market developments to the overall economy, i.e., to see the forest as well as the trees. The broad training of economists provides a flexibility that allows them to turn their hand to a broad range of analytical problems – a critical attribute in a company experiencing a redirection of industry interests.”

Students pursuing graduate degrees in many other fields, such as the social sciences, business, public administration, public health, environmental studies, urban studies, law, and journalism find that economics is their best choice for an undergraduate major or minor, given the extensive economic content of these programs. Several studies have shown that lawyers with undergraduate degrees in business economics earn more than other lawyers.  

The Department of Economics offers graduate and undergraduate degrees:
- Bachelor of Arts in Business Administration, Concentration in Business Economics
- Bachelor of Arts in Economics
- Minor in Economics
- Master of Arts in Economics
- Master of Business Administration, Concentration in Economics

Advisers

The Business Advising Center, Steven G. Mihaylo Hall 1201, provides information on admission, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, all economics majors should see a faculty adviser in the Department of Economics for information on career opportunities and advanced study. Undergraduates should consult the undergraduate adviser, Dr. Radha Bhattacharya. Graduate students should consult the graduate adviser, Dr. Andrew Gill.

Credential Information

For students interested in a teaching credential, the Department of Economics offers courses that may be included in Subject Matter Preparation Programs and Supplementary Authorization Programs for elementary and secondary teaching.

Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and is also available from the Department Office for Elementary and Bilingual Education and the Department Office for Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education, Education Classroom 182.

Awards in Economics

- Economics Outstanding Graduate Student Award
- Economics Outstanding Senior Award
- Economics Wall Street Journal Student Award
- Formuzis-Pickersgill-Hunt Student Paper Award
- Murray Wolfson Memorial Scholarship
- Economics Faculty Student Achievement Award
- Norman Townshend-Zellner Award
- Levern Graves Award
- The Emeriti Faculty and Staff Award
- Stewart Long Graduate Study Award
- Stewart Long Award for Outstanding New Graduate Student
- Klein Family Awards

Bachelor of Arts in Economics

Admission to the Economics major involves two steps. Students who apply to the major are initially classified as Pre-economics. After completing the lower-division core requirements with grades of at least "C" (2.0), students may apply to the Economics major. Pre-economics students may take lower-division business and economics courses, but most upper-division courses are not open to Pre-economics students.

The Bachelor of Arts in Economics requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements, and free electives. All of the following requirements must be met for the degree. Students must earn a grade of at least "C" (2.0) in each course listed below. However, a "C" (2.0) average will be acceptable in the upper-division economics electives. For assistance in interpreting these requirements, contact the Business Advising Center, Steven G. Mihaylo Hall 1201. Students should also contact their faculty adviser in the Economics Department prior to or during their first semester.

Required Lower-Division Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 201A</td>
<td>Financial Accounting (3)</td>
</tr>
<tr>
<td>Accounting 201B</td>
<td>Managerial Accounting (3)</td>
</tr>
<tr>
<td>Math 150B</td>
<td>Calculus (4)</td>
</tr>
<tr>
<td>Business Admin 201</td>
<td>Business Writing (3)</td>
</tr>
<tr>
<td>Econ 201</td>
<td>Principles of Microeconomics (3)</td>
</tr>
<tr>
<td>Econ 202</td>
<td>Principles of Macroeconomics (3)</td>
</tr>
<tr>
<td>InfoSys/DecSci 265</td>
<td>Introduction to Information Systems and Applications (3)</td>
</tr>
<tr>
<td>Math 135</td>
<td>Business Calculus (3)</td>
</tr>
<tr>
<td>OR Math 130</td>
<td>Short Course in Calculus (4)</td>
</tr>
<tr>
<td>OR Math 150A</td>
<td>Calculus (4)</td>
</tr>
</tbody>
</table>

Required Upper-Division Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Admin 301</td>
<td>Advanced Business Communication (3)</td>
</tr>
<tr>
<td>Econ 310</td>
<td>Intermediate Microeconomic Analysis (3)</td>
</tr>
<tr>
<td>Econ 320</td>
<td>Intermediate Macroeconomic Analysis (3)</td>
</tr>
<tr>
<td>Econ 340</td>
<td>Economic Research Methods (3)</td>
</tr>
<tr>
<td>Econ 490</td>
<td>Economics Capstone</td>
</tr>
</tbody>
</table>

Economics Electives

Fifteen units of upper-division economics electives (six of which must be 400-level).

No more than three units of independent study may be used to meet the 400-level electives requirement.
Other Requirements, Grades and Residence

Other Requirements. Students must complete all university requirements for the bachelor's degree. A student who majors in economics can take a certain number of free electives toward the university requirements. The undergraduate adviser will guide the student in selecting courses that match a student's specific interests and career goals. These courses can be in any field of the student's interest, such as (but not limited to) finance, insurance, business, public administration, urban studies, geography, statistics and mathematics. Students planning to complete graduate work in economics are advised to take Math 150A,B; Econ 440 and Econ 441.

Grade-Point Average (GPA). Attain at least a 2.0 GPA ("C" average) in all university courses and in the upper-division economics electives. Earn at least a "C" (2.0) grade in each course required for the major (other than the upper-division economics electives where a "C" (2.0) average is required).

Grade Option. Take all required courses in economics, accounting and information systems/decision sciences for a letter grade (A,B,C,D,F). The credit/no credit grading option may not be used for these courses, and a grade of "CR" (credit) will not satisfy the requirements for the degree. Exception: a course in calculus may be taken under the credit/no credit grading option; however, if it is also taken to meet general education requirements, then it must be taken for a letter grade.

Residence. At least 15 units of courses must be taken in residence at the Mihaylo College of Business and Economics at Cal State Fullerton. Also, students must fulfill University residence requirements.

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION

See "Business Administration, Business Economics Concentration."

MINOR IN ECONOMICS

The economics minor covers the basics in the discipline of economics and gives students the opportunity to explore personal interests through electives. Note that a course in calculus (Math 135 or equivalent) is prerequisite to Econ 310, 315 and 320. Students must earn a grade of at least "C" (2.0) in each course listed below.

Required Lower-Division Courses
Econ 201 Principles of Microeconomics (3)
Econ 202 Principles of Macroeconomics (3)

Required Upper-Division Courses
Business Admin 301 Advanced Business Communications (3)
OR equivalent
Econ 310 Intermediate Microeconomics Analysis (3)
OR Econ 315 Intermediate Business Microeconomics (3)
Econ 320 Intermediate Macroeconomics Analysis (3)
AND nine units of upper-division economics electives

Required Courses for Business Administration Majors

Students with a major in business administration and a concentration other than business economics who wish to minor in economics, must take Econ 201, 202, and 310 (or 315) as part of their major.

For such students, these requirements in the minor will be waived and the minor will consist of Econ 320 and nine units of upper-division economics electives.

Students with a major in business administration and a concentration in business economics may not also minor in economics.

MASTER OF BUSINESS ADMINISTRATION

See "Business Administration, MBA."

MASTER OF ARTS IN ECONOMICS

This program provides preparation for professional careers in private industry and government and provides a foundation for further graduate work at the doctoral level. Full- and part-time students can be accommodated. Most of the courses are scheduled in the evening.

The curriculum is designed for students with an undergraduate degree in business administration or economics and consists of 10-11 courses (30-33 units). The required courses progress from economic theory through economic model building and estimation to the seminar course on current research, where students are exposed to the latest research in various areas of economics. The graduate curriculum includes four to six courses (12-18 units) of electives. Students have the option of writing a thesis (the thesis track is 30 units) or taking a comprehensive exam (the comprehensive exam track is 33 units) to earn their degrees.

Most graduate courses in Mihaylo College of Business and Economics require classified "MCBE status" and are open only to students with classified standing in the M.A. in Economics, MBA, M.S. in Accountancy, M.S. in Information Systems, or M.S. in Taxation programs.

Admission

Minimum requirements for admission to the MA program are the following:
1. A baccalaureate from an accredited institution
2. Good standing at the last college attended
3. Minimum grade point average of 2.5 in the last 60 semester units (or 90 quarter units) attempted
4. A GPA of at least 3.0 in the following courses or their equivalents (corresponding CSUF courses are in parenthesis): Business Calculus (Math 135), Principles of Microeconomics (Econ 201), Principles of Macroeconomics (Econ 202), Intermediate Microeconomics (Econ 310 or Econ 315), Intermediate Macroeconomics (Econ 320), Probability and Statistics (InfoSys/DecSci 361A), and one advanced undergraduate elective in economics
5. For international students, a score of 570 on the paper exam or 230 on the computer-based TOEFL is required.

6. 1000 points in verbal and quantitative sections in the Graduate Record Examination (GRE).

7. Three confidential letters of recommendation, a résumé and a Statement of Purpose from the applicant sent directly to the Graduate Adviser in Economics. Persons who have known the candidate professionally should write the letters of recommendation. There are no forms. The letters should be written on official letterhead, and the letters should discuss both the strengths and the weaknesses of the applicant. The statement of purpose should not exceed 750 words.

An applicant who does not meet one or more of the requirements above (including international students who score between 550 and 570 on TOEFL), may still be considered for admission, depending on the evaluation of the entire application file (the students must, however, have a GPA of 2.5 in the last 60 semester units at the time of admission). If admitted, an applicant with one or more deficiencies may be asked to take specified deficiency courses and exams. Students admitted with deficiencies are called “conditionally classified” students. Conditionally classified students can take a limited number of courses at the graduate level, subject to the approval of the graduate adviser of the department. Students are expected to advance promptly to classified standing. Conditionally classified students are eligible to take graduate courses for which they are qualified.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Study Plan

Within one semester of admission, the students are advised to prepare a study plan. A study plan reflects a selection of approved courses that have been taken or will be taken by the student to earn the graduate degree.

Students are urged to meet as soon as possible with the graduate adviser in the Department of Economics to file a study plan and advance to classified standing.

Any study plan course in which a “C−” (1.7) or below is received must be repeated with at least a “C” (2.0) grade, regardless of the overall grade-point average of the students. A minimum 3.0 GPA is required for graduation. Students are also required to graduate in a timely manner.

Required Courses (15 units)

Econ 441 Introduction to Mathematical Economics (3)
Econ 502 Advanced Microeconomic Analysis (3)
Econ 503 Advanced Macroeconomic Analysis (3)
Econ 504 Econometric Analysis (3)
Econ 595 Current Research in Economics (3)
OR approved 500-level substitute

Note: Econ 440, Introduction to Econometrics, is a prerequisite to Econ 504.

Area and Electives Courses (12–18 units)

Students may choose to focus on one of the following elective tracks:
1. Financial and monetary economics
2. Health, aging and labor economics
3. Public economics, law and industrial organization
4. International, environmental and development economics

In addition to Econ 441, only two more 400-level courses are allowed on the Study Plan.

Terminal Evaluation (0–3 units)

Econ 598 Thesis Research (3)
OR Comprehensive Examinations

These examinations are given at the end of each semester.

ECONOMICS COURSES

Courses are designated as ECON in the class schedule.

100 The Economic Environment (3)

Application of economics to the problems of unemployment and inflation, the distribution of income, competition and monopoly, the role of government in the economy, other policy issues. Not open to pre-business, business administration majors or minors, economics majors or minors or international business majors.

201 Principles of Microeconomics (3)

Principles of individual consumer and producer decision-making in various market structures, the price system, market performance and government policy.

202 Principles of Macroeconomics (3)

Prerequisite: Econ 201. Principles of macroeconomic analysis and policy, unemployment and inflation, financial institutions, international trade, economic growth, comparative systems. One or more sections offered online.

310 Intermediate Microeconomic Analysis (3)

Prerequisites: Econ 202 and Math 135. Corequisites: Business Admin 301 and InfoSys/DecSci 361A or equivalent. Rational decision-making behavior of consumers and firms, price and output determination in markets. Primarily for economics majors, but open to all students who qualify.

315 Intermediate Business Microeconomics (3)

Prerequisites: Econ 202 and Math 135. Corequisites: Business Admin 301 and InfoSys/DecSci 361A or equivalent. Analysis of business decisions in alternative market structures with special emphasis on problem-solving in a business context using economic concepts and methods. Not open to economics majors. Students may not receive credit for both Economics 310 and 315. One or more sections offered online.
320 Intermediate Macroeconomic Analysis (3)
Prerequisites: Econ 202 and Math 135. Corequisites: Business Admin 301, InfoSys/DecSci 361A or equivalent. Determinants of the level of national income, employment and prices, and monetary and fiscal policies.

330 Comparative Economic Systems (3)
Prerequisite: Econ 100 or 201. Alternative economic systems; their theoretical foundations, actual economic institutions, and achievements and failures. Contrast between socialist and capitalist systems.

331 Economies in Transition (3)
Prerequisite: Econ 100 or 201. Transformation from centrally planned to market-oriented economies in Russia and Eastern Europe. Economic, social and political costs and benefits involved in the restructuring of economic systems.

332 Economies of the Pacific Rim (3)
Prerequisite: Econ 100 or 201. Dimensions of industrialization, agriculture, investment, human resources and trade in economies of the Far East (including Japan and China), India and related nations of the Pacific Rim.

333 Economic Development: Analysis and Case Studies (3)
Prerequisite: Econ 100 or 201. Processes of economic growth with references to developing areas. Capital formation, resource allocation, relation to the world economy, economic planning and institutional factors, with case studies.

334 Economics of Latin America and the Caribbean (3)
Prerequisite: Econ 100 or 201. Corequisite: Business Admin 301. Regional economic problems within an international context: dependence, industrialization and the international corporation; agriculture; regional cooperation; inflation; trade and debt problems.

335 The International Economy (3)
Prerequisite: Econ 100 or 201. Theory, practice and institutions of the international economy. International trade and investment, balance of payments, foreign exchange rates, multi-national enterprise, international economic policy. Current trade issues: European Community, trade with developing countries, Eastern Europe, and the states of the former Soviet Union; General Agreement on Tariffs and Trade (GATT) and other major trade agreements.

336 Economies of the Middle East (3)
Prerequisite: Econ 100 or 201. Economic circumstances and challenges in the Middle East. Topics include population and education, dependence on oil exports, state control of the economy, and the potential for economics growth and stability in the region.

340 Economic Research Methods (3)
Prerequisites: Econ 202, InfoSys/DecSci 361A or equivalent. Introduces basics of applied economic research. How to access existing economic knowledge, locate and compile economic data, and analyze economic problems using theory and quantitative methods.

350 American Economic History (3)
Prerequisite: Econ 100 or 201. Development of American economic institutions; economic problems, economic growth and economic welfare.

351 European Economic History (3)
Prerequisite: Econ 100 or 201. Evolution of European economic institutions and their relation to the development of industry, commerce, transportation and finance in the principal European countries.

355 Economics of Gender and Work (3)
Prerequisites: completion of General Education category III.C.1 and upper division standing. Economic analysis of demographic trends and changing gender roles and experiences in paid and unpaid work, education, earnings and market discrimination using economic theory. International comparisons. (Same as Women's Studies 355.)

361 Urban Economics (3)
Prerequisite: Econ 100 or 201. Theory and analysis of the urban economy, urban economic problems and policy.

362 Environmental Economics (3)
Prerequisite: Econ 100 or 201. Economic analysis of environmental problems and related issues: externalities, property rights, social costs and benefits, user cost, rent and decision making under uncertainty.

410 Industrial Organization (3)
Prerequisites: Business Admin 301, Econ 310 or equivalent. Business organization, conduct and performance; rationale and impact of public policy on business and business activities, including the regulated industries, sick industries and antitrust policy.

411 International Trade (3)
Prerequisites: Business Admin 301, Econ 310 or 315 or equivalent. Theories of international trade. Gains from trade, effects of tariff and non-tariff barriers, and conduct of commercial policy. Balance of payments, theories of exchange rate determination and other international economic issues.

412 Labor Economics (3)
Prerequisites: Business Admin 301, Econ 310 or equivalent. Labor supply and demand, labor force participation, employment, unemployment, human capital, wage differentials, disadvantaged labor market groups, discrimination and wage-related income transfers.

413 Law and Economics (3)
Prerequisites: Business Admin 301; Econ 310 or 315. Economic analysis of the common law – property, contract and tort – focusing on the use of microeconomic theory to study the economic efficiency characteristics and effects of these laws. Analysis of specific legal cases.

415 Economics of Health (3)
Prerequisites: Econ 340 or equivalent, or consent of instructor. Application of economic reasoning to the analyses of health-related issues, markets, practice, education, research, and policy within social and political contexts.
416 Benefit Cost and Microeconomic Policy Analysis (3)
Prerequisites: Business Admin 301; Econ 310 or equivalent. Application of microeconomic models and welfare economics to public policy. Concepts of economic efficiency, economic surplus and equity. Measurement of policy effects, including benefit-cost analysis, with applications to selected policy areas such as education and environmental programs.

417 Public Finance (3)
Prerequisites: Business Admin 301; Econ 310 or equivalent. Government finance at the federal, state and local levels; impact of taxation and spending on resource allocation, income distribution, stabilization and growth.

420 Money and Banking (3)
Prerequisites: Business Admin 301; Econ 320 or equivalent. Money supply process and impact of monetary policy on economic activity.

421 Monetary and Fiscal Policy (3)
Prerequisites: Business Admin 301; Econ 320 or equivalent. Techniques of monetary and fiscal policy and their relative roles in promoting economic stability and growth.

431 International Macroeconomics and Growth (3)
Prerequisites: Business Admin 301 and Econ 320. Macroeconomic analysis of the open economy: impact of stabilization policies in a global economy, role of the balance of payments, international monetary system and growth in less developed countries.

433 The Less Developed Countries and the World Economy (3)
Prerequisites: Econ 310 or 315 or 515 and Econ 320 or 521. In-depth analytical study of development and underdevelopment in the poorer countries in the context of a changing international economic order. Neo-classical and political economy approaches. Includes case studies from Asia, Africa and Latin America.

440 Introduction to Econometrics (3)
Prerequisites: Business Admin 301, Econ 340, InfoSys/DecSci 361A or equivalent. Economic measurement: specification and estimation of econometric models; statistical methods in economic research.

441 Introduction to Mathematical Economics (3)
Prerequisites: Business Admin 301, Econ 202 and Math 135 or equivalent. Economic theory from microeconomics and macroeconomics. Content varies; constrained optimization problems and rational decision-making.

450 History of Economic Thought (3)
Prerequisites: Business Admin 301 and Econ 310 or 320. Major schools of thought and of leading individual economists as they influenced economic thought and policy.

461 Ecological Economics (3)
Prerequisites: Business Admin 301 and Econ 310 or 315 or equivalent. Application of economic concepts and methods to understanding the ways in which human economic behavior contributes to environmental and ecosystem degradation; the use of economic approaches to evaluate and manage these impacts; the design of sustainable economic policies.

462 Natural Resource Economics (3)
Prerequisites: Business Admin 301 and Econ 310 or 315 or equivalent. Concepts and principles in the application of economics to issues in natural resource economics. Issues include uncertainty and risk in investment, depletion over time, cartelization, the role of technological innovation and government intervention related to fuels, water, land, etc.

490 Economics Capstone (3)
Prerequisites: Econ 310, 320 and 340. Capstone experience for Economics majors. Students demonstrate facility with economic theory and quantitative methods by presenting teaching topics, summarizing news reports and scholarly journal articles, writing policy briefs on selected economic topics and replicating empirical findings from economics literature.

495 Internship (1-3)
Prerequisites: Economics major with Business Admin 301, InfoSys/DecSci 361A, Econ 310 or 320 or the equivalents; or international business major with Econ 202 and 335, InfoSys/DecSci 361A or the equivalents; consent of the department internship adviser; at least junior standing; 2.5 GPA and one semester in residence at the university. Planned and supervised work experience. May be repeated for a total of six units of credit. Credit/No Credit grading only.

499 Independent Study (1-3)
Prerequisites: Economics major or concentration, Business Admin 301, Econ 310 and 320 or the equivalents, senior standing, and consent of department chair. Directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

502 Advanced Microeconomic Analysis (3)
Prerequisite: Econ 441. Advanced treatment of rational decision-making behavior of consumers and firms, the price system, and resource allocation in partial and general equilibrium settings. Topics include preference theory, welfare economics, gains from trade, monopoly power, external costs and benefits, public goods, factor markets, intertemporal decisions, risk and uncertainty.

503 Advanced Macroeconomic Analysis (3)
Prerequisites: Econ 320 or equivalent and classified graduate status in Economics. Determination of employment, fluctuations of real and money income, and the forces underlying economic growth.
504 Econometric Analysis (3)
Prerequisites: Econ 440 or equivalent and classified graduate status in economics. Contemporary methods for analyzing microeconomic data, with a focus on instrumental variables estimation, probit, logit and tobit models, models of sample selection and panel data methods.

505 Economic Models and Forecasting (3)
Prerequisites: Econ 440 and classified graduate status in economics. Statistical methods of econometric estimation and forecasting. Practical solutions to problems in model specification, estimation by regression, time series analysis and forecasting.

506 Economics of Aging (3)
(Same as Gerontology 506)

515 Microeconomic Perspective for Managers (3)
Prerequisites: classified MCBE status and Math 135 or the equivalent. Individual economic agents – demand side consumers and supply side producers. Market structures ranging from perfect competition to monopoly. Features of organizational architecture: the assignment of decision rights within organizations; the reward system; and the performance-evaluation system. (Not open to M.A. Economics candidates.)

516 Economics and Benefit-Cost Analysis (3)
Prerequisites: Econ 201 and classified graduate status in Economics or Environmental Studies or Public Administration. Economics and benefit-cost analysis of public projects. Consumer demand and the estimation of benefits; the nature of cost in a market economy; price controls, unemployment and inflation; and criteria for choice, for multi-year projects. For elective credit in the M.S. Environmental Studies or Master of Public Administration.

521 Macroeconomic Perspective for Managers (3)
Prerequisites: Econ 310 or 515 or equivalent and classified MCBE status. Managerial use of local, national and global macroeconomic trends and data to make decisions. Impact that changes in taxes, government spending and Federal Reserve Bank monetary policy have on business, real estate and financial markets. (Not open to M.A. Economics candidates or students with credit for Economics 320.)

528 Financial Economics (3)
(Same as Finance 528)

531 International Economics (3)
Prerequisites: Econ 310 or 315 or 515 or equivalent and classified MCBE status, and Econ 320 or 521. Analysis of theories and current issues in international trade, finance, macroeconomics and growth, with an emphasis on business applications.

590 Topics in Economic Analysis and Policy (3)
Prerequisites: Econ 310 and 320 or equivalent; classified graduate status in economics. Contemporary research in areas such as resource economics; history of economic thought; international monetary systems; forecasting; economics of planning; trade and development; human resource economics. May be repeated for credit.

595 Current Research in Economics (3)
Prerequisites: classified graduate status in economics or Econ 440 and permission of the instructor. Students read, present and replicate scholarly research published in peer-reviewed journals covering a variety of topics in economics. They receive guidance as to research methodology, composition of a research paper and professional presentation. Attendance at departmental research seminars required.

598 Thesis Research (3)
Prerequisites: Econ 502, 503 and classified graduate status in economics. Corequisite: Econ 505. Selection and approval of topic; outline; methodology; literature survey; data collection and analysis; presentation of results. Award of the grade is contingent upon the completion and acceptance of the thesis.

599 Independent Graduate Research (1-3)
Prerequisites: Econ 440, 502 and 503; classified graduate status; and consent of instructor and Department Chair (or designee). Directed advanced independent inquiry. May be repeated for credit. Not open to students on academic probation.
MISSION

Our mission is to prepare school leaders who demonstrate strategic, instructional, organizational, political and community leadership; and to provide the community a source of scholarship and assistance in interpretation and application of scholarship.

GOALS OF THE DEPARTMENT

The goals of the department are to prepare educational leaders who demonstrate a wide array of knowledge, skills, attributes and commitment.

Strategic Leadership

Leadership requires the ability to develop with others vision and purpose, utilize information, frame problems, exercise leadership processes to achieve common goals and act ethically for educational communities.¹

A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by the school community.²

A school administrator is an educational leader who promotes the success of all students by modeling a personal code of ethics and developing professional leadership capacity.²

Instructional Leadership

Leadership requires the ability to design appropriate curricula and instructional programs, develop learner-centered school cultures, assess outcomes, provide student personnel services and plan with faculty professional development activities aimed at improving instruction.¹

A school administrator is an educational leader who promotes the success of all students by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth.²

Organizational Leadership

Leadership requires the ability to understand, initiate and/or improve the organization, implement operational plans, manage financial resources and apply effective management processes and procedures.¹

A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations and resources for a safe, efficient and effective learning environment.²

Political Leadership

Leadership requires the ability to act in accordance with legal provisions and statutory requirements, to apply regulatory standards, to develop and apply appropriate policies, to understand and act professionally regarding the ethical implications of policy initiatives and political actions, to relate public policy initiatives to student welfare, to understand schools as political systems.¹

COLLEGE OF EDUCATION DEAN
Claire C. Cavallaro

DEPARTMENT CHAIR
Dr. Louise Adler

DEPARTMENT OFFICE
College Park 520

DEPARTMENT WEBSITE
http://ed.fullerton.edu/edleadership

PROGRAMS OFFERED
Master of Science in Education
Concentration in Educational Administration
Concentration in Higher Education
Preliminary Administrative Credential
Professional Administrative Credential
School Business Management Certificate (University Extension)
Doctor of Education in Educational Leadership
PreK-12 Leadership Concentration
Community College Leadership Concentration

FACULTY
Louise Adler, Leigh Barton, Daniel Choi, Keni Cox, John Hoffman, Jerome Hunter, Joyce Lee, Christina Lunceford, Ron Oliver, Linda Orozco, Dawn Person, Ken Stichter
A school administrator is an educational leader who promotes the success of all students by understanding, responding to and influencing the larger political, social, economic, legal and cultural context.\(^1\)

**Community Leadership**

Leaders must collaborate with parents and community members; work with community agencies, foundations and the private sector; respond to community interests and needs in performing administrative responsibilities; develop effective staff communications and public relations programs; and act as mediators for the various groups and individuals who are part of the school community.\(^2\)

A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.\(^2\)

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**PHILOSOPHY OF THE DEPARTMENT**

Administration of schools for the 21st century demands that education leaders demonstrate:

- Commitment to high standards
- Strong ethical values
- Credible instructional leadership
- Understanding of social and political trends and the changing role of education in our society
- Problem solving ability and the skills necessary to promote and adapt to change and use collaboration to build a shared vision for schools and colleges
- Capacity to collaborate effectively with a wide range of non-school agencies and community organizations which can help schools achieve their mission
- Commitment to lifelong learning that empowers students, staff and themselves

We believe that:

- Every person must achieve academic success
- We must educate for an American democracy that values the norms and practices of diverse groups and at the same time celebrates shared community values
- Educational leaders must be reflective practitioners
- Knowledge is evolving and socially constructed and that learning is produced through an interaction of different perspectives that enable students to connect their education to their experiences

**Policies of the Department**

Candidates for our programs will be selected on the basis of leadership potential and commitment to the improvement of education, and will engage in a rigorous course of study.

The department is committed to a continual effort to plan and revise programs in collaboration with university colleagues, our students and the leaders of the schools and colleges in the communities we serve.

The courses offered by the department are arranged in a specific order, which must be followed by all students. Cohorts of students are formed and move through the courses as a group.

The department expects every student to use their university email address and check their university portal regularly. The university has computing facilities that can be used by students to email or access the web.

**Credential Requirements**

Students who wish to apply for credential programs must complete a separate applicant portfolio. The requirements and information are available at http://ed.fullerton.edu/edleadership/admissions.htm.

Students applying for the Preliminary Administrative Credential Program are required to have three years teaching experience when entering the program. Waiver requests for 1-2 years of experience are considered for those starting a second career or under unusual circumstances.

The minimum GPA required to be recommended for a certificate of eligibility or a credential is an average of 3.0 for all classes taken in the credential program.

**Review at the End of the First and Second Semester**

Any faculty member who may have concerns about the progress of a student in the program or their suitability to be recommended for leadership positions in schools or colleges may request a department review of the student’s performance at the end of the student’s first or second semester in the program. The issue will be considered at a department meeting.

Should the consensus of the faculty confirm the concerns, the department chair will provide specific written information to the student as to the nature of the concerns and the steps necessary to resolve the concerns. The chair will meet with the student and the adviser to discuss the concerns and necessary steps to resolve the concerns.

In situations where the continued participation of the student in the program is not recommended by the department, the policy and procedures for removing a student from the program will be followed.

**ADMINISTRATIVE SERVICES CREDENTIAL**

The Administrative Services Credential programs of the Department of Educational Leadership are approved by the California Commission on Teacher Credentialing. Because regulations governing these programs change, students should contact the department office for current information and requirements.

**Preliminary Credential**

The Preliminary Administrative Services Certificate/Credential is the “Tier I” administrative credential in California, requiring a total of 26-31 units of work (which may be incorporated into the master’s degree program). Upon receipt of the Preliminary credential, one is eligible for employment as an administrator in California public schools. A master’s degree is required for California State University to recommend a candidate for this credential.
Professional Credential

The Professional Administrative Services Credential is the “Tier II” administrative credential.

Candidates with strong administrative experience and a strong professional portfolio can complete the Demonstration of Mastery Program at CSUF in as little as one semester. Candidates must hold a Master’s Degree in Educational Administration and/or completed an accredited Preliminary Administrative Credential Program.

Students enrolled in the Ed.D. program complete the standards-based program requiring a total of 26 semester hours. Please note that holding a job as administrator and the Preliminary Credential are prerequisites to entry to the program for the Professional Credential.

SCHOOL BUSINESS MANAGEMENT CERTIFICATE

This certificate is offered through Cal State Fullerton’s University Extended Education program. It provides a 25-unit specialization for people who work in or want to move into the field of school business management. Classes reflect general skills and specific functions of school business management, capped by a practicum designed to demonstrate what has been gained in classroom study. The instructors are practitioners with successful experience as school business managers.

For further information on the program including program objectives, eligibility and registration, please visit the University Extended Education website at http://www.csufextension.org.

MASTER OF SCIENCE IN EDUCATION
(Educational Administration)

The principal objective of the curriculum is to prepare carefully selected individuals for leadership positions in public schools. The program is designed to help these individuals gain the technical knowledge and scholarship requisite to high achievement in these positions.

Application Deadlines

To assure full consideration, please complete the online applications before March 1 for the fall semester and October 1 for the spring semester (http://www.csumentor.edu).

Application deadlines change depending on demand and enrollment allocations. Check with the department for current information.

Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate degree from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted (see “Graduate Regulations” section of this catalog for complete statement and procedures). In addition, an applicant should have a successful teaching experience in an elementary or secondary school. (If such experience is not available, other experience in related fields is an alternative if approved by a graduate adviser before starting the program.) A candidate portfolio is also required.

Graduate Standing: Classified

A student who meets the admission requirements and has a minimum 3.0 GPA in previous academic work may be granted classified graduate standing upon approval of a study plan.

Study Plan

The study plan must include 30 units of coursework. Course requirements include field experience and a project.

No more than nine units of postgraduate work taken prior to classified standing may be applied to a student’s master’s degree program.

The adviser-approved 30 units (minimum) on the study plan will include:

Core Coursework (10 units)

- Ed Admin 503 Organizational Leadership (3)
- Ed Admin 505 Instructional Leadership (4)
- Ed Admin 510 Research Design (3)

Concentration Coursework (17 units)

- Ed Admin 561 Policy, Governance, Community Relations (3)
- Ed Admin 563 Human Resource Administration (2)
- Ed Admin 564 School Law and Regulatory Process (3)
- Ed Admin 565 School Finance (3)
- Ed Admin 566 Leadership in Public Schools (3)
- Ed Admin 567 K-12 Fieldwork (1,1,1)

Project (3 units)

- Ed Admin 597 Project (1,1,1)

For advisement and further information, consult the graduate program adviser, Dr. Ron Oliver (roliver@fullerton.edu).

Cohort Order of Classes

Once students are admitted to the Tier I/Preliminary Administrative Credential Program, they are required to take all of the courses in a prescribed order shown below.

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<td>Spring 597*</td>
<td>Summer 597*</td>
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* May not be required of credential only students.

Prior approval is required from the cohort leader and department chair to change the order or timing of courses.
The purpose of this concentration is to prepare students with the practical skills, knowledge and experience to become entry and mid-level professionals and leaders in higher education institutions, national/international professional associations and organizations, and government agencies. The program provides a strong foundation for career advancement.

Application Deadlines
To assure full consideration, please complete the online applications before March 1 for the fall semester (http://www.csumentor.edu). Application deadlines change depending on demand and enrollment allocations. Check with the department for current information.

Admission to Graduate Standing: Conditionally Classified
University requirements include a baccalaureate degree from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted (see "Graduate Regulations" section of this catalog for complete statement and procedures). In addition, an applicant should have a successful teaching experience in an elementary or secondary school. (If such experience is not available, other experience in related fields is an alternative if approved by a graduate adviser before starting the program.) A candidate portfolio is also required.

Graduate Standing: Classified
A student who meets the admission requirements and has a minimum 3.0 GPA in previous academic work may be granted classified graduate standing upon approval of a study plan.

Study Plan
The study plan must include 30 units of coursework. Course requirements include field experience and a comprehensive exam.

The adviser-approved 30 units (minimum) on the study plan will include:

Core Coursework (10 units)
Ed Admin 503 Organizational Leadership (3)
Ed Admin 505 Instructional Leadership (4)
Ed Admin 510 Research Design (3)

Concentration Coursework (17 units)
Ed Admin 521 History and Philosophy of Higher Education (3)
Ed Admin 522 College Students’ Characteristics and Cultures (3)
Ed Admin 523 Student Learning and Development (3)
Ed Admin 524 Diversity Access and Equity (2)
Ed Admin 568 Higher Education Fieldwork (400 hours) (3,3)

Culminating Experience-Comprehensive Exam
Ed Admin 595 Professional Seminar in Higher Education (3)
For advisement and further information, consult the graduate program adviser, Dr. Dawn Person (dperson@fullerton.edu).

Cohort Order of Classes

Semester 1
Ed Admin 521 History and Philosophy of Higher Education (3)
Ed Admin 503 Organizational Leadership (3)

Semester 2
Ed Admin 510 Research Design (3)
Ed Admin 505 Instructional Leadership (4)

Semester 3 (Summer)
Ed Admin 522 College Students’ Characteristics and Cultures (3)
Ed Admin 524 Diversity Access and Equity (2)

Semester 4
Ed Admin 523 Student Learning and Development (3)
Ed Admin 568 Fieldwork (3)

Semester 5
Ed Admin 595 Professional Seminar in Higher Education (3)
Ed Admin 568 Fieldwork (3)

DOCTOR OF EDUCATION (ED.D.) IN EDUCATIONAL LEADERSHIP

The mission of the Ed.D. Program at CSUF is to prepare educational leaders who ethically apply critical skills of evaluation, analysis, synthesis and action to insure excellence and equity in educational practice as they serve as stewards to the education community. A distinguishing feature of the program is its emphasis on the integration of theory, research and practice in preparing leaders to plan, initiate and assess local reforms to improve educational programs and outcomes. Attention to field-based study of educational problems is intended to improve linkages between graduate preparation, research and practice and contribute to both the knowledge base in education and the improvement of public education.

The program prepares leaders for PreK-12 and community college education who understand the critical changes educational institutions are facing; who can create, lead and study innovative reforms; and who are committed to critical examination of educational practices and policies. It achieves this goal in large part through the active involvement of a distinguished and multi-disciplinary group of faculty, a strong group of scholars committed to this innovative graduate program and its purpose of transforming educational institutions for the 21st century.

The distinctive features of the program are:
- Addressing regional needs through partnerships with PreK-12 and community college leaders in which the partners participate substantively in program design, candidate recruitment and admissions, teaching, and program assessment and evaluation
- Using pedagogical practices that recognize needs and contributions of professionals enrolled in the program
- Focus on problems of educational practice addressing important educational needs.
- Involvement of faculty with varied disciplinary perspectives and integration of different perspectives in examining field-based problems
- Use of a range of research methods to focus on actions to improve educational outcomes for all students
- Focus on addressing curricular, instructional, assessment and governance reforms and the implications for diverse educational settings

**Admissions Requirements**

Minimum requirements for admission include:

1. An earned baccalaureate degree and master’s degree from accredited institutions of higher education with a GPA in upper division and graduate study of 3.0 or above
2. Sufficient preparation and experience pertinent to educational leadership to benefit from the program
3. Submission of Graduate Record Examination (GRE) scores on the three GRE tests, taken within the last five years
4. Demonstrated educational leadership potential and skills, including successful experience in school, postsecondary, community and/or policy leadership
5. Demonstrated academic excellence, problem-solving ability and an interest in critically assessing and bringing about improvements within current educational policies and practices
6. Three confidential recommendation forms attesting to the leadership ability and scholarship of the candidate
7. A written statement of purpose reflecting understanding of the challenges facing the public schools or community colleges/institutions of higher education in California;
8. Professional resume
9. Examples of professional writing
10. Response to a writing prompt administered on-campus prior to the interview
11. Interview with the Admissions Committee

Meeting the minimum requirements qualifies an individual for consideration, but does not guarantee admission to the Program. Admission will be granted on a competitive basis. The Ed.D. in Educational Leadership will not include a foreign language requirement.

**Specializations**

Two specializations will focus on the development of leaders in education: PreK-12 Educational Leadership and Community College Leadership.

**Program of Study**

The program includes two summers and two complete academic years of coursework, followed by a period during which the candidate advances to candidacy and undertakes the dissertation. Classes will be held in the late afternoons and evenings and occasionally on weekends to accommodate the schedules of working professionals.

All candidates are required to be enrolled at CSUF for a minimum of six terms.

The courses offered throughout the program are expected to be taken by individuals who also hold full-time positions. Their full-time employment is viewed as an asset and as providing important opportunities to apply theoretical and empirical material covered in their coursework. The program of study distributed over 12 months will facilitate: (a) integration of graduate studies and practice; (b) periods of intensive study among candidates; and (c) opportunities to work with faculty from CSUF.

**Dissertation**

All students in the CSUF Ed.D. program will complete a rigorous research-based dissertation that integrates theory and research in the study of educational practice. The dissertation will include the results of the candidate’s independent research and will typically focus on examination of: (a) an educational problem; (b) a practice or program; or (c) an educational policy or reform. Most dissertations will be studies undertaken in the local context, having the potential to contribute to solutions of local educational problems. Dissertations will utilize a range of qualitative and quantitative research and evaluation methodologies. The dissertation will present the results of the candidate’s independent investigation in a manner that contributes both to professional knowledge in education and to the improvement of educational practice. Examples might include studies examining and/or evaluating reforms in curriculum and instruction, professional development, assessment and applications of technology.

Each Ed.D. student’s dissertation must conform to the CSU regulations and specifications with regard to format and method of preparation as described in Manuscript Preparation: Standards and Procedures for Dissertations. Candidates in the program will be expected to attend information sessions in which procedures for dissertation manuscript preparation and filing are presented.

**Defense of Dissertation**

During a final oral examination the candidate defends the dissertation. The dissertation defense will address the theoretical and conceptual background, relevant literature, data collection techniques, data analysis strategies and results and implications concerning the question(s) studied.
EDUCATIONAL ADMINISTRATION COURSES

Courses are designated as EDAD in the class schedule. Students who desire only isolated courses from the program are normally denied admission to such courses.

GENERAL EDUCATION

364 Justice and Equity in California Education (3)
Prerequisite: completion of General Education Category III.C.1. Themes such as justice, equity, fairness, equal protection and duty of care are reflected in the laws that govern California public education and how those laws are used to deal with the social problems that beset our schools.

M.S. AND CREDENTIAL

501A,B,C Collaborative Professional Portfolio Assessment of Competence for School Leaders (4)
Prerequisite: one year of experience as a school administrator. Comprehensive course for Professional Administrative Services (Tier II) credential candidates. Candidates will demonstrate mastery of fieldwork performance standards by preparing a professional portfolio of work-embedded artifacts, evidences and documentation. A collaborative assessment process (student, university faculty, mentor, colleagues in the course) will establish the candidate's competency in each of the California Standards for Educational Leaders adopted by the California Commission on Teacher Credentialing. Successful completion of the course provides for university-approval and recommendation to the CTC for Professional Administrative Services Credential (Tier II). This course is a post-master's credential course, offered credit/no credit only.

503 Organizational Leadership (3)
Prerequisite: admission to Preliminary Credential and/or master's program. Using organizational theory and leadership studies to understand schools and how to bring about change in schools. Organization, structure and cultural context of schools and the study of techniques used to guide, motivate, delegate, build consensus and lead others in the achievement of goals.

505 Instructional Leadership (4)
Prerequisite: admission to credential and/or M.S. program. Approaches for advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and professional growth.

510 Research Design (3)
Prerequisites: admission to Preliminary Credential and/or master's program and a grade of "B" (3.0) or better in Ed Admin 505. Introduction to major forms of quantitative and qualitative research used in education. How to select an appropriate research method and the characteristics of sound research. Making reasoned judgments as consumers of research, as well as selecting appropriate information collection strategies as school leaders.

521 History and Philosophy of Higher Education (3)
Evolution of US higher education, considering the diversity of the system, internal and external influence, and the evolution and development of student affairs and student learners

522 College Student's Characteristics and Cultures (3)
Students in postsecondary education in the United States. Major demographic groups (race, class, ethnicity, age, ability, sexual orientation, gender, etc.) and their experiences with access, equity, campus cultures and retention at two- and four-year institutions.

523 Student Learning and Development (3)
Student development theory in college, considering traditional and non-traditional students and learning outcomes. Theoretical assumptions and the practical application of theory to diverse student learners and the role of theory in student affairs practice.

524 Diversity Access and Equity (2)
Diversity, access, equity, multiculturalism, pluralism as concepts in education. From an historical lens, students will gain an understanding of these concepts and their applications to student affairs/higher education.

561 Policy, Governance, Community Relations (3)
Prerequisite: Ed Admin 503. Factors that determine public policy with regard to education, the roles of the various levels of government in controlling public education, how to identify various interest groups and how to communicate effectively about school programs.

563 Human Resource Administration (2)
Prerequisite: Ed Admin 503. Importance and dimensions of human resource administration and the need to attract, retain, develop and motivate school personnel in ways that enhance learning and professional development that lead to positive and productive school settings. Collective bargaining and employee evaluation in public schools.

564 School Law and Regulatory Process (3)
Prerequisite: Ed Admin 503. Federal, state and local educational laws, regulations and other policies that govern schools and the requirements that administrators act in accordance with these laws and regulations in ways that are ethically and legally defensible.

565 School Finance (3)
Prerequisite: Ed Admin 503. Effective management of fiscal resources and business services. Sources of income to public schools: federal, state, local and private (including grants and foundations). Reviews sound budgetary and business procedures for schools.

566 Leadership in Public Schools (3)
Leadership roles of principals, co-administrators and supervisors in public schools. Leadership, reflective practice, human relations, the administrator's role in group process, site-based decision-making, school climate change agent roles and planning models. Violence and school safety issues such as gangs will be studied.
567 K-12 Fieldwork (1,2)
Prerequisite: admission to credential and/or master's program. Directed fieldwork in administrative areas in school. May be repeated for up to 3 units credit.

568 Higher Ed Fieldwork (3,3)
At least 200 hours at two different sites demonstrating competence in applying theory to practice, assessment, evaluation, and program design and implementation, supervised by an approved educational leader who provides feedback for learning and growth as a student affairs educator/leader.

595 Professional Seminar in Higher Education (3)
Application of technology for effective communication, verbal and written, and individual and group interactions on-line and face to face. Application of computers to work in student affairs/higher education settings.

597 Project (1-2)
Prerequisites: Ed Admin 510. Individual research on a graduate project, with conferences with a faculty adviser, culminating in a project.

599 Independent Graduate Research (1-3)
Prerequisite: consent of instructor. Independent inquiry for qualified students.

EDUCATIONAL ADMINISTRATION AND LEADERSHIP
DOCTORAL CLASSES
Courses designated EDD in the class schedule.

600 Organizational Theory and Challenges for Leadership (3)
Organizational theories and their application to the role of educational leaders. Theories from leadership and management literatures, which predicate the conceptual development of the role of educational leadership. Implications of these theories for effective performance as educational leaders.

601 Methods of Research: Quantitatively Based Methods (3)
Introduction to the conceptual and methodological bases of quantitative analysis in educational leadership. Topics include issues of research design, measurement and statistical analysis.

602 Methods of Research: Qualitatively Based Methods (3)
Students acquire the knowledge, dispositions and critical thinking skills necessary for conducting field research, and apply these skills to design and implement applied research projects that create knowledge for solving dilemmas related to educational leadership.

603 Research Elective: Specialization in Qualitatively Based Tools (3)
Prerequisite: EDD 602. Develops advanced skills in identifying, conducting, analyzing and interpreting field research in education toward the purpose of improving education.

604 Applications of Research: Forecasting and Planning (3)
Theories and methods that promote accurate forecasting of the impact of social, economic, political, cultural, academic and demographic trends as they affect educational institutions. Emphasizes how these indicators can be used to engage effective planning.

605 Applications of Research: Collection and Analysis of Assessment Data (3)
Methods of system-level data collection and analysis of outcomes of education. Complexity and efficacy of using various types of data for making judgments at the system level about the effectiveness of instruction across classrooms and schools.

606 Specialization in Quantitatively Based Tools (3)
Prerequisites: Admission to the Ed.D. Program and EDD 601. Statistics, exploratory data analysis, sampling, survey and experimental design; and interview and questionnaire design in the context of using research in planning, change management, policy analysis and program management.

620 Ethical and Legal Dimensions of Leadership (3)
Concepts of ethics (e.g., self-interest, free will, social responsibility, duty) as the basis for legal standards (protection of individual rights, fair treatment, equality of opportunity, duty of care, public trust) through the study of education case law.

621A Leadership of Curricular and Instructional Practices (3)
Current issues in curriculum design and implementation. Explores: forces affecting the curriculum; curriculum continuity and articulation; content trends in the subject areas; appropriate curriculum for students from diverse backgrounds; curriculum censorship; and effective instructional leadership for school curriculum improvement.

621B Higher Education/Community College Systems, Structures and Cultures (3)
Higher education, from Egyptian Era to the diversity of current postsecondary instructions, philosophies and orientations. Organizational development and structures of higher educational systems and the impact of faculty, student and administrative cultures on higher education leaders.

622A Human Dimensions of Education Change (3)
Issues associated with change. Topics include change as a sociopolitical process; sources and purpose of change; coping with multiple reform efforts; decision-making processes; reform implementation; problems of resistance to change in curriculum and instruction; and change as a continuous process.

622B Resource Management and Development (3)
Prerequisite: EDD 600. Practical applications and skills for college resource management in personnel, structures, facilities, technologies, finances, programs and services. Optimizing resources through management and creative leadership that encourage and support collaboration across divisions.
623 The Politics of School Reform (3)
Prerequisite: admission to Joint Doctoral Program and consent of program adviser are required. Theoretical and practical aspects of school reform politics with particular attention to curricular and instructional reform. Topics include: history of school reform; role of city government in school reform; racial and ideological divisions over school reform; and the political challenge of building coalitions for sustainable reform.

624A Social Context of Education Politics, Policy and Governance (3)
Prerequisite: admission to the EDD program. In-depth study of topics relevant to instructional leadership and educational policy cycles. Topics include policy-making process, role of values and interest groups, policy analysis, equality of educational opportunity, how policy efforts are reshaped and systemic reform. Policy issues, such as high-stakes testing, curricular mandates and accountability are used as exemplars.

624B Student Learning and Development (3)
Prerequisite: admission to the program and EDD 600. Student development and learning theories based on cognitive, psychosocial, typology and person-environment perspectives. Role of faculty and others in the collaborative development and implementation of responsive curricula and co-curricula at two- and four-year institutions.

626A Transforming Teaching and Education through Resource Optimization (3)
Through a multidisciplinary approach, explores perspectives for how optimization of resources can transform education. Topics include identification of economic, social and political resources, innovative ways to develop new streams of resources and policies and procedures that increase highly productive ways to use resources.

626B Integrative Seminar in Higher Education/Community College Issues (3)
Prerequisites: admission to the program and EDD 600. Current issues in higher education/community colleges from local to global perspectives reinforcing a multilens view of higher educational studies. Opportunities for interactions with experts and for student to engage in questions/challenges and data-driven, solution-focused discussions.

627 Epistemology, History and Structure of Contemporary Education (3)
Analysis of the epistemological and historical trends that have shaped the structure of contemporary education. Influence of major schools of thought, such as rationalism, empiricism, pragmatism, behaviorism and constructivism, and how modern education structure, curriculum and pedagogy have been influenced by these various perspectives.

630 Leadership for Change and Collaboration (3)
Prerequisites: admission to the program and EDD 600. Research on leadership and organizational change in higher education, multicultural organizational development, forecasting, planning and change analyzed. Explores community relations needed to develop programs responsive to workforce and community needs. Educational codes, laws, policies and practices impacting higher education.

637 Emerging Developments in Subject Areas (2)
Team-taught elective course focusing on: cutting-edge developments in reading/English language arts, math, science and social studies curricula; the critical connection between staff development program and instructional leadership; and methods for engaging parents and the community in support of instructional improvements.

670A Linking Research to Problems of Practice (2)
Assists students in identifying complex problems of educational practice appropriate for doctoral research. Small-group instruction provides coaching that enables students to initiate the research cycle by linking research to problems of practices.

670B Connecting Research Questions to Scholarship in the Discipline (2)
Assists students in writing a critical review of the professional literature pertaining to the research problem each has identified.

670C Written Qualifying Examination (2)
Prepares students for the Ed.D. Qualifying Examination, which is a prerequisite for advancing to candidacy in the doctoral program.

670D Refining Research Questions (2)
Prerequisites: admission to EDD, EDD 670A,B,C, passing EDD Qualifying Examination. In the fourth research support seminar, students further refine their research questions or hypotheses, select the research method to investigate their research question, design a research study that specifies methods to be implemented for data collection and analysis.

670E Proposal Defense Preparation (2)
Prerequisites: admission to EDD, EDD 670A,B,C, passing EDD Qualifying Examination. This seminar assists students to write a defensible dissertation research proposal reflecting high quality scholarship.

670F IRB Approval and Proposal Defense (2)
Prerequisites: admission to EDD, EDD 670A,B,C,D,E, passing EDD Qualifying Examination. In the sixth and final research support seminar, students obtain CSUF IRB approval and submit a revised and completed dissertation research proposal in preparation for the dissertation proposal defense.
MISSION AND OBJECTIVES

Mission Statement

Consistent with the university’s mission, learning is the first priority in the Department of Electrical Engineering.

To implement this mission, the Electrical Engineering programs at CSUF provide the best qualities of teaching, scholarship and professional practice. The Department is committed to facilitating the education of engineering undergraduate and graduate students for their entrance into, and significant contribution to, the engineering profession. Our students are actively engaged and work in collaboration with faculty and staff to acquire and expand knowledge. The objectives for our mission are further elaborated under “Department Educational Objectives.”

Department Educational Objectives

The goals of the Department are:

1. To provide the best of current practice, theory, research and intellectual study in the humanities to prepare students for challenging careers in engineering, strengthen relationships to their communities and contribute ethically and productively to society
2. To educate students who, actively engaged with faculty and staff, work in collaboration to acquire and expand knowledge
3. To provide service to the profession, the state of California, the country and to the worldwide development of engineering

A critical focus of the education, research and service programs with the Department is to afford undergraduates of varying backgrounds and abilities every opportunity for achieving success in the engineering professions.

Program Educational Objectives

To achieve these goals, the faculty and students of the Department of Electrical Engineering, with input from other constituents, have established the following program educational objectives:

1. Technical Growth: Graduates will be successful in modern engineering practice, integrate into the local and global workforce, and contribute to the economy of California and the nation.
2. Professional Skills: Graduates will continue to demonstrate the professional skills necessary to be competent employees, assume leadership roles, and enjoy career success and satisfaction.
3. Professional Attitude and Citizenship: Graduates will become productive citizens with high ethical and professional standards, make sound engineering or managerial decisions, and have enthusiasm for the profession and professional growth.

The level of achievement of PEOs is measured by analyzing the Program Outcomes.

DEPARTMENT CHAIR
Mostafa Shiva

DEPARTMENT OFFICE
Engineering 100A

DEPARTMENT WEBSITE
http://www.fullerton.edu/ecs

PROGRAMS OFFERED
Bachelor of Science in Electrical Engineering
Master of Science in Electrical Engineering
Option in Systems Engineering

FACULTY
Maqsood Chaudhry, David Cheng, John Clymer, George Cohn, Shahin Ghazanshahi, Mohinder Grewal, Karim Hamidian, Hassan Hamidi-Hashemi, Jidong Huang, Young Kwon, Chennareddy Reddy, Mostafa Shiva, Fleur Tehrani, Jesus Tuazon, Raman Unnikrishnan

ADVISERS
Undergraduate program adviser:
David Cheng
Graduate program coordinator:
Mohinder Grewal
Graduate admissions:
Mohinder Grewal

All department full-time faculty serve as advisers; see Electrical Engineering bulletin board for names, office hours and room numbers.
Program Outcomes

1. An ability to apply knowledge of mathematics, science, and engineering
2. An ability to design and conduct experiments, as well as to analyze and interpret data
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufac turability and sustainability
4. An ability to function on multi-disciplinary teams
5. An ability to identify, formulate, and solve engineering problems
6. An understanding of professional and ethical responsibility
7. An ability to communicate effectively
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
9. A recognition of the need for, and an ability to engage in, lifelong learning
10. A knowledge of contemporary issues
11. An ability to use the techniques, skills and modern engineering tools necessary for engineering practice

2 + 2 Articulated Program with Community Colleges

The department has developed 2+2 articulation agreements with community colleges to provide students seamless transfer to the CSUF Electrical Engineering Program. This allows full-time students, taking the courses specified by the Electrical Engineering Department each semester, to graduate in two years following transfer to CSUF.

INTRODUCTION

The Bachelor of Science degree in Electrical Engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700. The electrical engineering program provides the students with the knowledge of basic and advanced topics in the areas of design and analysis of VLSI and electronic circuits, design and analysis of computer architecture, microprocessors, communication systems, signal processing, and control systems. This program develops an ability to apply design and analysis knowledge to the practice of electrical engineering in an effective and professional manner. This knowledge can be applied to various engineering practices in aerospace, computer, electrical, electronics and other applied fields.

High School Preparation

The entering freshman’s preparation should include two years of algebra, geometry, trigonometry and one year of physics or chemistry. Students deficient in mathematics must take special preparatory courses, i.e., Mathematics 125, which will not carry credit for the major. (See Mathematics Section for Entry Level Mathematics test and Math-Science Qualifying Examination requirements.)

Transfer Students

A transfer student shall complete a minimum of 30 units in residence, at least 15 of which shall be taken in upper-division engineering courses. Work taken at another college or university on which a grade of “D” (1.0) was earned may not be substituted for upper-division courses.

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

The undergraduate program requirements for the Bachelor of Science in Electrical Engineering comprise four major segments: foundation courses in mathematics and the physical sciences; general education courses in the arts, humanities, social sciences, biological sciences and other related areas; and a sequence of courses to fulfill the requirements of the Electrical Engineering degree.

Undergraduate students are required to meet with their academic adviser every semester during the first year and at least once a year thereafter. Students are strongly encouraged to see their academic advisers frequently. All courses taken in fulfillment of the requirements for the bachelor’s degree must be taken for a letter grade, i.e., under grade Option 1. Math 150A must be completed with at least a “C” (2.0) grade. All other mathematics and physical science courses required for the degree must be completed with at least a “C-” (1.7) grade to count as credit towards the degree. Graduate courses are not open to undergraduate students without approval of the program coordinator.

Mathematics and Science Courses (32)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics 150A  Calculus</td>
<td>(4)</td>
</tr>
<tr>
<td>Mathematics 150B  Calculus</td>
<td>(4)</td>
</tr>
<tr>
<td>Mathematics 250A  Multivariate</td>
<td>(4)</td>
</tr>
<tr>
<td>Mathematics 250B  Introduction to</td>
<td>(4)</td>
</tr>
<tr>
<td>Linear Algebra and Differential</td>
<td></td>
</tr>
<tr>
<td>Equations</td>
<td></td>
</tr>
<tr>
<td>Chemistry 115  Introductory</td>
<td>(4)</td>
</tr>
<tr>
<td>General Chemistry</td>
<td></td>
</tr>
<tr>
<td>Physics 225, 225L  Fundamental</td>
<td>(4)</td>
</tr>
<tr>
<td>Physics: Mechanics and Lab</td>
<td></td>
</tr>
<tr>
<td>Physics 226, 226L  Fundamental</td>
<td>(4)</td>
</tr>
<tr>
<td>Physics: Electricity and Magnetism</td>
<td>(4)</td>
</tr>
<tr>
<td>and Lab</td>
<td></td>
</tr>
<tr>
<td>Physics 227, 227L  Fundamental</td>
<td>(4)</td>
</tr>
<tr>
<td>Physics: Waves, Optics, and Modern</td>
<td>(4)</td>
</tr>
<tr>
<td>Physics and Lab</td>
<td></td>
</tr>
</tbody>
</table>

General Education Courses

I. Core Competencies (9)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Oral Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>Honors 101B, Human Comm 100, or Human Comm 102</td>
<td></td>
</tr>
<tr>
<td>B. Written Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>English 101</td>
<td></td>
</tr>
<tr>
<td>C. Critical Thinking</td>
<td>(3)</td>
</tr>
<tr>
<td>Honors 101A; Philosophy 105, 106;</td>
<td></td>
</tr>
<tr>
<td>Psychology 110; Reading 290; or</td>
<td></td>
</tr>
<tr>
<td>Human Comm 235</td>
<td></td>
</tr>
</tbody>
</table>

II. Historical and Cultural Foundations (9)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Development of World Civilization</td>
<td>(3)</td>
</tr>
<tr>
<td>History 110A or 110B</td>
<td></td>
</tr>
</tbody>
</table>
B. American History, Institutions and Values (6)
   1. American History (3)
      Afro Ethnic Studies 190, American Studies 201, Chicano 190, History 180, 190, or Honors 201A
   2. Government (3)
      Poli Sci 100

III. Disciplinary Learning (26)
   A. Mathematics and Natural Sciences (11)
      1. Mathematics
         Mathematics 150A (4)
      2. Natural Sciences
         a. Physical Science
            Physics 225, 225L (4)
         b. Earth and Astronomical Sciences
            Not applicable for engineering majors
      c. Life Science
         Biology 101 (3)
   B. Arts and Humanities (9)
      1. Introduction to the Arts (3)
         Art 101, 201A, 201B, 311, 312, Dance 101, Music 100, Theater 100
      2. Introduction to the Humanities (3)
         Any lower-division course in this category listed in the current class schedule
      3. Implications, Explorations and Participatory Experience in the Arts and Humanities (3)
         Any upper-division course in this category in the current class schedule
   C. Social Sciences (6)
      1. Introduction to the Social Sciences (3)
         EGEE 401
      2. Implications, Explorations and Participatory Experience in the Social Sciences (3)
         Any upper-division course in this category listed in the current class schedule

IV. Lifelong Learning
   This category is not applicable to engineering majors

V. Cultural Diversity
   Take at least one asterisked (*) course in Sections III.B.3 or III.C.2

Upper-Division Writing Requirement
   In addition to the Examination in Writing Proficiency (EWP), all of the following courses are required to fulfill the upper-division English writing requirement:
   EGEE 303L Electronics Laboratory (1)
   EGEE 303L Electronic Circuits Laboratory (1)
   EGEE 303L Power Laboratory (1)
   EGEE 485 Electrical Engineering Design Projects Laboratory (3)
   OR EGEE 485L Digital Computer Design Lab (3)
   Written work for these courses must meet professional standards. All these courses must be passed with at least a “C” (2.0) grade.

Required Courses in Electrical Engineering (50 units)
   Enrollment in these courses is limited to students who meet the prerequisites.
   CPSC 120 Introduction to Programming (3)
   EGEE 215 Solving Engineering Problems using MATLAB (1)
   EGEE 203 Electric Circuits (3)
   EGEE 203L Electric Circuits Lab (1)
   EGEE 245 Computer Logic and Architecture (3)
   EGEE 245L Computer Logic and Architecture Lab (1)
   EGEE 280 Microcontrollers (3)
   EGEE 281 Designing with VHDL (2)
   EGEE 303 Electronics (3)
   EGEE 303L Electronics Lab (1)
   EGEE 308 Engineering Analysis (3)
   EGEE 309 Network Analysis (3)
   EGEE 310 Electronic Circuits (3)
   EGEE 310L Electronic Circuits Lab (1)
   EGEE 311 Field Theory and Transmission Lines (3)
   EGEE 313 Introduction to Electromechanics (3)
   EGEE 313L Power Laboratory (1)
   EGEE 323 Engineering Probability and Statistics (3)
   EGEE 401 Engineering Economics and Professionalism (3)
   EGEE 407L Digital Computer Design Lab (3)
   OR EGEE 485 Electrical Engineering Design Projects (3)
   EGEE 409 Introduction to Linear Systems (3)
   Note: EGEE 203, 303, 303L, 310L, 313L, 485 and 407L must be passed with at least a “C” (2.0) grade.

Technical Electives in Electrical Engineering (14 units)
   Before enrolling in any elective course, approval of the adviser must be obtained. At least three-five units of design content must be included. Senior project, EGEE 497 (1-3), and Independent Study, EGEE 499 (1-3), are elective courses; the student must complete a study application form and submit it for approval to the supervising faculty member and the department chair prior to the semester in which the coursework is to begin.

VLSI and Electronic Circuits
   EGEE 404 Introduction to Microprocessors and Microcomputers (3)
   EGEE 404L Microprocessor Laboratory (1)
   EGEE 410 Electro-Optical Systems (3)
EGEE 442  Electronic Circuits (3)
EGEE 445  Digital Electronics (3)
EGEE 448  Digital Systems Design with FPGA (3)
EGEE 455  Microelectronics and Nano Devices (3)
EGEE 465  Introduction to VLSI Design (3)

Communication Systems and Signal Processing
EGEE 404  Introduction to Microprocessors and Microcomputers (3)
EGEE 410  Electro-Optical Systems (3)
EGEE 420  Introduction to Digital Filtering (3)
EGEE 442  Electronic Circuits (3)
EGEE 443  Electronic Communication Systems (3)
EGEE 448  Digital Systems Design with FPGA (3)
EGEE 480  Optical Engineering and Communications (3)
EGEE 483  Introduction to Global Positioning Systems (GPS) (3)
EGEE 483L  Global Positioning Systems Lab (2)

Control Systems
EGEE 404  Introduction to Microprocessors and Microcomputers (3)
EGEE 416  Feedback Control Systems (3)
EGEE 420  Introduction to Digital Filtering (3)
EGEE 424  Computer Simulation of Continuous Systems (3)
EGEE 425  Introduction to Systems Engineering (3)
EGEE 483  Introduction to Global Positioning Systems (GPS) (3)

Computer Engineering
EGGN 403  Computer Methods in Numerical Analysis (3)
EGEE 404  Introduction to Microprocessors and Microcomputers (3)
EGEE 404L  Microprocessor Lab (1)
EGEE 406  Design Applications with Microcontroller and FPGA (3)
EGEE 407  Digital Computer Architecture and Design I (3)
EGEE 407L  Digital Computer Design Lab (3)
EGEE 412  Digital Computer Architecture and Design II (3)
EGEE 425  Introduction to Systems Engineering (3)
EGEE 445  Digital Electronics (3)
EGEE 448  Digital Systems Design with FPGA (3)
EGEE 455  Microelectronics and Nano Devices (3)
EGEE 465  Introduction to VLSI Design (3)

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

To qualify for admission in conditionally classified standing, applicants must meet the following university and departmental requirements:

1. Bachelor’s degree from a regionally accredited institution

2. Bachelor’s degree in an engineering program accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700

3. Good standing at the last institution attended

4. Minimum GPA of 2.5 in the last 60 semester (90 quarter) units of electrical engineering courses attempted

Students with grade deficiencies, degrees from non-ABET accredited universities or undergraduate majors other than Electrical Engineering may be considered for conditional admission. However, any deficiencies must be made up prior to advancing to classified standing and prior to beginning coursework for the master’s degree. Requirements for fulfilling deficiencies include a minimum of six units of adviser-approved coursework. Deficiencies must be completed with minimum GPA of 3.0.

Each applicant file will be reviewed by the department graduate admissions adviser. Upon admission, the applicant is required to make an appointment with the graduate program coordinator. The program coordinator will assign a faculty adviser based on the student’s areas of interest and career objectives.

Classified Standing

A student who meets the above requirements for admission to conditionally classified standing may be granted classified standing contingent upon:

1. Completion of all required deficiency coursework

2. Fulfillment of the university writing requirement. Students with degrees from American universities must show proof of meeting an upper-division writing requirement, pass the EWP, or complete English 301 or 360. Students who have degrees from foreign universities must pass the Examination in Writing Proficiency (EWP) or complete English 301 or 360 with a grade of “C” (2.0) or better. Also refer to the Admission Requirements section of this catalog for additional international student requirements.

3. Development and approval of a study plan prior to completing nine units toward the 30-unit degree requirement

Students must meet with a faculty adviser to set up a study plan. Classification is not granted until the study plan is approved by the faculty adviser, the department chair, and the Office of Graduate Studies. Any subsequent changes to the study plan must have prior written approval by the faculty adviser and department chair.

Study Plan

The study plan consists of a minimum of 30 units of adviser-approved upper-division and graduate-level coursework which must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

Required Mathematics Courses (6 units)
EGGN 403  Computer Methods in Numerical Analysis (3)
EGEE 580  Analysis of Random Signals (3)

Note: If one of the above courses has been completed, EGEE 518 Digital Signal Processing, will satisfy the requirement.
Concentration Courses (15 units)

A student is required to select a minimum of 15 units in Electrical Engineering. These units may be 400- and 500-level courses and are selected according to the student’s area of interest. Coursework may focus on the following areas: Communications Systems/Signal Processing, Computer Engineering, Control Systems, Microelectronics and Circuit Theory, and Systems Engineering. Graduate Project, EGEE 597 (1-3), and Thesis, EGEE 598 (1-6), are considered concentration courses.

Other Courses (9 units)

Elective units should be taken in Electrical Engineering or a related engineering field and are subject to adviser approval.

Exam/Thesis/Project Option

Subject to approval by the faculty adviser, students may select one of the following options for final review by the department graduate committee:

1. Satisfactory completion of a final oral comprehensive examination on coursework, OR
2. Satisfactory completion of a formal project EGEE 597 (3 units) and a final oral comprehensive examination on coursework, OR
3. Satisfactory completion and oral defense of a thesis EGEE 598 (3-6 units)

A typed draft of the thesis or project report must be submitted to the student’s thesis or project committee no later than four weeks prior to the last day of the semester in which the oral defense of the thesis or project report is scheduled.

The thesis or project committee consists of a minimum of three members of the Electrical Engineering faculty. The thesis should cover original research and be prepared according to university guidelines. Committee questions will be directed toward defense of the project report and include questions related to coursework.

Guidelines for the preparation of theses and formal reports are available in the Electrical Engineering Department office and the university Graduate Studies office.

Students requesting Graduate Project (EGEE 597), Thesis (EGEE 598) or Independent Study (EGEE 599) must complete a study application form and submit it for approval to the supervising faculty member and department chair prior to the semester in which the coursework is to begin.

Advancement to Candidacy

Advancement to candidacy requires that the student file a graduation check prior to the beginning of the final semester (see class schedule for deadlines). Completion of requirements for the degree include a minimum GPA of 3.0 on all study plan coursework, successful completion of a comprehensive examination or oral defense of a thesis or project, and recommendation by the Electrical Engineering faculty and Office of Graduate Studies.

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING OPTION IN SYSTEMS ENGINEERING

Students seeking this option must meet the same requirements as the program in Electrical Engineering. In addition students selecting the systems engineering option will be required to include the following five courses in their study plans:

EGEE 580 Analysis of Random Signals (3)
EGEE 581 Theory of Linear Systems (3)
EGEE 582 Linear Estimation Theory (3)
EGEE 585 Optimization Techniques in Systems Engineering (3)
EGEE 587 Operational Analysis Techniques in Systems Engineering (3)

The remainder of the systems engineering study plan will include other engineering courses with an emphasis in a particular field, such as information systems, control theory, computer systems, civil or mechanical engineering applications. Students possessing a Bachelor of Science in Engineering may elect to include up to nine units from approved subjects offered by the Mihaylo College of Business Administration and Economics as a part of their study plan.

ELECTRICAL ENGINEERING COURSES

Courses are designated as EGEE in the class schedule.

203 Electric Circuits (3)
Prerequisites: Physics 226; Math 250A; corequisite: Computer Science 120. Units; Ohm’s and Kirchhoff’s laws; mesh and nodal analysis, superposition; Thevenin and Norton theorems; RL and RC transients; phasors and steady state sinusoidal analysis; response as a function of frequency; current, voltage, and power relationships; polyphase circuits.

203L Electric Circuits Laboratory (1)
Pre- or corequisite: EGEE 203. Simple resistive RL and RC circuits, electrical measurement techniques, verification of basic circuit laws through hard-wired breadboarding and CAD circuit simulation. (3 hours laboratory)

215 Solving Engineering Problems Using MATLAB (3)
Prerequisite: CPSC 120. Formulating, solving, verifying and reporting engineering problems such as control, signal processing, and communication systems and engineering, math, and physics problems such as engineering/scientific computations and operations research using the MATLAB/SIMULINK program. (3 hours laboratory)

245 Computer Logic and Architecture (3)
Prerequisite: CPSC 120. Logic design and organization of the major components of a computer, analysis and synthesis of combinational and sequential logics, analysis of the arithmetic, memory control and I/O units, concepts in computer control.
245L Computer Logic and Architecture Lab (1)
Pre- or corequisite: EGEE 245. Computer-Aided Design (CAD) of digital logic circuits, including decoders, multiplexes, adders and subtracters, counters, shift registers, and Arithmetic Logic Unit (ALU) of a computer. After verifying the CAD design through simulation, the circuits are built on a protoboard. (3 hours laboratory)

280 Microcontrollers (3)
(Same as Computer Engineering 280)

281 Designing with VHDL (2)
(Same as Computer Engineering 281)

303 Electronics (3)
Prerequisites: Physics 227 and EGEE 203. Characteristics and elementary applications of semiconductor diodes, field-effect transistors and bipolar-junction transistors, and operational amplifiers; mid-frequency small-signal analysis and design of transistors.

303L Electronics Laboratory (1)
Prerequisites: EGEE 203L and English 101. Corequisite: EGEE 303. Semiconductor diodes, transistors and elementary electronic circuits through hard-wired breadboarding, CAD electronic simulation and analysis. (3 hours laboratory)

308 Engineering Analysis (3)
(Same as EGCE/EGME 308)

309 Network Analysis (3)
Prerequisites: EGEE 203 and EGGN 308. Pre- or corequisite: EGEE 203L. Performance of RLC circuits; complex frequency and the s-plane; frequency response and resonance; network topology; two-port network characterization; classical filter theory.

310 Electronic Circuits (3)
Prerequisites: EGEE 303 and 309. Continuation of 303, analysis and design of multistage and feedback amplifiers; frequency characteristics of amplifiers, frequency characteristics and stability of feedback amplifiers, differential amplifiers, design of IC circuit biasing, operational amplifiers and their applications.

310L Electronic Circuits Lab (1)
Prerequisites: EGEE 303L. Pre- or corequisite: EGEE 310. Computer-Aided Design (CAD) of electronic circuits, including multi-stage feedback amplifiers, linear and integrated circuits; ADC and DAC and wireless design projects. After verifying the CAD design through simulation, the circuits are built on a protoboard. (3 hours laboratory)

311 Field Theory and Transmission Lines (3)
Prerequisites: EGEE 203, Physics 226, Math 250B. Introduction to waves and phasors; analysis and design of transmission lines; electrostatics and magnetostatics; boundary value problems; Maxwell equations.

313 Introduction to Electromechanics (3)
Prerequisites: EGEE 309 and 311. Electromagnetic fields and circuits; transformers, saturation effects. Simple electro-mechanical systems. Circuit models, terminal characteristics and applications of DC and AC machines.

313L Power Laboratory (1)
Prerequisite: EGEE 303L. Pre- or corequisite: EGEE 313. Experiments in electromagnetic fields and circuits, transformers and electromechanical systems such as AC and DC machines (3 hours laboratory)

323 Engineering Probability and Statistics (3)
Prerequisite: Math 250A or 270B. Set theory: axiomatic foundation of probability; random variables; probability distribution and density functions; joint, conditional and marginal distributions; expected values; distribution of functions of random variables; central limit theorem; estimation.

401 Engineering Economics and Professionalism (3)
Prerequisites: Math 150A and junior or senior standing in Engineering. Development, evaluation and presentation of design alternatives for engineering systems and projects using principles of engineering economy and cost benefit analysis. Engineering profession, professional ethics and related topics. (Not available for use on graduate study plans.) (Same as Civil Eng 401/Computer Eng 401)

404 Introduction to Microprocessors and Microcomputers (3)
Prerequisites: EGEE 245L and 280. Hardware and software concepts in microprocessors, processor family chips, system architecture, CPU, input/output devices, interrupts and DMA, memory (ROM, RAM), electrical and timing characteristics, assembly language programming.

404L Microprocessor Laboratory (1)
Prerequisite: EGEE 245L. Pre- or corequisite: EGEE 404. I/O interfacing with a microprocessor system; familiarization with the operating system, assembler, debugger and emulator; design of keyboard, LCD display, RS 232, D/A converter, A/D converter and floppy disk interfaces. (3 hours laboratory)

406 Design Applications with Microcontroller and FPGA (3)
Prerequisites: EGEE 245, 245L and 280. Digital system application design using microcontrollers, FPGAs and CPLDs including programming hardware interfacing, A/D conversion, CLB, logic arrays, interconnections, testing and simulations.

407 Digital Computer Architecture and Design I (3)
Prerequisites: EGEE 245L and 280. Organization and design of major components of a digital computer, including arithmetic, memory, input, output and control units. Integration of units into a system and simulation by a computer design language.
407L Digital Computer Design Laboratory (3)
Prerequisites: EGEE 245, 303L, and 407. Design and implementation of a small digital computer; adders, arithmetic unit, control unit, memory control unit, memory unit and program unit. May be taken in lieu of EGEE 485. (1 hour lecture, 6 hours laboratory).

409 Introduction to Linear Systems (3)
Prerequisite: EGEE 309. Development of time and frequency domain models for physical systems. Linearization process and representation with block diagrams and signal flow graphs; discrete-time systems and digital signals including use of Z-transforms; stability theory of continuous and discrete time systems.

410 Electro-Optical Systems (3)
Prerequisite: EGEE 311. Introduction to electro-optics; optical radiation characteristics and sources; geometrical and physical optics; lasers and electro-optical modulation; quantum and thermal optical radiation detectors; detector performance analysis; electro-optical systems modeling and analysis; application examples.

412 Digital Computer Architecture and Design II (3)
Prerequisite: EGEE 307. Modern architectures of computer systems, their CPU structure, memory hierarchies and I/O processors; conventional and microprogrammed control; high-speed and pipelined ALU; cache, virtual and interleaved memories, DMA, interrupts and priority.

416 Feedback Control Systems (3)
Prerequisite: EGEE 409. Feedback control system characteristics; stability in the frequency and time domains; analysis and design of continuous-time systems using root-locus, Bode and Nyquist plots, Nichols chart and applications.

420 Introduction to Digital Filtering (3)
Prerequisite: EGEE 409. Discrete-time signals and systems; solution of difference equations; Fourier transform for a sequence; Z-transform; discrete Fourier transform; FIR and IIR realizations; design of digital filters.

424 Computer Simulation of Continuous Systems (3)
Prerequisites: CPSC 120; EGEE 215 and 308. Using digital computer for simulation of physical systems modeled by ordinary differential equations; problem formulation, in-depth analysis of two integration methods, and the use of a general purpose system simulation program such as CSSL.

425 Introduction to Systems Engineering (3)
Prerequisites: EGEE 245, EGEE 323, or Computer Science 240 and Math 338 for Computer Science majors. Introduction to systems engineering analysis and the systems approach; introduction to modeling, optimization, design and control; systems requirements analysis; analytical and computational solution methods; information processing; integrated systems.

430 Fuzzy Logic and Control (3)
Prerequisite: EGEE 409. Fuzzy logic and systems; comparison of classical sets, relations and operators with fuzzy sets, relations and operators; fuzzy arithmetic and transformations; classical predicate logic and reasoning versus fuzzy logic and approximate reasoning. Applications to rule-based systems and control systems.

442 Electronic Circuits (3)
Prerequisite: EGEE 310. Power amplifiers and tuned amplifiers; RF amplifiers; modulation and detection circuits; oscillators; and operational amplifier applications.

443 Electronic Communication Systems (3)
Prerequisites: EGEE 310 and 323 or equivalent. Principles of amplitude, angular and pulse modulation, representative communication systems, the effects of noise on system performance.

445 Digital Electronics (3)
Prerequisites: EGEE 245 and 303. RC circuits, attenuators, compensation and scope probe. Logic circuits: DTL, TTL, STTL, LSTTL and ECL. Fanout, noise-immunity, switching speed, power consumption, input-output characteristics. Design and analysis of MOS logic circuits; PMOS, NMOS and CMOS gates, flip-flops, shift registers and memory circuits.

448 Digital Systems Design with FPGA (3)
Prerequisites: EGEE 245, 281 and 303. Basic concepts and characteristics of digital systems, traditional logic design, LSI/VLSI logic design with VHDL, combinational and sequential logic, and their applications; timing and control, race conditions and noise, microcomputers, computer-aided programming, development systems, microcomputer system hardware design, input/output devices.

455 Microelectronics and Nano Devices (3)
Prerequisites: EGEE 303 and 311. Quantum mechanical principles, crystal structure, energy band, carrier transport, carrier generation and recombination, p-n junction, bipolar transistor, MOSFET, MESFET and related devices, basic microwave and optoelectronic technology, crystal growth and fabrication, introduction to nano structure, nano devices and technology.

460 Introduction to Cellular Mobile Communications Systems (3)
Prerequisite: EGEE 443. Introduction to wireless mobile telecommunications, description and analysis of cellular radio systems, co-channel interference reduction, channel capacity and digital cellular systems.

465 Introduction to VLSI Design (3)
Prerequisites: EGEE 245 and 303. Computer-aided design of VLSI circuits. MOS device structure, design rules, layout examples, CMOS standard cells. Speed power trade off, scaling, device and circuit simulation. VLSI design software tools. Routing method system design, Design Project. Chip fabrication through MOSIS service, testing.
480 Optical Engineering and Communications (3)
Prerequisites: EGEE 311 and Physics 227. Optics review, lightwave fundamentals, integrated optic waveguides, first design of fiber optic system, analog and digital modulation, digital fiber optic system design, baseband coding, digital video transmission in optical fiber, optical emitters and receivers, coherent optical communication, measurements in fiber optic telecommunication.

483 Introduction to Global Positioning Systems (GPS) (3)

483L Global Positioning System Lab (2)
Corequisite: EGEE 483. Use and description of Novatel, Magelon, Abtech, Collins and Tribel receivers. Computation of GPS and GEO stationary satellite positions from ephemeris data available on almanac. Errors such as selective availability, ionospheric, tropospheric, satellite ad receiver will be calculated and compensated in the data. (1 hour lecture, 3 hours laboratory)

485 Electrical Engineering Design Projects Laboratory (3)
Prerequisites: EGEE 280, 310L and 323. Practical aspects of design and project construction. Instructor-approved design project in electrical engineering, inter-disciplinary projects. Use of CAD program for schematic capture and simulation. Construction of final hardware according to the design specification. Performance evaluation and demonstration of project. (1 hour lecture, 6 hours laboratory).

497 Senior Project (1-3)
Prerequisites: consent of adviser and instructor. Directed independent design project.

499 Independent Study (1-3)
Prerequisite: approval of study plan by adviser. Specialized topics in engineering selected in consultation with and completed under the supervision of the instructor. May be repeated for credit.

503 Information Theory and Coding (3)
Prerequisite: EGEE 323. Information measures, probabilistic studies of the transmission and encoding of information, Shannon’s fundamental theorems, coding for noisy channels.

504A Linear Network Synthesis (3)

507 Detection Theory (3)

510 Optics and Electromagnetics in Communications (3)
Prerequisite: EGEE 480. Plane-wave propagation and reflection from multiple layers; two- and three-dimensional boundary value problems; waveguides and resonant cavities; radiation from apertures and antennas; electromagnetic properties of materials, gases and plasmas; significant coverage of engineering applications.

518 Digital Signal Processing (3)
Prerequisite: EGEE 420. Discrete Fourier transform; fast Fourier transform; Chirp Z-transform; discrete time random signals; floating-point arithmetic; quantization; finite word length effect in digital filters; spectral analysis and power spectrum estimation.

519A Parallel and Multiprocessing Systems (3)
Prerequisite: EGEE 412. Parallel and multiprocessing systems, including hypercubes, shared distributive memory architectures, array and pipelines processors, communication protocols, routing algorithms and hands-on parallel programming experience on CSUF Hypercube System.

519B Computer Networks and the Internet (3)
Prerequisite: EGEE 419. Computer networking with LAN, WAN to the Internet including ATM, Ethernet, wireless and Bluetooth technology, design of communication protocols, transmission media, security and control.

522 Spread Spectrum Communications (3)

523A VLSI and Nano Technology and Devices (3)
Prerequisite: EGEE 455 or equivalent. Silicon crystal, PN junction physics, oxide and interface physics, wafer fabrication technology; oxidation, diffusion, ion-implantation, epitaxy, photolithography, thin films process. Layout design principle for integrated circuits. Nano-electronic devices and technology.

523B CMOS VLSI Design (3)
Prerequisites: EGEE 465 and EGEE 448 or equivalent. Surface physics of MOS system, MOS device physics. Short channel effect; hot carrier effect, subthreshold conduction. CMOS fabrication process. Layout design rules. Scaling design and analysis of CMOS circuits. Standard cell method. CAD design and SPICE simulation.

526 Digital Control Systems (3)
Prerequisite: EGEE 416. Analysis, design and implementation of digital control systems; Z-transform methods; frequency domain and state-space approach for discrete-time systems.
527 Fault Diagnosis and Fault-Tolerant Design (3)
Prerequisite: EGEE 307. Fault diagnosis and fault-tolerant design of digital systems; fault diagnosis test for combinational and sequential circuits, reliability calculations, multiple hardware redundancy, error detection and correcting codes, software redundancy and fault-tolerant computing.

529 Principles of Neural Systems (3)

531 Phase-Locked and Frequency Feedback Systems (3)
Prerequisite: EGEE 580 or consent of instructor. Theory of noise and linear systems, FM feedback principles. Theory and design of phase-locked loops and their applications in communication and control.

537 Satellite Communications (3)
Prerequisite: EGEE 443. Satellite systems, link analysis, propagation effects, SNR/CNR calculations, modulation schemes, TDMA, FDMA, CDMA techniques.

557 Microprogramming and Embedded Microprocessors (3)
Prerequisites: EGEE 412 and EGEE 448. Introduction to microprogramming concepts and applications to the control unit of a computer, microprogrammable control, arithmetic-logic unit, implementation of an embedded process on FPGA and interfacing with external memories.

558A Microprocessors and System Applications I (3)
Prerequisites: EGEE 404 and 404L. Microprocessors and micro-computers, their related software systems, system design with microprocessors, applications in peripheral controllers, communication devices and multiprocessing systems.

558B Microprocessors and Systems Applications II (3)
Prerequisite: EGEE 558A. Advanced microprocessor architecture and their applications to microcomputer networking; RISC VS CISC architectures, communication protocol, distributed-operating system, and local area networks.

559 Introduction to Robotics (3)
Prerequisite: EGEE 416 or consent of instructor. Science of robotics from an electrical engineering standpoint, including modeling, task planning, control, sensing and robot intelligence.

580 Analysis of Random Signals (3)
Prerequisites: EGEE 323 and 409 or equivalent. Random processes pertinent to communications, controls and other physical applications, Markov sequences and processes, the orthogonality principle.

581 Theory of Linear Systems (3)
Prerequisites: EGEE 416 and EGGN 403. State space analysis, linear spaces, stability of systems; numerical methods of linear systems analysis and design.

582 Linear Estimation Theory (3)
Prerequisites: EGEE 580 and 581. Mathematical models of continuous-time and discrete-time stochastic processes; the Kalman filter, smoothing and suboptimal filtering computational studies.

585 Optimization Techniques in Systems Engineering (3)
Prerequisite: EGGN 403 or Math 340 for Computer Science majors. Calculus of variations, optimization of functions of several variables, Lagrange multipliers, gradient techniques, linear programming, and the simplex method, nonlinear and dynamic programming.

587 Operational Analysis Techniques in Systems Engineering (3)
Prerequisite: EGEE 323 or Math 338 for Computer Science majors. Operational research models; applications of probability theory to reliability, quality control, waiting line theory, Markov chains; Monte Carlo methods.

597 Project (1-3)
Prerequisite: consent of adviser. Classified graduate students only. Unless approved by the department chair, EGEE 597 cannot be taken if EGEE 598 or 599 is already taken.

598 Thesis (1-6)
Prerequisite: consent of adviser. Classified graduate students only. Unless approved by the department chair, EGEE 598 cannot be taken if EGEE 597 is already taken.

599 Independent Graduate Research (1-3)
Prerequisite: consent of adviser. May be repeated for credit. Unless approved by the department chair, EGEE 599 cannot be taken if EGEE 597 is already taken.
DEPARTMENT CHAIR
Karen S. Ivers

DEPARTMENT OFFICE
Education Classroom Building 324

DEPARTMENT WEBSITE
http://ed.fullerton.edu/edel

PROGRAMS OFFERED
Master of Science in Education
Concentrations:
- Bilingual/Bicultural (Spanish-English)
- Educational Technology
- Elementary Curriculum and Instruction
- Computing Certificate
Basic Teacher Credential Programs
Professional Teacher Preparation Program for the Multiple Subject (Elementary) Credential
Professional Teacher Preparation Program for the Multiple Subject Credential with Bilingual Cross
Cultural Academic Development (BCLAD) Emphasis

FACULTY
Donna Bennett, Janet Boyce, Kim Case, Sharon Chappell, Amy Cox-Petersen, Teresa Crawford, Mildred Donoghue, Loretta Donovan, Barb Finnell, Ana Garza-Dargatz, Earl Gotts, Tim Green, Andrea Guillaume, Karen Ivers, Pablo Jasis, Patricia Keig, Lisa Kirtman, Christine Mayfield, Kathy Murphy, Kim Norman, Terri Patchen, Nawang Phuntsog, Jennifer Ponder, Kristine Quinn, Chris Renne, Christine Valenciana, Michelle VanderVeldt, Evelyn Weisman, Lisa Winstead, Ruth Yopp-Edwards, Hallie Yopp Slowik

Awards in Education
Outstanding Graduate Student
Emma H. Holmes Mathematics Award
Bernard Kravitz Multicultural Project Award
Outstanding Curriculum Project
Edwin Carr Fellowship

Application Deadlines
The deadlines for completing online applications to credential programs are Feb. 28 for the fall semester and Sept. 30 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections. For master’s programs, check the CSU Mentor website and the department office for initial filing and cutoff dates.

THE PROFESSIONAL TEACHER PREPARATION PROGRAM FOR THE MULTIPLE SUBJECT (ELEMENTARY) CREDENTIAL PROGRAM

The Professional Teacher Preparation Program for the Multiple Subject (Elementary) Credential prepares individuals to teach in self-contained classrooms at the pre-K through 12th grade level where multiple subjects are taught. Candidates may select either a two- or three-semester credential program sequence, or a three-semester sequence that can include teaching on an internship credential. The Department also offers two Bilingual Cross-Cultural and Academic Development (BCLAD) Emphasis options: the Asian BCLAD and the Spanish BCLAD. Applicants to the credential program must either hold a bachelor’s degree or have completed their general education and major requirements. Applicants must pass the CSET before entering the program.

Freshmen may opt to simultaneously pursue an undergraduate major and a teaching credential through the Streamlined Teacher Education Program (STEP), which leads to a Multiple Subject Credential or to a basic Education Specialist Credential. The section on Teaching Credentials in this catalog contains more information on STEP.

California law requires an academic major; there is no major in education. Students who opt for STEP select a Liberal Studies or Child and Adolescent Development major. Students who opt for the fifth-year Multiple Subject Credential Program devote their first three or four years of work to completing requirements for the baccalaureate degree with an academic major. Majors in the social sciences, humanities or natural sciences provide excellent background for careers in elementary school teaching. Individuals interested in working as bilingual teachers may consider a major in a non-English language. Students are encouraged to attend a program overview during the junior and senior year. Overview schedules may be obtained through the Office of Admissions to Teacher Education. For more information about STEP contact the Center for Careers in Teaching in Humanities 113 or by phone at 657-278-7130.
Two-Semester Program Sequence

The Multiple Subject Credential Program two-semester sequence is as follows:

First Semester
Ed El 430 Foundations in Elementary School Teaching (3)
Ed El 433 Language Arts and Reading Instruction in the Public Schools (3)
Ed El 434 Methods and Inquiry for Teaching English Learners (2)
Ed El 435 Mathematics Curriculum and Instruction in Elementary School Teaching (3)
Ed El 438 Supervised Fieldwork in Elementary Teacher Education (2)

Second Semester
Ed El 429 Integrated Curriculum and Instruction in the Elementary School (3)
Ed El 436 Science Curriculum and Instruction in Elementary School Teaching (2)
Ed El 437 Social Studies Curriculum and Instruction in Elementary School Teaching (2)
Ed El 439 Student Teaching in the Elementary School (9)
Ed El 451 Community, School and Classroom Issues (1)
Ed El 452 P.E., Health and Mainstreaming Education (1)
Ed El 453 Teaching Performance Assessment Support (1)

Three-Semester Credential Program Sequence

A three-semester program is also available. This sequence is designed for individuals who wish to take classes during evenings and Saturdays, with limited though required daytime involvement in elementary schools. Student teaching requires a full daytime commitment.

First Semester
Ed El 430 Foundations in Elementary School Teaching (3)
Ed El 433 Language Arts and Reading Instruction in the Public Schools (3)
Ed El 434 Methods and Inquiry for Teaching English Learners (2)
Ed El 435 Mathematics Curriculum and Instruction in Elementary School Teaching (3) Ed El 438 Supervised Fieldwork in Elementary Teacher Education (1)

Second Semester
Ed El 429 Integrated Curriculum and Instruction in the Elementary School (3)
Ed El 436 Science Curriculum and Instruction in Elementary School Teaching (2)
Ed El 437 Social Studies Curriculum and Instruction in Elementary School Teaching (2)
Ed El 438 Supervised Fieldwork in Elementary Teacher Education (1)
Ed El 439 Student Teaching in the Elementary School (4-9)

Ed El 446 Methods and Inquiry for BCLAD Candidates (BCLAD only) (3)
Ed El 450 Visual and Performing Arts Methods: Art, Dance, Drama and Music (1)
Ed El 451 Community, School and Classroom Issues (1)
Ed El 452 P.E., Health and Mainstreaming Education (1)
Ed El 453 Teaching Performance Assessment Support (1)

Third Semester
Ed El 429 Integrated Curriculum and Instruction in the Elementary School (3)
Ed El 436 Science Curriculum and Instruction in Elementary School Teaching (2)
Ed El 439 Student Teaching in the Elementary School (5-9)

Three-Semester Internship Program

The three-semester Intern Credential Programs for Multiple Subject and Multiple Subject BCLAD credentials are three-semester programs to which candidates may apply while completing the first semester of the regular credential preparation program. Admission is contingent on approved full-time employment with a participating district, superior standing in first-semester coursework and student teaching, and recommendations from university and district personnel. The remaining two semesters involve paid teaching internship positions and university coursework. Additionally, some opportunities may arise for candidates in the three-semester non-internship program to pursue internship status. Questions may be directed to the Intern Coordinator. Information about these programs is available in the Office of Admission to Teacher Education.

Both the two- and three-semester credential programs require substantial time commitments. The three-semester credential program requires evening coursework and may require Saturday coursework.

Admission Procedures and Criteria

Admission to the university does not include admission to the Multiple Subject Credential Program. Students must apply for admission to the Multiple Subject Credential Program the semester prior to anticipated enrollment in the program. Filing deadlines are Feb. 28 (to begin the program the following fall) and Sept. 30 (to begin the program the following spring). Check the Admission to Teacher Education website for details and application procedures: http://ed.fullerton.edu/adtep.

Applicants for admission into the Multiple Subject Credential Program are evaluated at several transition points measuring candidates’ progress toward meeting program outcomes as outlined in the College of Education’s conceptual framework. Specifically, these include knowledge (scholarship, breadth of understanding), skills (professional aptitude, physical and mental fitness) and dispositions (character). Evidence related to these criteria that is assessed at time of application includes:
1. Overall grade point average at least 2.75 for the last 60 units
2. Passage of the California Subject Examination for Teachers (CSET)
3. Completion of the California Basic Education Skills Test (CBEST) and passage of the written portion of this test
4. Satisfactory completion of prerequisite courses:
   a. CAS 101 Introduction to Child and Adolescent Development (3)
      OR CAS 312 Human Growth and Development (3)
      OR CAS 315 Child Development (3)
      OR CAS 325A Conception Through Age 8 (3),
      CAS 325B Age 9 Through Adolescence (3)
      OR Psych 361 Developmental Psychology (3)
   b. Ed El 315 Introduction to Elementary Classroom Teaching (3)
   c. Ed El 325 Cultural Pluralism in Elementary Schools (3)
5. Recommendations from academic faculty, school personnel and/or other appropriate persons
6. Autobiography
7. Interview with Education Faculty members

   Program faculty and staff also conduct informal assessments of applicants’ suitability for teaching throughout prerequisite courses and the application process. Further evidence is provided subsequent to application when opportunity is provided for verification of tuberculosis screening and certificate of clearance that verifies the absence of a criminal record.

   Details concerning admission procedures and criteria are available in the Office of Admission to Teacher Education.

Program Continuation
Once admitted, continuation in the program is based on continuous and satisfactory progress as assessed at specific transition points throughout the program, including passage of the California Teaching Performance Assessments (TPA).

Bilingual Cross-Cultural Language and Academic Development (BCLAD) Emphasis
A Multiple Subject Credential with a bilingual-bicultural (Spanish-English) emphasis or with an Asian language emphasis is available. Contact Dr. Evelyn Weisman (eweisman@fullerton.edu) for more information about these programs.

Application for Teaching Credentials
Upon completion of a multiple subject credential program the credential candidate must submit an application to the Commission on Teacher Credentialing through the CSUF credential analyst and verify passage of the Reading Instruction Competence Assessment (RICA). The credential analyst is located in the Credential Preparation Center in College Park 740. Additional information on the credential application process is available in the Credential Preparation Center.

MASTER OF SCIENCE IN EDUCATION (BILINGUAL/BICULTURAL EDUCATION CONCENTRATION)
The program is designed to develop qualified bilingual/bicultural instructors (Spanish-English) who can work as classroom or resource teachers and staff developers. It will help individuals teach others how to provide experiences in the cultural heritage of the target population and develop specific teaching techniques and methods in teaching reading and English as a second language. The program will also help individuals to interpret and implement research related to bilingual/bicultural children. Individuals will become skilled in their abilities to diagnose learning needs for such students and to develop and implement sound educational strategies.

Admission to Graduate Standing: Conditionally Classified
University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted.

Graduate Standing: Classified
A student who meets the admission requirements and the following requirements may be granted classified graduate standing:
1. The development of an approved study plan
2. A basic teaching credential or equivalent experience
3. An approved major (minimum of 24 units upper division or graduate)
4. A 3.0 grade-point average on previous academic and related work
5. Language competence (English and Spanish) as determined by satisfactory interviews or coursework
6. Completion of Spanish 466.

Credit will be given for previous postbaccalaureate studies when possible. Otherwise, well-qualified students may be admitted with limited subject or grade deficiencies, but these deficiencies must be removed.

Study Plan
The adviser-approved 30 units (minimum) on the study plan will include the following:

Core Coursework (9 units)
Ed El 500 Culture and Curriculum (3)
Ed El 511 Survey of Educational Research (3)
Ed El 541 Psychological and Sociological Foundations of Bilingual-Bicultural Education (3)

Concentration Courses (18 units)
Ed El 542 Current Issues and Problems in Bilingual-Bicultural Education (3)
Chicana/o 450 The Chicano and Temporary Issues (3)
Chicana/o 480 The Immigrant and the Chicano (3)

One of the following:
TESOL 509 Advanced Principles of TESOL: Listening/Speaking Focus (3)
TESOL 510 Advanced Principles of TESOL: Reading/Writing Focus (3)

One of the following:
TESOL 527 Second Language Acquisition (3)
TESOL 595 Curriculum and Program Design for TESOL (3)

Elective (3 units)
Elective units are chosen in consultation with and approved by the graduate adviser.

Culminating Experience (3 units)
One of the following:
Ed El 594 Research Seminar (3)
OR Ed El 597 Project (3)
OR Ed El 598 Thesis (3)

For further information consult the graduate program adviser.

MASTER OF SCIENCE IN EDUCATION
(EDUCATIONAL TECHNOLOGY CONCENTRATION)

The Concentration in Educational Technology within the Master of Science in Education is designed to: (1) help classroom teachers upgrade their skills and knowledge about new educational technologies and their role in the classroom; and (2) prepare teachers for technology leadership roles in public and private schools.

Admission to Graduate Standing: Conditionally Classified
University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted.

Graduate Standing: Classified
A student who meets the admission requirements and the following requirements may be granted classified graduate standing:
1. The development of an approved study plan
2. A basic teaching credential or equivalent experience
3. An approved major (minimum of 24 units upper division or graduate)
4. A 3.0 grade-point average on previous academic and related work

Credit will be given for previous post baccalaureate studies when possible. Otherwise well-qualified students may be admitted with limited subject or grade deficiencies, but these deficiencies must be removed.

Study Plan
Core Classes (9 units)
Ed El 511 Survey of Educational Research (3)
Ed El 529 Learning Theory for Classroom Use (3)
Ed El 536 Curriculum Theory and Development (3)

Concentration Courses (18 units)
Ed El 512 Level Two Technology Proficiencies for Teachers in K-8 Schools (3)
OR Ed El 523 Distance Education Issues and Trends in Schools (3)
Ed El 515 Technology and Problem Solving in Schools (3)
Ed El 518A Issues in the Instructional Design of Software for Use in Schools (3)
Ed El 518B Multimedia Development and Instruction in the Classroom (3)
Ed El 522 Web Design for Instruction in Schools (3)
Ed El 590 Technology Professional Development in Schools (3)

Culminating Experience (3 units)
One of the following:
Ed El 594 Research Seminar Including Project (3)
OR Ed El 597 Project (3)
OR Ed El 598 Thesis (3)

MASTER OF SCIENCE IN EDUCATION (ELEMENTARY CURRICULUM AND INSTRUCTION CONCENTRATION)
The program is designed to help career classroom teachers upgrade their skills, become informed about new ideas in elementary teaching, and prepare for curriculum and instructional leadership in one or more of the following areas: elementary classroom teaching; technology in education; meeting the needs of diverse learners; early childhood education; math/science education; professional inquiry; and staff development in public and private schools. Students may follow the study plan outlined below for the concentration in Elementary Curriculum and Instruction or they may elect to specialize in one of six emphasis areas: Diversity, Early Childhood Education, Math and Science, Professional Inquiry and Practice, Staff Development, and Technology in Education.

Admission to Graduate Standing: Conditionally Classified
Requirements include a baccalaureate from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted.

Graduate Standing: Classified
A student who meets the admission requirements and the following requirements may be granted classified graduate standing:
1. The development of an approved study plan
2. A basic teaching credential or equivalent experience
3. An approved major (minimum of 24 units upper division or graduate)
4. A 3.0 grade-point average on previous academic and related work

Credit will be given for previous post baccalaureate studies when possible. Otherwise well-qualified students may be admitted with limited subject or grade deficiencies, but these deficiencies must be removed.
Study Plan

The adviser-approved 30 units (minimum) on the study plan will include the following:

Core Coursework (9 units)
- Ed El 511 Survey of Educational Research (3)
- Ed El 529 Graduate Studies: Learning Theory for Classroom Use (3)
- Ed El 536 Curriculum Theory and Development (3)

Coursework in Concentration (12 units)

Six units from following instruction-focused courses:
- Ed El 492 Gender Issues in Math and Science (3)
- Ed El 512 Level Two Technology Proficiencies for Teachers in K-8 Schools (3)
- Ed El 515 Technology and Problem Solving in Schools (3)
- Ed El 521 The Study of Teaching (3)
- Ed El 527 Graduate Seminar in Developmental Psychology: The Human from Conception Through Eight Years (3)
- Ed El 538 Teaching and Learning in the Early Childhood Classroom (3)
- Ed El 539 Clinical Supervision: Analyzing Effective Teaching (3)
- Ed El 541 Psychological and Sociological Foundations of Bilingual-Bicultural Education (3)
- Ed El 542 Current Issues and Problems in Bilingual-Bicultural Education (3)
- Ed El 551 Assessment Across the Curriculum (3)
- Ed El 552 Family, Community, and Professional Partnership (3)
- Ed El 553 Models of Teaching (3)

Six units from the following curriculum-focused courses:
- Ed El 528 Reading/Language Arts in the Early Childhood Curriculum (3)
- Ed El 530 Graduate Studies in Elementary Education: Second Languages (3)
- Ed El 531 Graduate Studies in Elementary Education: Integrated Language Arts (3)
- Ed El 532 Graduate Studies in Elementary Education: Mathematics (3)
- Ed El 533 Graduate Studies in Elementary Education: Science (3)
- Ed El 534 Graduate Studies in Elementary Education: Social Studies (3)
- Ed El 535 Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
- Ed El 537 Graduate Studies: Current Issues and Problems (3)
- Ed El 548 Social Studies, Science, and Math in Early Childhood Education (3)

Electives (6 units)

Electives are chosen in consultation with and approved by the graduate adviser.

Culminating Experience (3 units)

One of the following:
- Ed El 594 Research Seminar (3)
- OR Ed El 597 Graduate Project (3)
- OR Ed El 598 Thesis (3)

For further information, consult the graduate program adviser.

MASTER OF SCIENCE IN EDUCATION ELEMENTARY CURRICULUM AND INSTRUCTION CONCENTRATION (EMPHASIS IN DIVERSITY)

The Diversity emphasis is designed to help career classroom teachers become informed about appropriate curriculum and instruction for the diverse student population in the public schools in the state of California. It will help individuals to provide educational experiences and develop curriculum appropriate to linguistically and culturally diverse populations.

Admission to Graduate Standing:
Conditionally Classified/Classified

The requirements for admission to conditionally classified and classified standing are the same as those for the M.S. in Education concentration in Elementary Curriculum and Instruction.

Study Plan

Core Coursework (9 units)
- Ed El 500 Culture and Curriculum (3)
- Ed El 511 Survey of Educational Research (3)
- Ed El 529 Graduate Studies: Learning Theory for Classroom Use (3)

Diversity Emphasis Coursework (9 units)
- Ed El 530 Graduate Studies in Elementary Education: Second Languages (3)
- Ed El 541 Psychological and Sociological Foundations of Bilingual-Bicultural Education (3)
- Ed El 542 Current Issues and Problems in Bilingual-Bicultural Education (3)

Curriculum-Focused Coursework (15 units)

Two of the following:
- Ed El 528 Reading/Language Arts in the Early Childhood Curriculum (3)
- Ed El 531 Graduate Studies in Elementary Education: Integrated Language Arts (3)
- Ed El 532 Graduate Studies in Elementary Education: Mathematics (3)
- Ed El 533 Graduate Studies in Elementary Education: Science (3)
Ed El 534  Graduate Studies in Elementary Education: Social Sciences (3)
Ed El 535  Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Ed El 548  Social Studies, Science, and Math in Early Childhood Curriculum (3)
Ed El 571  Graduate Studies in Elementary Education: Science Education Practicum (3)

Elective (3 units)
Elective units are chosen in consultation with and approved by the graduate adviser.

Culminating Experience (3 units)
Ed El 594  Research Seminar (3)
OR Ed El 597  Project (3)
OR Ed El 598  Thesis (3)

MASTER OF SCIENCE IN EDUCATION ELEMENTARY CURRICULUM AND INSTRUCTION CONCENTRATION (EMPHASIS IN EARLY CHILDHOOD EDUCATION)

This emphasis is designed to meet the greater community and professional need for quality education during preschool through third grade. The educational demand for developmentally appropriate instruction in preschool, kindergarten and the primary grades has increased the need for effective specialists in Early Childhood Education.

Admission to Graduate Standing:
Conditionally Classified/Classified

The requirements for admission to conditionally classified or classified standing are the same as for the M.S. in Education concentration in Elementary Curriculum and Instruction.

Study Plan
The adviser-approved 30 units (minimum) on the study plan will include the following:

Core Coursework (9 units)
Ed El 511  Survey of Educational Research (3)
Ed El 529  Graduate Studies: Learning Theory for Classroom Use (3)
Ed El 536  Curriculum Theory and Development (3)

Coursework in Early Childhood Emphasis (9 units)
Ed El 528  Reading/Language Arts in the Early Childhood Curriculum (3)
Ed El 538  Teaching and Learning in the Early Childhood Classroom (3)
Ed El 548  Social Sciences, Science, and Math in Early Childhood Education (3)

Curriculum-Focused Coursework (6 units)
Two of the following:
Ed El 530  Graduate Studies in Elementary Education: Second Languages (3)
Ed El 531  Graduate Studies in Elementary Education: Integrated Language Arts (3)
Ed El 532  Graduate Studies in Elementary Education: Mathematics (3)
Ed El 533  Graduate Studies in Elementary Education: Science (3)
Ed El 534  Graduate Studies in Elementary Education: Social Studies (3)
Ed El 535  Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Ed El 537  Graduate Studies: Current Issues and Problems (3)
Ed El 571  Graduate Studies in Elementary Education: Science Education Practicum (3)

Elective (3 units)
Elective units are chosen in consultation with and approved by the graduate adviser.

Culminating Experience (3 units)
One of the following:
Ed El 594  Research Seminar (3)
OR Ed El 597  Project (3)
OR Ed El 598  Thesis (3)

For further information, consult the graduate program adviser.

MASTER OF SCIENCE IN EDUCATION ELEMENTARY CURRICULUM AND INSTRUCTION CONCENTRATION (EMPHASIS IN PROFESSIONAL INQUIRY AND PRACTICE)

The Professional Inquiry and Practice emphasis is designed to help career classroom teachers become informed about appropriate curriculum and instruction for students in the public schools of California. They will develop reflective and analytical thinking and initiate cycles of goal setting, professional practice, and reflection. The base of skills and knowledge will support their growing involvement in school reform including systematic reforms. Courses in this emphasis provide a foundation for teachers who wish to prepare for certification by the National Board for Professional Teaching Standards.

Admission to Graduate Standing:
Conditionally Classified/Classified

The requirements for admission to conditionally classified or classified standing are the same as for the M.S. in Education concentration in Elementary Curriculum and Instruction.

Study Plan
Core Courses (9 units)
Ed El 511  Survey of Educational Research (3)
Ed El 529  Graduate Studies: Learning Theory for Classroom Use (3)
Ed El 536  Curriculum Theory and Development (3)

One of the following:
Ed El 530  Graduate Studies in Elementary Education: Second Languages (3)
Ed El 531  Graduate Studies in Elementary Education: Integrated Language Arts (3)
Ed El 532  Graduate Studies in Elementary Education: Mathematics (3)
Ed El 533  Graduate Studies in Elementary Education: Science (3)
Ed El 534  Graduate Studies in Elementary Education: Social Studies (3)
Ed El 535  Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Ed El 537  Graduate Studies: Current Issues and Problems (3)
Ed El 571  Graduate Studies in Elementary Education: Science Education Practicum (3)

Elective (3 units)
Elective units are chosen in consultation with and approved by the graduate adviser.

Culminating Experience (3 units)
One of the following:
Ed El 594  Research Seminar (3)
OR Ed El 597  Project (3)
OR Ed El 598  Thesis (3)

For further information, consult the graduate program adviser.
Emphasis Courses (9 units)
Ed El 521 The Study of Teaching (3)
Ed El 551 Assessment Across the Curriculum (3)
Ed El 552 Family, Community, and Professional Partnerships (3)
Curriculum Course (3 units)
One of the following:
Ed El 528 Reading/Language Arts in the Early Childhood Curriculum (3)
Ed El 530 Graduate Studies in Elementary Education: Second Language (3)
Ed El 531 Graduate Studies in Elementary Education: Integrated Language Arts (3)
Ed El 532 Graduate Studies in Elementary Education: Mathematics (3)
Ed El 533 Graduate Studies in Elementary Education: Science (3)
Ed El 535 Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Ed El 548 Social Sciences, Science, and Math in Early Childhood Education (3)
Electives (6 adviser-approved units)
Culminating Experience (3 units)
One of the following:
Ed El 594 Research Project (3)
OR Ed El 597 Graduate Project (3)
OR Ed El 598 Thesis (3)
For further information, consult the graduate program adviser.

MASTER OF SCIENCE IN EDUCATION ELEMENTARY CURRICULUM AND INSTRUCTION CONCENTRATION
(EMPHASIS IN STAFF DEVELOPMENT)
This program is designed to enable educators to assume leadership roles in staff development in school districts. The sequence of courses is also designed to help teacher leaders and master teachers to understand contemporary trends and research findings in elementary curriculum and instruction.

Admission to Graduate Standing:
Conditionally Classified/Classified
The requirements for admission to conditionally classified or classified standing are the same as for the M.S. in Education concentration in Elementary Curriculum and Instruction.

Study Plan
The adviser-approved 30 units (minimum) on the study plan will include the following:
Core Coursework (9 units)
Ed El 511 Survey of Educational Research (3)
Ed El 529 Graduate Studies: Learning Theory for Classroom Use (3)
Ed El 536 Curriculum Theory and Development (3)
Emphasis Courses (9 units)
Ed El 521 The Study of Teaching (3)
Ed El 539 Clinical Supervision: Analyzing Effective Teaching (3)
Ed El 553 Models of Teaching (3)
Curriculum-Focused Coursework (6 units)
Two of the following:
Ed El 528 Reading/Language Arts in the Early Childhood Curriculum (3)
Ed El 530 Graduate Studies in Elementary Education: Second Languages (3)
Ed El 531 Graduate Studies in Elementary Education: Integrated Language Arts (3)
Ed El 532 Graduate Studies in Elementary Education: Mathematics (3)
Ed El 533 Graduate Studies in Elementary Education: Science (3)
Ed El 534  Graduate Studies in Elementary Education: Social Studies (3)
Ed El 535  Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Ed El 537  Graduate Studies: Current Issues and Problems (3)
Ed El 548  Social Sciences, Science, and Math in Early Childhood Education (3)
Ed El 571  Graduate Studies in Elementary Education: Science Education Practicum (3)

Elective (3 units)
Elective units are chosen in consultation with and approved by the graduate adviser.

Culminating Experience (3 units)
One of the following:
Ed El 594  Research Seminar (3)
OR Ed El 597  Project (3)
OR Ed El 598  Thesis (3)

MASTER OF SCIENCE IN EDUCATION ELEMENTARY CURRICULUM AND INSTRUCTION CONCENTRATION (EMPHASIS IN TECHNOLOGY IN EDUCATION)
This emphasis has been designed to provide elementary school teachers with a broad understanding of the applications of computers and other technologies in the elementary school classroom. Competencies will enable participants to become computer curriculum specialists who will guide the integration of technology into the elementary school curriculum, its use in instruction, and its applications in instructionally related activities.

Admission to Graduate Standing:
Conditionally Classified/Classified
The requirements for admission to conditionally classified and classified standing are the same as those for the M.S. in Education concentration in Elementary Curriculum and Instruction.

Study Plan
The study plan consists of 30 units of adviser-approved coursework:

Core Coursework (9 units)
Ed El 511  Survey of Educational Research (3)
Ed El 529  Graduate Studies: Learning Theory for Classroom Use (3)
Ed El 536  Curriculum Theory and Development (3)

Coursework in Technology in Education Emphasis (12 units)
Ed El 512  Level Two Technology Proficiencies for Teachers in K-8 Schools (3)
OR Ed El 523 Distance Education Issues and Trends in Schools (3)
Ed El 515  Technology and Problem Solving in Schools (3)
Ed El 522  Web Design for Instruction in Schools (3)
Ed El 590  Technology Professional Development in Schools (3)
Curriculum-Focused Coursework (6 units)
Ed El 528  Reading/Language Arts in the Early Childhood Curriculum (3)
Ed El 530  Graduate Studies in Elementary Education: Second Languages (3)
Ed El 531  Graduate Studies in Elementary Education: Integrated Language Arts (3)
Ed El 532  Graduate Studies in Elementary Education: Mathematics (3)
Ed El 533  Graduate Studies in Elementary Education: Science (3)
Ed El 534  Graduate Studies in Elementary Education: Social Studies (3)
Ed El 535  Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Ed El 537  Graduate Studies: Current Issues and Problems (3)
Ed El 548  Social Studies, Science, and Math in Early Childhood Education (3)
Ed El 571  Graduate Studies in Elementary Education: Science Education Practicum (3)

Culminating Experience (3 units)
One of the following:
Ed El 594  Research Seminar (3)
OR Ed El 597  Project (3)
OR Ed El 598  Thesis (3)

COMPUTING CERTIFICATE FOR ELEMENTARY SCHOOL TEACHERS
The purpose of this certificate program is to provide participants with a broad understanding of the applications of technology in the elementary school classroom and the instructionally related tasks in the public schools. The certificate program is designed to provide the needed competencies for participants to become curriculum specialists who will guide the integration of technology into the elementary school curriculum, its use in instruction, and its applications in instructionally related activities at the elementary school. This certificate requires 12 units.

Required Courses (12 units)
Ed El 512  Level Two Technology Proficiencies for Teachers in K-8 Schools (3)
OR Ed El 523 Distance Education Issues and Trends in Schools (3)
Ed El 515  Technology and Problem Solving in Schools (3)
Ed El 522  Web Design for Instruction in Schools (3)
Ed El 590  Technology Professional Development in Schools (3)
For further information, consult the Elementary Education graduate program adviser.
ELEMENTARY AND BILINGUAL EDUCATION COURSES

Courses are designated EDEL in the class schedule.

110 Explorations in Education (3)
(Same as Ed Sec 110)

315 Introduction to Elementary Classroom Teaching (3)
Exploratory course with field assignments for students considering career in elementary school teaching. Campus seminars and overview of admission requirements for the Multiple Subject Credential Program. Students taking this course to meet the prerequisite for either the Multiple Subject or the Special Education Credential Program must earn a “B” (3.0) or better to receive a grade of credit. Fieldwork required.

325 Cultural Pluralism in Elementary Schools (3)
Prerequisite: completion of General Education Category III.C.1. Culture and cultural pluralism in elementary schools. Topics: Examination of one’s own beliefs and values; classroom practices and materials that promote equity; strategies for learning about students; history/traditions of cultural groups; and assessment of multicultural education programs.

429 Integrated Curriculum and Instruction in the Elementary School (3)
Prerequisite: admission to second semester of Multiple Subject Credential Program. Additional study of elementary curriculum with emphasis on language arts, integrated instruction across the curriculum, and assessment of learning outcomes. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit.

430 Foundations in Elementary School Teaching (3)
Prerequisite: admission to Multiple Subject Credential Program. Curriculum of the elementary school, instructional planning, principles of effective teaching, generic instructional strategies, classroom management, and legal issues in education. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 430)

433 Language Arts and Reading Instruction in the Public Schools (3)
Prerequisite: admission to Multiple Subject Credential Program. Overview of principles of reading instruction, elements of the language arts program including literature-based reading, content area reading, the role of phonics, emergent literacy, and diagnosis of reading problems. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit.

434 Methods and Inquiry for Teaching English Learners (2)
Prerequisites: admission to Multiple Subject Credential Program, Ed El 315 or HComm 407, Ed Sec 310 and Special Ed 371. Theoretical foundations, legal issues and school programs for the education of English learners. Assessment, materials, methods and strategies for English language development and learning across the curriculum for elementary school English learners. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of Credit. One or more sections offered online. (Same as Special Ed 434)

435 Mathematics Curriculum and Instruction in Elementary School Teaching (3)
Prerequisites: admission to Multiple Subject Credential Program, Ed El 315 or HComm 407, Ed Sec 310 and Special Ed 371. Instructional materials, learning styles, inquiry, concept learning, problem solving, various instructional strategies applied to teaching mathematics. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 435)

436 Science Curriculum and Instruction in Elementary School Teaching (2)
Prerequisites: admission to Multiple Subject Credential Program. Instructional materials, learning styles, inquiry, concept learning, problem solving, various instructional strategies applied to teaching science. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit.

437 Social Studies Curriculum and Instruction in Elementary School Teaching (2)
Prerequisite: admission to Multiple Subject Credential Program. Instructional materials, learning styles, inquiry, concept learning, problem solving, various instructional strategies applied to teaching social studies. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit.

438 Supervised Fieldwork in Elementary Teacher Education (1-2)
Prerequisites: admission to Multiple Subject Credential Program, Ed El 315 or HComm 407, Ed Sec 310 and Special Ed 371. Students serve as teacher participants in an assigned elementary school classroom. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 438)

439 Student Teaching in the Elementary School (4-14)
Prerequisites: Ed El 430, 433, 438 and admission to student teaching. Participation in a regular elementary school teaching program for the full school day. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 439)

446 Methods and Inquiry for BCLAD Candidates (3)
Prerequisite: admission to Multiple Subject Credential Program with BCLAD Emphasis. Prepares Multiple Subject candidates for teaching Spanish-speaking elementary students. Reading instruction methods, materials and assessment, equity issues, and elements and considerations of culture that promote effective instruction for Spanish-speaking elementary students.

448 Methods and Inquiry for Asian Language BCLAD Candidates (3)
Prerequisite: admission to Multiple Subject Credential Program with BCLAD emphasis (Asian languages). Equity issues, curriculum and instruction for Asian language-speaking elementary students.
450 Visual and Performing Arts Methods: Art, Dance, Drama and Music (1)
Prerequisite: admission to Multiple Subject Credential Program. Seminar emphasizing instructional materials, learning styles, integration and strategies as they apply to teaching the arts in elementary education. Must be taken Credit/No credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 450)

451 Community, School and Classroom Issues (1)
Prerequisites: admission to Multiple Subject Credential Program, Ed El 315 or HComm 407, Ed Sec 310 and Special Ed 371. Seminar in current issues of elementary school teaching, including classroom management, parent-teacher communication, school law and child abuse reporting. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 451)

452 P.E., Health and Mainstreaming Education (1)
Prerequisite: admission to Multiple Subject Credential Program. Seminar addressing mainstreaming students with special needs, health education and physical education in elementary school settings. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 452)

453 Teaching Performance Assessment Support (1)
Prerequisites: Ed El 430, 433, 434, 435, 438 and admission to student teaching. Seminar focusing on TPA support within social studies or science for the Multiple Subject Credential program. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit. (Same as Special Ed 453)

492 Gender Issues in Math and Science: Teaching and Learning (3)
Prerequisites: Ed El 315 and senior or graduate standing. Educational and cultural barriers and avenues to the success of girls in science and mathematics, development of curricula and instructional methods to address these issues.

499 Independent Study (1-3)
Prerequisites: senior or graduate standing, consent of instructor prior to registration. Individual investigation under supervision of a faculty member. Only students of demonstrated capability and maturity will be approved. May be repeated for credit.

500 Culture and Curriculum (3)
Prerequisite: teaching credential or consent of instructor. Seminar focusing on culture and school curriculum, forces operating on the curriculum, the participants involved in curriculum building, modification of the curriculum to reflect multicultural contexts, and pedagogy and pluralism.

502A New Teacher Induction, Assessment, and Support Year 1 (1)
(Same as Ed Sec 502A)
522 Web Design for Instruction in Schools (3)
Prerequisite: Level 2 technology proficiency, Ed El 515, or consent of instructor. Design, development, and implementation of web pages and sites for instructional purposes. Issues surrounding using the World Wide Web for instruction. Fieldwork required. Offered entirely online.

523 Distance Education Issues and Trends in Schools (3)
Prerequisite: Level 2 technology proficiency or consent of instructor. Issues and trends in distance education for teaching and learning in schools. Draws on research in K-12, higher education and corporate domains. Offered entirely online.

527 Graduate Seminar in Developmental Psychology: The Human from Conception Through Eight Years (3)
Prerequisites: teaching credential. Physical, social, cognitive-intellectual, and emotional development of individuals from conception to middle childhood. Current problems, theories and research.

528 Reading/Language Arts in the Early Childhood Curriculum (3)
Prerequisite: teaching credential. Seminar: significant research, curriculum developments and materials, and current instructional strategies for promoting emergent literacy in children.

529 Graduate Studies: Learning Theory for Classroom Use (3)
Prerequisite: teaching credential. Major theoretical positions in planning and interpreting classroom practices. Educational research findings, implications for curriculum development and teaching practices.

530 Graduate Studies in Elementary Education: Second Languages (3)
Prerequisites: Ed El 434 and teaching credential. Seminar: significant research, curriculum developments and materials, and criteria for planning and improving second language programs, including those for English as a second language.

531 Graduate Studies in Elementary Education: Integrated Language Arts (3)
Prerequisite: teaching credential. Seminar: significant research, trends and problems in teaching the fundamental skills of communication; curriculum development and materials, and criteria for planning and improving integrated language arts programs.

532 Graduate Studies in Elementary Education: Mathematics (3)
Prerequisite: teaching credential. Seminar: significant research, curricular developments and materials, criteria for planning and improving mathematics programs and instruction.

533 Graduate Studies in Elementary Education: Science (3)
Prerequisite: teaching credential. Seminar: research and materials in science education and criteria for planning and improving science programs and instruction.

534 Graduate Studies in Elementary Education: Social Studies (3)
Prerequisite: teaching credential. Seminar: research developments and materials, criteria for planning and improving social studies programs, and current techniques of teaching.

535 Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
Prerequisite: teaching credential. Seminar: research developments and materials, criteria for planning and improving reading instruction in the integrated language arts programs, current instructional strategies and the role of children’s literature.

536 Curriculum Theory and Development (3)
Prerequisite: teaching credential. Seminar: the school curriculum including the forces operating on the curriculum and the participants involved in curriculum building. Process of curriculum building.

537 Graduate Studies: Current Issues and Problems (3)
Prerequisite: teaching credential. Problems and issues in elementary education, their causes and possible solutions.

538 Teaching and Learning in the Early Childhood Classroom (3)
Prerequisite: teaching credential. Seminar: application of significant research in the education of young children. Current instructional strategies and criteria for planning and improving programs in early childhood education.

539 Clinical Supervision: Analyzing Effective Teaching (3)
Prerequisite: teaching credential. Systematic, research-based approach. Identifies basic components needed by teachers, staff developers, and administrators to improve their instructional skills. Principles of learning applied to supervision and applied practice in analyzing the instructional process.

541 Psychological and Sociological Foundations of Bilingual-Bicultural Education (3)
Prerequisite: teaching credential. Application of psychological and sociological theory related to teaching English learners; application of these disciplines for the development of emotionally and socially supportive learning environments.

542 Current Issues and Problems in Bilingual-Bicultural Education (3)
Prerequisite: teaching credential. Problems and issues in the development and implementation of bilingual-bicultural education.

548 Social Studies, Science, and Math in Early Childhood Education (3)
Prerequisite: teaching credential or equivalent experience. Seminar investigates current curriculum standards and instructional options in social studies, science, and mathematics in early childhood education. Content, process skills and literature connections.
315

**551 Assessment Across the Curriculum (3)**

Prerequisite: teaching credential. Improving student performance through assessment, self-assessment, and student goals setting; establishing congruence between purposes, audiences, and instruments used. Goals of the course include design and selection of instruments, including performance assessment, portfolio, observation and personal communication forms for standards-based assessment.

**552 Family, Community and Professional Partnership (3)**

Prerequisite: teaching credential. Overview of community collaboration with service providers, business leaders, policy makers and parents. Diversity across families and importance of family interface with agencies and community. Importance of partnerships with professional agencies concerned with education, youth and children.

**553 Models of Teaching (3)**


**571 Graduate Studies in Elementary Education: Science Education Practicum (3)**

Prerequisite: Ed El 533. Strategies for effectively teaching and assessing science content knowledge, science process skills, and scientific attitudes in the elementary school; includes field assignments in elementary schools (1 unit - 4 hours per week); seminars (2 units - 2 hours per week). Principles of effective staff development in elementary science education.

**590 Technology Professional Development in Schools (3)**

Prerequisites: Level 2 technology proficiency, Ed El 522 and 523. Planning, implementing and evaluating technology professional development in schools. Writing grants, acting as a change agent and serving as a technology leader in a school. Fieldwork required.

**594 Research Seminar (3)**

Prerequisite: 3.0 GPA and consent of instructor. Preparation, evaluation, development and presentation of curriculum research proposals culminating in a graduate project. Individuals and groups will participate in critiquing proposals, curriculum projects and research results.

**597 Project (1-3)**

Prerequisite: 3.0 GPA and consent of instructor. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

**598 Thesis (1-3)**

Prerequisite: 3.0 GPA and consent of instructor. Individual research with conferences with the instructor, culminating in a thesis.

**599 Independent Graduate Research (1-3)**

Prerequisite: teaching credential, one year of teaching experience, and consent of instructor. Independent inquiry.
INTRODUCTION

The discipline of English includes the study of British and American literature, composition and rhetoric, and the history, structure and dialects of the English language.

The major in English is a flexible program emphasizing skill(s) in writing, familiarity with and appreciation of the literatures of England and America, and knowledge of the nature and development of the English language.

Comparative literature is the study of world literature without specific regard for national or linguistic boundaries. It is comparative in that it deals with the relationships among different literatures. The comparatist studies not only the international literary masterpieces and historical periods of world literature, but also examines critical theories from a cross-cultural perspective. The major in comparative literature promotes the understanding of world literatures and cultures in various historical periods, including the present, for students with a special concern for the relationships among the languages and literatures of various civilizations. Comparative literature courses are conducted in English, and required reading is available in English.

The study of literature and language helps students to achieve a mature understanding of themselves and the world and to learn to read critically and analytically, write clearly and persuasively, and reason soundly. For these reasons, such study is ideal preparation for professional training in fields such as law, medicine and religion, or for responsible positions in business and industry. The major in English may be combined with preparation for elementary and secondary school teaching. In addition, the majors in English, Comparative Literature and Linguistics provide a foundation for students who intend to work for advanced degrees in preparation for college teaching.

LEARNING GOALS AND STUDENT LEARNING OUTCOMES

The following goals and learning outcomes have been established for students pursuing a degree in English:

Read critically
- Read a text in any of several genres on a number of levels, including literal comprehension, aesthetic responsiveness, informed awareness of the traditions and the varied critical perspectives within which it may be most productively read, and rhetorical and logical analysis of its argument and/or structure

Write effectively
- Write about various kinds of texts so as to articulate the dimensions of the work as described above
- Demonstrate an awareness of audience, purpose and various rhetorical forms, as well as a high level of control of standard written English conventions
Research
- Demonstrate the ability to find in textbooks and research materials — paper and electronic — the kinds of information relevant to a given problem or issue, literary or otherwise, and to integrate that information into one's own written work to support one's argument while giving appropriate credit to the source of the information.

Knowledge of major literary works and traditions
- Have a working knowledge of the major writers, periods and genres of English and American literature and be able to place important works and genres in their historical context.

Knowledge of noncanonical literary works
- Have a working knowledge of some important works in nonwestern, ethnic and women's literatures that illustrate the diversity of literary studies and the interconnectedness of literary traditions.

Structure of the English language
- Have a working knowledge of the structure of the English language and theories of second language acquisition.

Advisers

**English/Comparative Literature, Undergraduate:** All full-time faculty members serve as advisers.

**English/Comparative Literature, Graduate:** Marlin Blaine

**Teaching Credential:** April Brannon

**Linguistics, Undergraduate:** Franz Mueller

**Linguistics, Graduate:** Franz Mueller

An annual conference with a faculty adviser is required. New students must confer with an adviser in each of the first two semesters.

Credential Information

The bachelor's degree in English may be effectively combined with subject matter studies necessary for either the multiple subject teaching credential (K-8) or single subject credential (7-12) in English. Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor's degree. Postgraduate students should contact the Admission to Teaching office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

**BACHELOR OF ARTS IN COMPARATIVE LITERATURE**

The Bachelor of Arts in Comparative Literature requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. The English major consists of 42 units. At least 30 units must be upper-division courses. A grade of "C" (2.0) or better is required in all courses applied to the major. In selecting courses, students are urged to consult a faculty member of the Department of English, Comparative Literature and Linguistics. English 101, a graduation requirement for all students, is not part of the English major but is a prerequisite to further work in English.

**Required Courses (9 units)**

- English 300 Analysis of Literary Forms (3)
- English 302 Advanced Composition and Rhetoric for English Teachers (3)
- OR English 307 Advanced College Writing for English Studies (3)
- English 316 Shakespeare (3)

**Survey Courses (at least 6 units)**

- English 211 British Literature to 1760 (3)
- English 212 British Literature from 1760 (3)
- English 221 American Literature to Whitman (3)
- English 222 American Literature from Twain to the Moderns (3)
- Comp Lit 324 World Literature to 1650 (3)
- Comp Lit 325 World Literature from 1650 (3)

**Period, Genre and Criticism Courses**

(At least nine units, including at least three from courses prior to 1800, i.e., 423, 450, 451, 452, 453, 454, 455, 456)

- English 423 Early American Literature (3)
- English 450 Medieval Literature (3)
- English 451 Elizabethan and Jacobean Drama (3)
- English 452 Elizabethan Poetry and Prose (3)
- English 453 17th-Century Poetry and Prose (3)
English 454  The Drama of the Restoration and the 18th Century (3)
English 455  Restoration and 18th-Century Poetry and Prose (3)
English 456  The Development of the English Novel Through Jane Austen (3)
English 457  The Romantic Movement in English Literature (3)
English 458  Victorian Literature (3)
English 459  The Development of the 19th Century English Novel (3)
English 462  Modern British and American Novels (3)
English 463  Contemporary Novels in English (3)
English 464  Modern British and American Drama (3)
English 465  Contemporary Drama in English (3)
English 466  Modern British and American Poetry (3)
English 467  Contemporary Poetry in English (3)
English 468  Modern British and American Poetry (3)
English 491  Traditions of English Literary Criticism (3)
English 492  Modern Critical Theory (3)

**Major Author Courses (at least 3 units)**

English 315  Chaucer (3)
English 317  Milton (3)

**Language Courses (at least 3 units)**

English 303  Structure of Modern English (3)
English 305  The English Language in America (3)

**Electives (at least 12 units)**

Chosen from English, Comparative Literature or Linguistics courses numbered 201 and above.

**MINOR IN ENGLISH**

Students must complete a total of 21 units, including 15 as described below and six electives. No more than six units of lower-division coursework can be applied to the minor. In selecting courses, students seeking a minor in English should consult a faculty member of the Department of English, Comparative Literature and Linguistics.

A grade of “C” (2.0) or better is required in all courses applied to the minor.

**Required Courses (9 units)**

English 300  Analysis of Literary Forms (3)
English 301  Advanced College Writing (3)
English 316  Shakespeare (3)

**Survey Courses (at least 6 units)**

English 211  British Literature to 1760 (3)
English 212  British Literature from 1760 (3)
English 221  American Literature to Whitman (3)
English 222  American Literature from Twain to the Moderns (3)
Comp Lit 324  World Literature to 1650 (3)
Comp Lit 325  World Literature from 1650 (3)

**Electives (at least 6 units)**

Chosen from additional English, Comparative Literature and Linguistics courses, with the exception of English 101 and 200. Students may take the approved upper-division writing course(s) in their majors instead of English 301. They must, however, complete 21 units in English, Comparative Literature and Linguistics.

**MASTER OF ARTS IN ENGLISH**

The master’s degree program in English offers students the opportunity to achieve a multifaceted understanding of literature and language. The degree is useful to those already teaching in high schools or interested in community college teaching, to those seeking careers in writing and publishing, and to those intending to take further graduate work.

**ADMISSION TO GRADUATE STANDING**

Applicants are encouraged to make an appointment with the department graduate adviser. The adviser will review transcripts, advise applicants regarding prerequisites and determine if any courses apply to the degree program.

Admission to the master’s degree program is a prerequisite to enrollment in all graduate courses.

1. University requirements include a bachelor’s degree from an accredited institution and a minimum GPA of 2.5 in the last 60 semester units attempted.
2. The department requires a bachelor’s degree in English or Comparative Literature from an accredited institution with at least a 3.0 grade-point average in the upper-division major courses, provided that a minimum of 24 units of upper-division coursework is included. If the applicant holds a bachelor’s degree in another major, 24 units of upper-division coursework in English and/or Comparative Literature must be completed with at least a 3.0 grade-point average before beginning work in the master’s degree program.
3. In the event that the applicant’s grade-point average in prerequisite courses is below 3.0, he or she may take additional upper-division English and/or Comparative Literature coursework and reapply to the program. The applicant should consult with the graduate adviser to determine appropriate coursework. Some courses taken to make up qualitative deficiencies may be credited toward the M.A., if completed with a grade of “B” (3.0) or better, and if applicable to the student’s particular study plan. Courses taken to remove quantitative deficiencies may not be applied to the M.A. program.
4. A writing sample will also be required of all applicants. The writing sample should demonstrate advanced skill in literary analysis or rhetorical and expository writing. A paper written for an upper-division literature course and analyzing one or more elements in one or more literary works is preferred. The writing sample should be approximately five to 10 pages long, and need not include secondary research. Applicants who do not have course papers available should contact the department graduate adviser for advice.
5. Applicants must submit three letters of recommendation from individuals best qualified to judge their potential for graduate study in English.

6. All applicants, regardless of citizenship, whose preparatory education was principally in a language other than English, must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score of 600 (paper) or 250 (computer) on the Test of English as a Foreign Language (TOEFL).

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Foreign Language Requirement

Students must satisfy a foreign language requirement with one of the following options:

1. two years of foreign language at the college or university level;
2. one 400-level course in a foreign language or in literature taught in a foreign language;
3. Linguistics 406 Descriptive Linguistics or Linguistics 412 Sociolinguistics; or
4. another 400-level linguistics course approved by the graduate adviser.

This requirement may be satisfied prior to or after admission to the M.A. program.

Study Plan

The graduate program in English comprises 30 units of course credit. All courses must be approved by the graduate adviser.

A study plan must be developed and approved for admission to classified graduate standing within the student's first nine units of graduate coursework. Courses taken by a student admitted to the program with conditionally classified status do not necessarily apply toward the degree. No more than nine units of postgraduate coursework may be applied to the master's degree program. See the graduate adviser for further information.

The study plan allows three units of adviser-approved coursework outside the department and/or three units of graduate independent study. No more than six units are allowed at the 400 level. In addition, at least one proseminar or seminar must be in Comparative Literature or cross-listed in Comparative Literature. A project and comprehensive exam are required of all students. Students are encouraged to take English 500 in their first semester.

Core Courses (6 units)

English 500 Introduction to Graduate Studies in Literature (3)
Analysis of Discourse (3 units from English 491, 492, 510, 579T)

Proseminars (12 units)

English or Comparative Literature 525T Proseminar in Literature, Rhetoric or Writing (3)

Students are encouraged to satisfy the proseminar requirements prior to taking seminars.

Seminars (9 units)

Students choose from advisor-approved seminar courses (English or Comparative Literature 509T, 517T, 573T, 574T, 575T or 591T, or other adviser-approved courses).

Project (3 units)

In addition to the written exam described below, students are required to complete a project in the project writing course, English 595. Students who plan to complete a creative writing project must take a minimum of six units of creative writing workshops, one of which must be at the 500 level.

Project proposals are due before the end of the fifth week of the semester preceding enrollment in the project writing course and must be approved by the department Graduate Studies Committee. If the proposal is not approved when first submitted, students may resubmit only once in the same semester. Please consult the graduate adviser or department office for further details.

Comprehensive Exam

In order to complete degree requirements, students must pass a two-part written exam involving analysis and synthesis. Failed parts of the exam may be retaken only once. The deadline to file a notice of intention to take the examination is the end of the third week of the semester in which the student plans to take the exam.

BACHELOR OF ARTS IN LINGUISTICS

MINOR IN LINGUISTICS

For information on these programs and a listing of linguistics courses, please consult the “Linguistics” section of this catalog.

COMPARATIVE LITERATURE COURSES

Courses are designated as CPLT in the class schedule.

110 Literature of the Western World from Ancient through Medieval Times (3)
(Same as English 110)

111 Literature of the Western World from the Renaissance through the 19th Century (3)
(Same as English 111)

312 The Bible as Literature (3)
Prerequisite: completion of General Education (G. E.) Category III.B.2. Literary qualities of biblical literature and the influence of major themes upon Western literary traditions. (Same as Comparative Religion 312)

315 Classical Mythology in World Literature (3)
Prerequisite: completion of G. E. Category III.B.2. Greek and Roman myths that have been of continuing significance in Western world literature.
324 World Literature to 1650 (3)
   Prerequisites: junior or senior standing and completion of any
   literature course from G. E. Category III.B.2. Asian and Western
   literature from the beginning to 1650.

325 World Literature from 1650 (3)
   Prerequisites: junior or senior standing and completion of any
   literature course from G. E. Category III.B.2. Asian and Western
   literature from 1650 to the present.

355T Images of Women in Literature (3)
   (Same as English 355T)

373 Nineteenth-Century Russian Literature (3)
   Prerequisites: junior or senior standing and completion of any
   literature course from G. E. Category III.B.2. Major writers such as
   Pushkin, Gogol, Dostoyevsky, Tolstoy, Chekhov, and their relation-
   ship to Western literature.

374 Twentieth-Century Russian Literature (3)
   Prerequisite: completion of any literature course from G. E.
   Category III.B.2. Soviet peoples’ literature from 1918 to the present.
   Basic trends in literary criticism. Major writers such as Gorky, Blok,
   Mayakovsky, Zamyatin, Zoshchenko, Akhmatova and Pasternak.

380 Introduction to Asian Literature (3)
   Prerequisite: completion of any literature course from G. E.
   Category III.B.2. Selected translations of Arabic, Persian, Indian,
   Chinese and Japanese literature.

381 African Literature (3)
   (Same as English 381 and Afro-Ethnic Studies 381)

382T Topics in Asian Literature (3)
   Prerequisite: completion of any literature course from G. E.
   Category III.B.2. Specific topics will vary from semester to semester.
   May be repeated with different content for additional credit.

389 Literature About the War in Vietnam (3)
   (Same as English/Asian American Studies 389)

450 Medieval Literature (3)
   (Same as English 450)

451 Literature of the Renaissance (3)
   Prerequisites: survey of English, American, or world literature;
   an upper-division literature course; or equivalent. The Renaissance as
   a literary movement, from Erasmus to Montaigne and Cervantes.

499 Independent Study (1-3)
   Prerequisite: junior or senior standing.

525T Proseminar in Literature, Rhetoric, or Writing (3)
   (Same as English 525T)

571T Graduate Seminar: Major Writers (3)
   (Same as English 571T)

572T Graduate Seminar: Literary Genres (3)
   (Same as English 572T)

573T Graduate Seminar: Cultural Periods (3)
   (Same as English 573T)

574T Graduate Seminar: Special Problems in Literature (3)
   (Same as English 574T)

575T Graduate Seminar: Topics in Teaching (3)
   (Same as English 575T)

579T Graduate Seminar: Problems in Criticism (3)
   (Same as English 579T)

599 Independent Study (1-3)

ENGLISH COURSES
   Courses are designated as ENGL in catalog.
   For world literature in English translation, see courses under
   Comparative Literature (CPLT)

099 Developmental Writing (3)
   Intensive course in basic writing skills. Prepares students for English
   101 and intended for students who score 133 to 144 on the English
   Placement Test (EPT). Degree credit is not awarded for this course.

099M Developmental Writing (3)
   Intensive course in basic writing skills and language develop-
   ment. Prepares students for English 101 and intended for students
   who score below 133 on the English Placement Test (EPT). Degree
   credit is not awarded for this course.

101 Beginning College Writing (3)
   Prerequisite: English 099, a satisfactory score on the English
   Placement Test or exemption from the EPT. Introductory course
   in the fundamentals of expository prose. Grammatical and basic
   rhetorical concepts and practices necessary for successful college
   writing. Instructional fee.

105 Introduction to Creative Writing (3)
   Prerequisite: English 101. Exploratory creative writing with the
   opportunity to write in various genres. No credit toward the major.

110 Literature of the Western World from Ancient through
   Medieval Times (3)
   Representative writers and works from the ancient through the
   medieval world. (Same as Comparative Literature 110)

111 Literature of the Western World from the Renaissance
   through the 19th Century (3)
   Representative writers and works from the Renaissance through
   the 19th century. (Same as Comparative Literature 111)
199 Intensive Writing Review (3)
Prerequisite: consent of instructor. Restricted to students who have failed the EWP at least twice. Intensive review of the fundamentals of writing expository prose. Meets examination portion of baccalaureate writing requirement. Carries no credit toward graduation.

200 Introduction to Literature (3)
Introduction to the study of fiction, drama and poetry. Critical understanding of literary types rather than on their historical development. Carries no credit toward the major.

206 Introduction to Language Structure and Language Use (3)
Introduction to the nature, structure, development and use of English. How sounds are articulated and patterned in meaningful units (phonology); symbolic correspondence (phonics); rules of word formation (morphology); word history (etymology); and language use (pragmatics). (Same as Linguistics 206)

211 British Literature to 1760 (3)
Major periods and movements, major authors and major forms through 1760.

212 British Literature from 1760 (3)
Major periods and movements, major authors and major forms from 1760 through modern times.

221 American Literature to Whitman (3)
Major writers such as Hawthorn, Poe, Melville, Emerson, Thoreau, Whitman and Dickinson.

222 American Literature from Twain to the Moderns (3)
Major writers such as Twain, James, Crane, Hemingway, Faulkner, O'Neill, Frost and Elliot.

300 Analysis of Literary Forms (3)
Main literary forms—prose fiction, poetry and drama—are studied and analyzed. English majors should schedule this basic course as early as possible.

301 Advanced College Writing (3)
Prerequisite: English 101. Writing expository prose. Precision in rhetoric and development of individual style by concentration on matters of diction, audience, emphasis and persuasion. Required of English majors seeking a secondary credential. Instructional fee.

302 Advanced Composition and Rhetoric for English Teachers (3)
Prerequisite: English 101. The writing process. Instruction in expository prose, journalistic prose and creative writing for prospective teachers of English. Meets the university upper-division writing requirement for English majors.

303 The Structure of Modern English (3)

305 The English Language in America (3)
American English, its origins, its regional and social dialects and its role in American history and in such institutions as schools, corporations, government and the media. (Same as Linguistics 305)

306 Intermediate Creative Writing (3)
Prerequisites: completion of G. E. Categories III.B.1, III.B.2. Creative writing beyond the introductory level. Poetry, the short story and/or the one-act play.

307 Advanced Writing in English Studies (3)
Prerequisite: English/Comparative Literature majors who have completed their lower-division writing requirements. Analyze interpretive frameworks of communities within the discipline of English Studies (literary studies, creative writing, English education, composition, cultural criticism). Uses discursive conventions of these communities to produce formal and informal texts of various genres.

315 Chaucer (3)
Prerequisite: English 101 or equivalent. Canterbury Tales and Chaucer’s language. Vocabulary, pronunciation, grammar and syntax of the East Midland dialect of Middle English.

316 Shakespeare (3)
Prerequisite: English 101 or equivalent. Study of the major plays.

317 Milton (3)
Prerequisite: English 101 or equivalent. Poetry and prose in the light of Milton’s intellectual development.

324 Introduction to Afro-American Literature (3)
(Same as Afro-Ethnic 324)

325 American Ballad and Folksong (3)
Anglo-American balladry and folksong; their historical development, ethnic background and poetical values.

326 The American Frontier in Literature (3)
Prerequisite: any courses in American literature, American studies or American history. Thematic study of American literature as it reflects the changing frontier experience and establishes national myths and symbols.

327 Asian American Literature (3)
(Same as Asian American Studies 327)

328 Literature of the American Indians (3)
Prerequisite: completion of any literature courses from G. E. Category III.B.2. The prose and poetry of the North American Indian tribes.

331 Shakespeare on Film (3)
Prerequisite: English 101. Analysis of representative Shakespeare plays, along with viewing and analyzing several film versions of each play. Use literary and film terminology to write critical responses to drama and film, develop storyboards and conceptualize a Shakespeare play adaptation “pitch” with set, costume design and marketing strategy.
341 Children’s Literature (3)
Prerequisite: completion of any literature course in G. E. Category III.B.2. World literature written primarily for children, including material from the oral tradition, realistic fiction, fantasy and poetry. Not applicable for graduate degree credit.

355T Images of Women in Literature (3)
Prerequisite: junior or senior standing. Images of women in genres such as autobiography, poetry, drama, novel. Individual sections may treat conventional literary periods or specific cultures. May be repeated with different content for additional credit. (Same as Comparative Literature 355T)

360 Scientific and Technical Writing (3)
Open to science and non-science students. Scientific and professional writing and editing, with attention to outlines and abstracts, description, process explanation, instructions and fundamentals of reports, feasibility studies, proposals, internal memos and letters.

365 Legal Writing (3)
Advanced compositions stressing logic, reasoning and legal analysis.

370 Horror Fiction (3)
Prerequisite: English 101 or equivalent. Horror/occult fiction (or “dark fantasy”) from Mary Shelley to the present, including such writers as E. A. Poe, J. S. LeFanu, Bram Stoker, H. P. Lovecraft, Fritz Leiber and Stephen King.

371 Fantasy Fiction (3)
Prerequisite: English 101 or equivalent. Fantasy in literature from Ariosto to Brautigan.

372 Detective Fiction (3)
Prerequisite: English 101 or equivalent. Detective fiction from Edgar Allan Poe to the present, including writers such as Sayers, Christie, Chandler, Hammett and Ross MacDonald.

373 Science Fiction (3)
Prerequisite: English 101 or equivalent. Science fiction as a literary genre, including future-scene fiction, the utopian novel, the superman/woman novel and short stories.

374 The Gothic Novel (3)
Prerequisite: English 101. Development of the Gothic Novel in England from 1750-1850, including such authors as Walpole, Smith, Radcliffe, Lewis, Mary Shelley, Austen, Maturin and Emily Brontë.

381 African Literature (3)
Prerequisite: completion of any literature course from G. E. Category III.B.2. African literature written in the English language; the fiction, poetry and drama of the new nations. (Same as Comparative Literature 381 and Afro-Ethnic Studies 381)

389 Literature About the War in Vietnam (3)
Prerequisite: English 101. Fiction, nonfiction, poetry and film are studied to reflect views of the Vietnam War as experienced by North and South Vietnamese and by Americans, both soldiers and ordinary citizens. (Same as Comp Lit/Asian American Studies 389)

402 Theories of Response to Written Composition (2)
Prerequisite: English 301 and 303 or equivalents. Corequisite: English 402S. May be taken for letter grade or credit/no credit.

402S Tutor Supervision (1)
Prerequisites: English 301 and 303. Corequisite: English 402. May be taken for letter grade or credit/no credit.

404T Advanced Creative Writing (3)
Prerequisite: English 306 or its equivalent. Instruction and practice in a workshop setting for the student with some experience in creative writing; emphasizes writing for professional markets. Consult the class schedule to determine section’s emphasis. May be repeated for credit.

416 Studies in Shakespeare (3)
Prerequisite: English 316. Problems of dramatic structure and artistic meanings.

423 Early American Literature (3)
Prerequisite: English 221. Literature of colonial and revolutionary America, including the Puritans, 18th-century deism and rationalism, and the literary antecedents of American democratic thought.

429 American Landscape in Literature (3)
American landscape in literature. Literary perception of our environment, with special attention to what perceptions of the landscape reveal about human nature.

434 Literature for Junior and Senior High School (3)
Prerequisite: junior or senior standing. Evaluation, selection and interpretation of fiction, non-fiction, drama and poetry reflecting the broad range of interest of young people ages 12 to 17.

442 Changing Words: History, Semantics, and Translation (3)
(Same as Linguistics 442)

450 Medieval Literature (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Readings in modern English translation from the medieval literature of England and the continent from St. Augustine to Sir Thomas Malory. (Same as Comparative Literature 450)

451 Elizabethan and Jacobean Drama (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Dramatic tradition in plays by such dramatists as Marlowe, Jonson, Webster, Beaumont and Fletcher.
452 Elizabethan Poetry and Prose (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Non-dramatic literature of the English Renaissance.

453 17th-Century Poetry and Prose (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Non-dramatic literature of the period from 1603 to 1660 excluding Milton.

454 The Drama of the Restoration & the 18th Century (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Representative plays of the Restoration and the 18th century. Development of such dramatic movements as the heroic play, Restoration comedy and sentimental drama.

455 Restoration and 18th-Century Poetry and Prose (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major writers such as Butler, Rochester, Dryden, Pepys, Swift, Addison and Steele, Pope, Boswell, Johnson and selected minor writers.

456 The Development of the English Novel through Jane Austen (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. English novel from its beginnings to the 19th century, including such novelists as Defoe, Richardson, Fielding, Sterne and Austen.

457 The Romantic Movement in English Literature (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major writers such as Burns, Blake, Wordsworth, Coleridge, Byron, Shelley and Keats.

458 Victorian Literature (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major writers such as Carlyle, Tennyson, Browning, Arnold, Ruskin and Pater.

459 The Development of the 19th-Century English Novel (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major novelists such as the Brontes, Thackeray, Dickens, Eliot and Hardy.

462 Modern British and American Novels (3)
Prerequisite: survey of English, American or world literature; an upper-division literature course; or equivalent. Modern British and American novels from 1900 to 1950.

463 Contemporary Novels in English (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. The novel in English since World War II.

464 Modern British and American Drama (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. British and American drama from 1900 to 1950.

465 Contemporary Drama in English (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Drama in English from 1950 to the present.

466 Modern British and American Poetry (3)
Prerequisite: survey of English, American or world literature; an upper-division literature course; or equivalent. British and American poetry from 1900 to 1950.

467 Contemporary Poetry in English (3)
Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Poetry in English from 1950 to the present.

491 Traditions of English Literary Criticism (3)
Prerequisite: English 300 or equivalent. Major English critics, from the Renaissance to the beginning of the 20th century, in relationship to the classical theories of criticism.

492 Modern Critical Theory (3)
Prerequisite: English 300 or equivalent. Major movements in 20th-century British and American criticism.

498 English Internship (1-3)
Prerequisites: junior standing and consent of faculty supervisor. Practical application of literature and language studies outside the university. Specified hours, limited enrollment, credit/no credit; no credit toward major. May be repeated for a maximum of six units of credit.

499 Independent Study (1-3)
Prerequisite: junior or senior standing. Open to advanced students in English with consent of department chair. May be repeated for credit.

500 Introduction to Graduate Studies in Literature (3)
Research techniques, analytical approaches and theories of literature. Basic orientation in graduate literary studies.

509T Creative Writing Workshop (3)
Intensive graduate-level workshop in creative writing. Students produce their own work, write critiques of others’ works and discuss opportunities for publication. Recommended for students with an interest in creative writing. Workshops may focus on the writing of poetry or fiction or of a mix of fiction and drama, depending on expertise of instructor. May be repeated for credit with different topic.
510 Rhetorical Criticism and Discourse Analysis (3)
Theories of disclosure and rhetorical analysis, ranging from 
an overview of historically foundational/classical readings and ap-
proaches to contemporary rhetorical theories and their applications 
to textual criticism.

525T Proseminar in Literature, Rhetoric, or Writing (3)
Traces the development of the sonnet from its medieval Italian 
beginning to the present. Authors of various periods and genres will 
be covered, with concentration on Sidney, Spenser and Milton, and 
particular emphasis on Petrarch and Shakespeare. May be repeated 
with different content for additional credit. (Same as Comparative 
Literature 525T)

571T Graduate Seminar: Major Writers (3)
As appropriate to the specialized research and publication of 
instructor; major figures such as Shakespeare, Dante, Cervantes, 
Goethe, Bronte, Twain, Joyce, Woolf and Morrison. May be repeated 
with different content for additional credit. (Same as Comparative 
Literature 571T)

572T Graduate Seminar: Literary Genres (3)
As appropriate to the specialized research and publication of 
instructor, major literary types such as the epic, novel, short story, 
lyric poetry, tragedy, comedy and historical drama. May be repeated 
with different content for additional credit. (Same as Comparative 
Literature 572T)

573T Graduate Seminar: Cultural Periods (3)
As appropriate to the specialized research and publication of 
instructor, the literature of a cultural period from Anglo-Saxon to 
to modern times. May be repeated with different content for additional 
credit.

574T Graduate Seminar: Special Problems in Literature (3)
As appropriate to the specialized research and publication 
of the instructor, special problems such as influences on literature, 
including philosophical, religious, scientific, geographic and other 
ecological viewpoints. May be repeated with different content for 
additional credit. (Same as Comparative Literature 574T)

575T Graduate Seminar: Topics in Teaching (3)
Specific topics will vary from semester to semester. May be 
repeated with different content for additional credit. (Same as Com-
parative Literature 575T)

579T Graduate Seminar: Problems in Criticism (3)
Historical development and schools of criticism. Individual 
offerings within this course number may deal with only one aspect 
of critical problems. May be repeated with different content for 
additional credit. (Same as Comparative Literature 579T)

590 Writing Theory and Practice for Teaching Associates (3)
Prerequisite: English 402 and admission to the English De-
partment Teaching Associate Program. Theory and practice of the 
composing process for the beginning college teacher of expository 
writing. Required of all English Department Teaching Associates 
during their first semester of teaching.

590S Teaching Associate Supervision (1)
Prerequisite: English 590. Supervised teaching of development-
tal writing and freshman composition. No credit toward the M.A. in 
English. May be repeated for credit.

591T Seminar: Topics in Rhetoric and Composition (3)
As appropriate to the specialized research of instructor, 
special topics on rhetoric and composition, including historical and 
thoretical approaches. May be repeated with different content for 
additional credit.

595 M.A. Project Writing (3)
Process of writing an M.A. project in literature, rhetoric and 
composition, or creative writing. To enroll in the course, students 
must receive prior departmental approval of their M.A. project 
proposal.

599 Independent Graduate Research (3)
Research projects in areas of specialization beyond regularly 
offered coursework. Oral and written reports. May be repeated with 
different content for additional credit.

ENGLISH EDUCATION COURSES
Courses are designated as ENED in catalog.

442 Teaching English in the Secondary School (3)
Prerequisite: admission to teacher education. Principles, meth-
ods and materials of teaching English in the secondary school.

449E Externship in Secondary Teaching (3)
Student teaching in the secondary school during the first semes-
ter of the teacher preparation program. Candidate plans and teaches 
assigned lessons during the last third of the semester.

449I Internship in Secondary Teaching (10)
Student teaching in the secondary school during the second 
semester of the teacher preparation program. Candidate has the same 
instructional hours of responsibility as the master teacher.

449S Seminar in Secondary Teaching (3)
Taken concurrently with Ed Sec 449I. Teaching a single subject 
in secondary schools. Videotape analysis of teaching based on Teach-
ing Performance Assessments. Taken Credit/No Credit. A “B” (3.0) 
or better is required to receive a grade of credit.
INTRODUCTION
The master's program in Environmental Studies is a broadly based interdisciplinary program that focuses on human interaction with the environment. The program is geared for students entering the rapidly expanding environmental field, especially in science, planning and regulation, and education. Because the scale and scope of environmental issues vary from local and practical to international and theoretical, the program seeks to integrate knowledge and approaches from a range of related disciplines in the sciences, social sciences and humanities. Topics include environmental policy, management, pollution, law, philosophy, economics, planning, regulation and education. Given the range of their academic backgrounds, students are encouraged to craft a study plan that meets their own particular career or avocational goals. Students demonstrate their expertise in one of the environmental concentrations by preparing a thesis or project.

Students select a course of study consistent with one of the following three concentrations:

Environmental Sciences
This area deals with the application of physical and biological science principles to environmental issues. Topical concerns include environmental ecology, water and air resources waste management, toxicology and environmental geology. Students in this emphasis typically have a strong background in biology, chemistry, earth science, engineering, geography, geology or mathematics.

Environmental Policy and Planning
This area deals with the concepts and methods of the social and behavioral sciences as applied to environmental policy and planning. Topical concerns include urban and regional planning, environmental aspects of administration, design, ethics, perception, law and economics. Students in this area come from many backgrounds, including the natural, social or behavioral sciences, or the humanities.

Environmental Education and Communication
This emphasis seeks to develop a body of knowledge that is consistent with the needs of the environmental educator, the outdoor naturalist or the communication specialist. Students in this emphasis area should have a background in natural science, education or communications.

International Learning Opportunities in Environmental Studies
Because many environmental problems are trans-boundary in nature, our curriculum necessarily addresses issues that are international in scope. From topical courses, such as Environmental Ethics and Global Environmental Issues, to region-specific courses, such as Wetlands and Tropical Rainforests, students tackle an array of internationally significant environmental problems. This experience is enhanced further through interaction with the significant number of international students enrolled in the program.

PROGRAM COORDINATOR
John Bock

ASSOCIATE COORDINATOR
Steven Kim

PROGRAM OFFICE
Humanities 420A

DEPARTMENT WEBSITE
http://hss.fullerton.edu/envstud

PROGRAM OFFERED
Master of Science in Environmental Studies

PROGRAM COUNCIL AND THESIS/PROJECT ADVISERS
Gordon Bakken (History), John Bock (Anthropology), David Bowman (Geological Sciences), April Bullock (Liberal Studies), Matt Calarco (Philosophy), Alison Cliath (Sociology), Peter Fashing (Anthropology), John Foster (Geological Sciences), Jane Hall (Economics), William Hoese (Biological Science), Mike Horn (Biological Science), Anne Houman (Biological Science), Eugene Jones (Biological Science), Danny Kim (Health Sciences), Jeff Kuo (Civil Engineering), William Laton (Geological Sciences), Shari McMahan (Health Sciences), Megan Nelson (History), Moreza Rahmatian (Economics), Harold Rogers (Chemistry), Darren Sandquist (Biological Science), Denise Stanley (Economics), Michael Steiner (American Studies), Paul Stapp (Biological Science), Jonathan S. Taylor (Geography), Justin Tucker (Political Science), Robert Voeks (Geography), Jindong Wu (Geography)

Graduate Adviser: Steven Kim
MASTER OF SCIENCE IN ENVIRONMENTAL STUDIES

Application Deadlines

The deadlines for completing online applications are April 1 for the fall semester and November 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of 3.0 in the last 60 units of coursework attempted. In addition, two letters of recommendation are required, at least one of which must come from a college or university.

An undergraduate course in ecology and one in quantitative methods are prerequisites for admission. Students without these prerequisites may be admitted provisionally but must take these courses during their first year in the program.

Graduate Standing: Classified

After completing no more than nine semester units of adviser-approved coursework and developing an approved study plan, the student should apply for classified standing.

STUDY PLAN

The M.S. in Environmental Studies requires the completion of 36 units of adviser-approved coursework with a GPA of 3.0 or better, and includes a thesis or project. The student's thesis committee should comprise three CSUF faculty members, representing at least two different academic disciplines. A student's project is supervised by a single CSUF faculty member.

Environmental Studies Core (9 units)

Environmental Studies 500 Environmental Issues and Approaches (3)
Environmental Studies 510 Environmental Evaluation and Protection (3)
Environmental Studies 520 Environmental Research and Analysis (3)

Environmental Studies Electives (12-15 units)

Choose from:

Environmental Studies 595T Selected Topics in Environmental Problems (3)
Environmental Studies 596 Internship in Environmental Studies (3)
Environmental Studies 599 Independent Graduate Research (1-3)

Cross-Disciplinary Electives Work (9-12 units)

Courses outside Environmental Studies are chosen with prior approval of the faculty adviser and must be consistent with the student's area of concentration.

No more than 12 units can be taken from the undergraduate major department. A three-unit planning course must be included, either from environmental studies electives or cross-disciplinary elective.

Thesis 598 or Project 597 (3 units)

All Environmental Studies students are required to register in Environmental Studies 597 Project, or Environmental Studies 598 Thesis exit research option. Students may only register for this course once. If they do not complete their project or thesis within this semester, they will be assigned a grade of RP for the course until a letter grade can be assigned. Since students are required to maintain continuous enrollment, they must register in GS 700, either through University Extension or CSUF. Students may only enroll in GS 700 through University Extension for one semester if they are working on a project, and for two semesters if they are working on a thesis.

The deadline for project completion is the last Friday before the final exam period each semester. The deadline for thesis completion is set by the university (usually three weeks before the end of exam week). By the thesis/project deadline, a notification of completion form must be submitted with the faculty adviser's signature and (if applicable) with change of grade card(s) from the faculty adviser. In addition, all students must submit a hard-bound copy of his or her completed project or thesis. A receipt indicating that a bound and title-embossed copy of the thesis or project has been ordered for the Environmental Studies Program may be submitted on the deadline.

For further information, consult the graduate program associate coordinator.

ENVIRONMENTAL STUDIES COURSES

Courses are designated as ENST in the class schedule

500 Environmental Issues and Approaches (3)

Prerequisite: graduate standing in Environmental Studies. Discussions of interdisciplinary approaches to environmental problems and research methods. Students prepare seminars and papers on research design for potential thesis topics. Meets graduate writing requirement.

510 Environmental Evaluation and Protection (3)

Prerequisite: graduate standing in Environmental Studies. Environmental parameters (water, air, solid wastes, noise, radiation, etc.). Techniques in monitoring and measurement; effect on human health; environmental quality standards and controls. Demonstrations and field trips.

520 Environmental Research and Analysis (3)

Prerequisite: graduate standing in Environmental Studies. Research methods used in the field of environmental studies. Research tools used in such areas as environmental field studies, environmental experiments, social environmental impacts, environmental attitudes and behavior, and environmental trend analysis.

595T Selected Topics in Environmental Problems (3)

Prerequisite: graduate standing in Environmental Studies. Various environmental topics, contemporary or historic, that focus on problems (e.g., law, endangered habitats, planning, global environmental issues, etc.) Topic chosen and outline will be circulated prior to registration. One or more sections offered online. May be repeated four times (with different topics) for credit.
596 Internship in Environmental Studies (3)
Prerequisite: graduate standing in Environmental Studies. Field experience with a governmental or private agency.

597 Project (3)
Prerequisites: classified status in Environmental Studies program and consent of project adviser and program coordinator. Planning, preparation and completion of an acceptable, interdisciplinary project. Credit on submission of project and presentation of research findings in a poster session organized by the Environmental Studies Program.

598 Thesis (3)
Prerequisites: classified status in Environmental Studies program and consent of instructor and program coordinator. Planning, preparation and completion of an acceptable, interdisciplinary thesis. Credit on submission of thesis.

599 Independent Graduate Research (1-3)
Prerequisites: graduate standing in Environmental Studies and consent of instructor and program coordinator.
INTRODUCTION

European Studies is an interdisciplinary program designed for students whose interests and career objectives are in areas such as business, journalism, entertainment, government service, law or education, as well as those who plan to study some aspect of the European experience at the graduate level. The program provides students already majoring in an existing discipline or department (i.e., history, business, art, economics, philosophy, etc.) the opportunity to have a second major or a related minor. In addition, the program fulfills the various cultural objectives common to any liberal arts program. It would be a particularly good choice for students seeking teaching credentials.

The program has eight learning objectives: (1) to understand holistically the historical development of European politics, economics, society and culture; (2) to recognize and analyze the contributions of cultural diversity to Europe’s past and present; (3) to relate European regional developments to the global forces shaping developments in other world regions; (4) to identify the particular approaches of specific academic disciplines that study Europe; (5) to evaluate the advantages and disadvantages of specific disciplinary approaches to regional studies; (6) to synthesize from across the humanities and social sciences the multiple disciplinary approaches to the regional study of Europe; (7) to communicate both in writing and orally in a stylistically and grammatically correct manner in order to articulate the information learned in the program; (8) to think critically and to comprehend, analyze and synthesize information from a variety of primary and secondary sources, including written sources, images and film.

ADMITTANCE TO THE PROGRAM

Students wishing to be admitted to the major in European Studies must have acquired at least intermediate-level competency in a European language other than English. Further, they must have a solid foundation in Europe’s geography, society and culture.

Upper-Division European Language Requirement

Intermediate-level competency in a foreign language, equivalent to the intermediate language courses numbered 204 in the Department of Modern Languages and Literatures, is a prerequisite to the upper-division European language requirement. It is therefore strongly recommended that students complete a minimum of three years of foreign language study while in high school.

Completion of an advanced composition and grammar course is a core requirement for all European Studies students. In addition, majors must complete an additional upper-division foreign language class selected from those listed in the student’s advising track.

Students should enroll at the point in the sequence of courses for which their previous study and/or experience has prepared them. Students with no language background should enroll in fundamental 101-level courses. Normally, two years of high school language study are considered to be equivalent to one year of college language. Students just completing two years of high school language should begin at the 200-level intermediate courses.
European languages available at CSUF are French, German, Portuguese and Spanish. Students wishing to pursue other European languages may enroll in appropriate courses at other CSU or UC campuses or transfer credits from other accredited language programs. Students may also meet the language requirement by passing a proficiency exam administered by the European Studies Program Coordinator.

**European Studies Foundation Courses and General Education**

Students wishing to be admitted to the major in European Studies must have a solid foundation in Europe's geography, society and culture. Thus, we recommend that students choose from the following European Studies Foundation Courses when selecting their General Education (G.E.) coursework. (G.E. requirements fulfilled by each European Studies Foundation Course are listed in italics.)

- **History 110A  World Civilization to the 16th Century**  
  *Historical and Cultural Foundations Part A (II.A)*
- **History 110B  World Civilization since the 16th Century**  
  *Historical and Cultural Foundations Part A (II.A)*
- **Geography 100  Global Geography**  
  *Disciplinary Learning Introduction to the Social Sciences (III.C.1)*
- **Economics 201  Principles of Microeconomics**  
  *Disciplinary Learning Introduction to the Social Sciences (III.C.1)*
- **Economics 202  Principles of Macroeconomics**  
  *Disciplinary Learning Implications and Explorations in the Social Sciences (III.C.2)*
- **Art 201A  Art and Civilization**  
  *Disciplinary Learning Introduction to the Arts (III.B.1)*
- **Art 201B: Art and Civilization**  
  *Disciplinary Learning Introduction to the Arts (III.B.1)*
- **History 230  The Ascent of Man**  
  *Disciplinary Learning Implications and Explorations in Mathematics and Natural Sciences (III.A.3)*
- **Music 103  History of Rock Music**  
  *Disciplinary Learning Implications, Explorations and Participatory Experience in the Arts and Humanities (III.B.3)*
- **Women's Studies 205  Gender and Globalization**  
  *Lifelong Learning (IV)*
- **Comp Lit 110  Literature of the Western World from Ancient through Medieval Times**  
  *Disciplinary Learning Introduction to the Humanities (III.B.2)*
- **Anthro 100  Non-Western Culture and the Western Tradition**  
  *Disciplinary Learning Introduction to the Humanities (III.B.2)*
- **Comp Lit 111  Literature of the Western World from the Renaissance through the 19th Century**  
  *Disciplinary Learning Introduction to the Humanities (III.B.2)*
- **Comparative Religion 200  Introduction to Christianity**  
  *Disciplinary Learning Introduction to the Humanities (III.B.2)*
- **Comparative Religion 210  Introduction to Judaism**  
  *Disciplinary Learning Introduction to the Humanities (III.B.2)*
- **Philosophy 290  History of Philosophy: Greek Philosophy**  
  *Disciplinary Learning Introduction to the Humanities (III.B.2)*

**BACHELOR OF ARTS IN EUROPEAN STUDIES**

The major consists of 39 upper-division units including a required set of core courses (18 units) and an elective component (21 units). At least 12 but not more than 15 units in the elective component must be drawn from one of the five advisement tracks: (1) European Culture, Religion and Philosophy; (2) European Fine Arts and Literatures; (3) European History, Politics and Society; (4) Communications, Business and Economics in Europe; and (5) Thematic Plan in European Studies.

**Required Core Courses (18 units)**

- **Geography (3 units)**
  - Geography 336  Europe (3)
- **History (3 units)**
  - Anthropology 320  Cultures of Europe (3)
  - Economics 351  European Economic History (3)
  - History 320  Modern European History (1789-present) (3)
  - Poli Sci 330  Politics in Nation-States (3)
- **Upper-Division European Language Requirement (6 units minimum)**
  - With the approval of the Program Coordinator, students wishing to pursue European languages other than those offered at CSUF may satisfy these requirements by enrolling in comparable courses at other CSU or UC campuses or by transferring credits from other accredited language programs.
  - **1. Composition and Grammar (3 units)**
    - One course in advanced composition and grammar in a European language other than English.
    - French 307  Advanced Composition & Grammar (3)
    - OR French 308 Advanced Composition and Grammar (3)
    - German 305  Advanced Conversation & Composition (3)
    - Portuguese 317  Advanced Conversation & Composition (3)
    - Spanish 301  Advanced Grammar and Composition (3)
  - **2. Upper-Division Specialty Course (3 units)**
    - One advanced Modern Languages & Literatures specialty course selected from those listed in the student's advisement track.
  - **Upper-Division Writing Requirement (3 units)**
    - European Studies does not offer its own upper-division writing course. Instead, students take an approved writing course in one of the program's constituent departments. For a European Studies major with a declared minor, the writing course in that minor will satisfy this requirement. For double majors, the writing requirement will be satisfied by taking the writing course in the second major.
  - **European Studies Senior Colloquium (3 units)**
    - European Studies 490  European Studies Senior Colloquium (3)
Upper-Division Elective Courses (21 units, at least 12 but no more than 15 of which must be drawn from ONE of the following advisement tracks)

Established department prerequisites for courses in the advisement tracks will not be waived for European Studies students. Special topics, variable topics, and new courses, when such courses deal in some significant way with the European experience, may be approved for European Studies credit at the discretion of the Program Coordinator.

Advisement Tracks are designed to help students in their career and educational planning. The tracks represent central concentrations within the field of European Studies. While students gain their core knowledge of the category “Europe” by taking the European Studies Core Requirements, the advisement tracks allow students to develop further specialization in one of five central aspects of the European experience.

**ADVISEMENT TRACK ONE: EUROPEAN CULTURE, RELIGION & PHILOSOPHY**

This track is particularly useful for students whose career objectives are in education, as well as those who plan to study some aspect of the European experience at the graduate level. Students choosing Advisement Track One gain expertise in the changing, contested definitions of European cultural identity. They have the opportunity to examine further the philosophical and religious underpinnings of European culture and to explore how Europeans have defined cultural insiders and outsiders based on ethnicity, race, religion, class and gender.

- Afro-Ethnic Studies 335 History of Racism (3)
- Anthro 320 Cultures of Europe (3) (unless selected to fulfill core requirements)
- Comparative Religion 345A History and Development of Early Christian Thought (3)
- Comparative Religion 345B History and Development of Modern Christian Thought (3)
- Comparative Religion 346A History and Development of Jewish Thought: Biblical and Rabbinical Eras (3)
- Comparative Religion 346B History and Development of Jewish Thought: Medieval and Modern Eras (3)
- French 315 Origins of Modern France (3)
- French 325 Contemporary French Civilization (3)
- German 315 Introduction to German Civilization (3)
- German 325 Current Trends in Culture of German-Speaking Peoples (3)
- Kinesiology 380 History and Philosophy of Human Movement (3)
- Kinesiology 381 Sport, Games, and Culture (3)
- Philosophy 300 History of Philosophy: Rationalism and Empiricism (3)
- Philosophy 301 History of Philosophy: Kant and the 19th Century (3)
- Philosophy 303 Introduction to the Philosophy of Science (3)
- Philosophy 311 Aesthetics: Philosophy of Art and Beauty (3)
- Philosophy 323 Existentialism (3)
- Philosophy 324 Existential Group (3)
- Philosophy 345 Social and Political Philosophy (3)
- Philosophy 348 Philosophy of Religion (3)
- Philosophy 355 Philosophy of Law (3)
- Philosophy 380 Analytic Philosophy: 1900 to 1950 (3)
- Philosophy 381 The Analytic Tradition: 1950 to the Present (3)
- Philosophy 382 Marx and Marxism (3)
- Philosophy 383 Postmodernism (3)
- Philosophy 410 Ethical Theory (3)
- Philosophy 420 Metaphysics (3)
- Philosophy 430 Epistemology (3)
- Philosophy 440 Philosophy of Mind (3)
- Portuguese 320 Introduction to Luzo-Brazilian Culture & Civilization (3)
- Spanish 315 Introduction to Spanish Civilization (3)
- Spanish 415 Contemporary Spanish Culture (3)
- Women’s Studies 302 Introduction to Intercultural Women’s Studies (3)

**ADVISEMENT TRACK TWO: EUROPEAN FINE ARTS AND LITERATURE**

This track is particularly useful for students whose career objectives are in the fine arts, entertainment, as well as those who plan to study some aspect of the European experience at the graduate level. Students choosing Advisement Track Two gain expertise in the production and analysis of high cultural artifacts in art, literature, music, oratory, and theatre. This track also allows students to examine the works of cultural minorities and women in fine arts and literature.

- Art 301 Ancient Art (3)
- Art 302 Medieval Art (3)
- Art 311 Foundations of Modern Art (3)
- Art 312 Modern Art (3)
- Art 320 History of Architecture Before the Modern Era (3)
- Art 401 History of Women Artists (3)
- Art 413 History of Contemporary Art (3)
- Art 431 Renaissance Art (3)
- Comp Lit 315 Classical Mythology in World Literature (3)
- Comp Lit 373 Nineteenth-Century Russian Literature (3)
- Comp Lit 374 Twentieth-Century Russian Literature (3)
- Comp Lit 450 Medieval Literature (3)
- Comp Lit 451 Literature of the Renaissance (3)
- English 315 Chaucer (3)
- English 316 Shakespeare (3)
- English 317 Milton (3)
- English 374 The Gothic Novel (3)
- English 416 Studies in Shakespeare (3)
- English 450 Medieval Literature (3)
- English 451 Elizabethan and Jacobean Drama (3)
- English 452 Elizabethan Poetry and Prose (3)
ADVISEMENT TRACK THREE: EUROPEAN HISTORY, POLITICS & SOCIETY

This track is particularly useful for students whose career objectives are in government service, law, as well as those who plan to study some aspect of the European experience at the graduate level. Students choosing Advisement Track Three gain further expertise in the historical evolution of European political institutions and social relations. This track also allows students to examine European ethnic, gender, and class relations from historical, political and sociological perspectives.

Criminal Justice 450 Organized Crime and Intelligence Analysis (3)
French 315 Origins of Modern France (3)
French 325 Contemporary French Civilization (3)
German 315 Introduction to German Civilization (3)
German 325 Current Trends in Culture of German-Speaking Peoples (3)
History 311 World War II (3)
History 320 Modern European History (3)
(unless selected to fulfill core requirements)
History 331 History of Science: Copernicus to the Present (3)
History 395 A History of the First World War (3)
History 402 Ancient and Medieval Britain (3)
History 403 Tudor-Stuart England (3)
History 404 History of Modern England and Great Britain (3)
History 405 History of the Jews (3)
History 406 The Holocaust (3)
History 409 Cities in European Civilization, 1000-1915 (3)
History 415A Classical Greece (3)
History 417A Roman Republic (3)
History 417B Roman Empire (3)
History 420 The Byzantine Empire (3)
History 421A History of the Christian Church to the Reformation (1517) (3)
History 421B History of the Christian Church from the Reformation to the Present (3)
History 423 Medieval History, 300-1350 (3)
History 424T Gender and Sexuality in History (3)
History 425A The Renaissance (3)
History 425B The Reformation (3)
History 427 Enlightenment and Revolution (3)
History 428 The Rise and Decline of Liberal Europe in the 9th Century (3)
History 429A Europe 1890-1945 (3)
History 429B Europe Since 1945 (3)
History 432 From Bismarck to Hitler: Modern Germany 1870-1945 (3)
History 434A Russia to 1801 (3)
History 434B Modern Russia and the Soviet Regime (3)
Poli Sci 330 Politics in Nation-States (3)
(unless selected to fulfill core requirements)
Poli Sci 340 Political Philosophy (3)
Poli Sci 350 World Politics in the 21st Century (3)
Poli Sci 438 Western European Democracies (3)
Poli Sci 457 Politics of International Economics (3)
Poli Sci 461 The United Nations and International Organization (3)
Poli Sci 476 International Law (3)
Portuguese 320 Introduction to Luzo-Brazilian Culture & Civilization (3)
Psychology 408 History of Psychology (3)
Sociology 410 Theories of Social Behavior (3)
Spanish 315 Introduction to Spanish Civilization (3)
Spanish 415 Contemporary Spanish Culture (3)

ADVISEMENT TRACK FOUR: COMMUNICATIONS, BUSINESS & ECONOMICS IN EUROPE

This track is particularly useful for students whose career objectives are in business, journalism, as well as those who plan to study some aspect of the European experience at the graduate level. Students choosing Advisement Track Four develop further expertise in the changing impact of European economic integration on global trade, communications and finance.

Economics 330 Comparative Economic Systems (3)
Economics 331 Economies in Transition (3)
Economics 335 The International Economy (3)
Economics 351 European Economic History (3)
Economics 411 International Trade (3)
Economics 431 International Macroeconomics and Growth (3)
Economics 450 History of Economic Thought (3)
Finance 370 International Business Finance (3)
French 310 French in the Professional World (3)
French 311 French for International Business (3)
French 407 French Film (3)
German 310 German in the Business World (3)
German 311 German for International Business (3)
German 482 German Literature & Culture in Film (3)
Human Comm 432 Contemporary Rhetoric (3)
Management 346 International Law for Business (3)
Management 350 International Management (3)
Management 480 Global Strategic Management (3)
Marketing 445 International Marketing (3)
Marketing 475 Export Marketing Strategies (3)
Marketing 489 Developing Marketing Strategies (3)
Portuguese 310 Portuguese in the Business World (3)
Radio-TV-Film 370 World Cinema (3)
Comm 426 Global Media Systems (3)
Spanish 310 Spanish in the Business World (3)
Spanish 311 Spanish for International Business (3)
Spanish 407 Spanish Visual Representations of Cultural Transformations in the 20th Century (3)

ADVISEMENT TRACK FIVE: THEMATIC PLAN IN EUROPEAN STUDIES

This track is useful for students with specialized individual career goals or those with career plans in education. Students must develop their thematic plan in conjunction with the Program Coordinator to ensure that their course of study meets European Studies learning goals.

Option 1: Individualized plan of study to be developed in conjunction with European Studies Program Coordinator.

Option 2: Open to Liberal Studies students only. Individualized plan of study to be developed in conjunction with Liberal Studies adviser and European Studies Program Coordinator.

MINOR IN EUROPEAN STUDIES

The minor consists of 19 upper-division units including a required set of core courses (10 units) and an elective component (9 units).

Required Core Courses (10 units)

Geography (3)
Geography 336 Europe (3)
History (3)
Anthro 320 Cultures of Europe (3)
Economics 351 European Economic History (3)
History 320 Modern European History (1789-present) (3)
Poli Sci 330 Politics in Nation-States (3)

Upper-Division Foreign Language Composition and Grammar (3)

One course in advanced composition and grammar in a European language other than English. With the approval of the Program Coordinator, students wishing to pursue European languages other than those offered at CSUF may satisfy these requirements by enrolling in comparable courses at other CSU or UC campuses or by transferring credits from other accredited language programs.

French 307 Advanced Composition & Grammar (3)
OR French 308 Advanced Composition and Grammar (3)
German 305 Advanced Conversation and Composition (3)
Portuguese 317 Advanced Conversation & Composition (3)
Spanish 301 Advanced Grammar and Composition (3)
European Studies Senior Colloquium (1)
European Studies 490 European Studies Senior Colloquium (1)

Upper-Division Elective Courses (9 units)

Students may choose to take any of the courses listed as electives for the major.

EUROPEAN STUDIES COURSES

Courses are designated as EUST in the class schedule.

490 European Studies Senior Colloquium (1-3)

Course open only to European Studies majors and minors with senior standing who have completed 6 units of European Studies Required Core Courses. Senior capstone seminar requires majors and minors to assemble a portfolio of prior work in European Studies and majors to complete an additional original research paper/project that deals in some way with a problem or challenge facing Europe today.
INTRODUCTION

In choosing their coursework, students are advised (but not required) to choose one of the five areas (advisory tracks) of study within the finance concentration. The corporate/international financial management track is designed to provide entry-level skills for students interested in the financial management of a non-financial firm. The international component of this track is designed for students who are interested in international corporate financial management. The financial institutions track may lead to employment in banks or savings and loan associations. The investment/financial planning track is designed for students interested in positions with brokerage firms or financial planning firms. The insurance and financial services track is designed for students interested in positions with insurance firms. The real estate professions track is designed for students interested in careers in commercial brokerage, property management, property development and real estate finance. Students may also combine courses from different advisory tracks to meet a specialized educational objective.

Finance Department Scholarships

Alliant Risk Services Scholarship
American International Companies (AIG) Scholarship
AmWIMS Scholarship
Aon Risk Services Scholarship
Auto Club Insurance Scholarships
Bill Doomey Memorial Scholarship
CPCU of Orange County Insurance Scholarship
CSU Real Estate Scholarships
Financial Executive Scholarship
Gamma Iota Sigma (GIS) Scholarship
George Joseph Insurance Scholarship
Gutmann Family Scholarship
HCC Surety Group Insurance Scholarship
Insurance Industry Charitable Foundation Awards
Insurance Professionals of Orange County Award
L.A. RIMS Insurance Scholarships
L.A. RIMS Outstanding Student Scholarship
Liberty Mutual Scholarship
Mercury Outstanding Insurance Student
Millennium Scholarship
New York Life Insurance Scholarships

DEPARTMENT CHAIR
John Erickson

DEPARTMENT OFFICE
Steven G. Mihaylo Hall 5113

DEPARTMENT WEBSITE
www.business.fullerton.edu/finance

PROGRAMS OFFERED
Bachelor of Arts in Business Administration
Concentration in Finance
Joint Emphasis in Accounting and Finance
Master of Business Administration
Concentration in Finance

FACULTY
Vipin Agrawal, Mehmet Akbulut, Aziz Alimov, Ajay Bhootra, Dean Capper, Carolyn Chang, Donald Crane, John Cross, Amadeu DaSilva, Dipasri Ghosh, John Erickson, Joseph Greco, Michael LaCour-Little, Tsiow-Yue Lai, Yuming Li, Yue Liu, Weili Lu, Michael Milligan, Yun Park, Catherine Richert, Mark Hoven Stohs, Donald Valachi, Blaine Walgren, Xiaoying Xie, Jing Yang

ADVISERS
The Business Advising Center, Steven G. Mihaylo Hall 1201, provides information on admissions, curriculum and graduation requirements, registration and grading procedures, residence and similar academic matters. In addition, advising on curriculum content and career opportunities may be obtained from the chair of the Finance Department or from:

Financial Management
Vipin Agrawal, Yun Park

Personal Financial Planning
Donald Crane

Real Estate
Michael LaCour-Little, Donald Valachi

Securities and Investments
Ajay Bhootra

Insurance and Financial Services
Weili Lu

International Finance
Joseph Greco
O.C. RIMS Insurance Scholarships
Pacific Life Insurance Scholarships
Philadelphia Insurance Scholarship
Robitaille Family Student Athlete Award
Surety Underwriters of Southern California
Terlecky Family Scholarship
The Travelers Companies, Inc.
Tutton Insurance Scholarship
Wang Family Insurance Scholarships
Zenith Outstanding Insurance Student

**BACHELOR OF ARTS IN BUSINESS ADMINISTRATION**
See "Business Administration, Finance Concentration."

**MASTER OF BUSINESS ADMINISTRATION**
See "Business Administration, MBA"**

**FINANCE COURSES**
Courses are designated as FIN in the class schedule.

**310 Personal Financial Management (3)**
Financial problems of the household in allocating resources and planning expenditures. Housing, insurance, installment buying, medical care, savings and investments. Special financial planning problems faced by minorities and women. May not be used to fulfill the concentration requirement in finance.

**320 Business Finance (3)**
Prerequisite: Accounting 201A. Corequisites: InfoSys/DecSci 361A and Business Admin 301. Financing business enterprises; financial planning and control; analysis of alternative sources and uses of combinations of short-, intermediate- and long-term debt and equity. Cost of capital and capital investment decisions; capital budgeting analysis and valuation; working capital management; corporate financial decisions in an international environment.

**331 Working Capital Management and Computer Applications (3)**
Prerequisite: Finance 320. Analysis of working capital management and policy, liquidity measurement, sources of financing for periods of cash deficits; management of accounts receivable and inventories; financial forecasting; and short-term financing.

**332 Theory of Corporate Finance (3)**

**335 Financial Analysis for Investors and Lenders (3)**
Prerequisite: Finance 320. Interpretation of financial statements from the perspective of the financial analyst and creditor. Economic meaning of financial statement data for the purpose of evaluating a company’s financial performance.

**340 Introduction to Investments (3)**
Prerequisite: Finance 320. Institutional characteristics of securities markets, security valuation and trading methods, fundamental and technical analysis, selection and management of securities, role of the capital asset pricing model in investing, options and futures markets, portfolio analysis and mutual funds.

**342 Capital and Money Markets (3)**
Prerequisite: Finance 320. Capital and money markets in the American and international economies; markets for new corporate and government issues; secondary markets; use of derivative securities for hedging; factors influencing yields and security prices.

**351 Introduction to Real Estate (3)**
Prerequisite: Finance 320. Real estate principles, practices and investment decisions. Equity investment, finance, legal aspects, practices, principles, property development, real estate administration in the public sector, real estate market analysis, and valuation.

**352 Real Estate Finance (3)**
Prerequisite: Finance 351. Financial institutions and real estate credit. Sources and uses of capital (funds) in financing real estate transactions. Money and capital markets and their effect on credit availability. Mortgage mechanics and the workings of primary and secondary markets.

**353 Real Estate Valuation (3)**
Prerequisite: Finance 351. Comprehensive coverage of the basic concepts and principles of real estate valuation. Use of the three approaches to valuation for the appraisal of residential and income-producing properties. Role of valuation in real estate investment. Government regulation of appraisers.

**355 Real Estate Investment Analysis (3)**
Prerequisite: Finance 320. Alternative analytical techniques in evaluating real estate investments. Tax aspects, measurement of investment returns, application of computer models to investment decisions. Lecture, discussion and case analysis of major investment types – raw land, apartment houses, commercial and industrial uses.

**360 Principles of Insurance (3)**
Prerequisite: Finance 320. Analysis of the risk management process, introduction to property and liability insurance, employee benefits and financial planning. Overview of the insurance industry and insurance problems.

**370 International Business Finance (3)**
Prerequisite: Finance 320. Financing problems of the multinational business. International financial environment, taxation of foreign income, the cost of capital in international capital and money markets, problems of risk in foreign investments and financial techniques for the operation of the multinational firm.
371 Export-Import Financing (3)
Prerequisite: Finance 320. Institutional arrangements, methods and techniques used to finance international trade. Government and financial institution services. Risk-return aspects of international sales, insurance needs, the use of letters of credit, international factoring, accounts receivable insurance and other financing techniques. Review of required export-import documentation.

373 Asia-Pacific Financial and Security Markets (3)
Prerequisite: Finance 320. Overview of financial markets in Japan, Korea, Taiwan, China, Hong Kong, Singapore and Southeast Asia. Historical perspectives, regulations, more recent liberalization and internationalization and institutional technical aspects of the stock, bond and other financial markets.

410 Theory and Practice of Personal Financial Planning (3)
Prerequisite: Finance 320. Developing, implementing and monitoring comprehensive personal financial plans. Risk management, investments, taxation, retirement and estate planning, professional practices.

411 Retirement and Estate Planning (3)
Prerequisite: Finance 320. Development of retirement objectives, needs and financial condition. Forecasting retirement income from employer based retirement plans, IRAs, insurance policies, social security, and investment programs. Medicare, medical, group life and health benefits after retirement. Property titling, wills and transfers in contemplation of death.

425 Commercial Bank and Financial Institution Management (3)

432 Financial Forecasting and Budgeting (3)
Prerequisite: Finance 320. Forecasting in financial management; profit planning and control process; goals, technical procedures, and effects of budgeting; mechanics of forecasting and budgeting, follow-up and control.

433 Problems in Business Finance (3)
Prerequisite: Finance 332. Case studies. Group problems and case studies relating to estimation of funds requirements, long-term financial planning, evaluation of cash flows, financing acquisitions and mergers, capital budgeting and cost of capital. Team-building, leadership and computer-assisted presentation skills. Not applicable for graduate degree credit.

435 Capital Markets and Fixed Income Analysis (3)
Prerequisite: Finance 320 or 517. Corequisite: Finance 340 or 541. Fixed income markets, including the price dynamics and risk profiles of various fixed-income securities, derivatives, yields, duration, credit analysis of bonds, portfolio management strategies, calculating performance and identifying factors driving fixed income returns.

442 Advanced Investment Analysis (3)
Prerequisites: Finance 340 and InfoSys/DecSci 361A. Securities markets and company analysis, security valuation models, the CAPM and the APT, option pricing and portfolio models. Practical application of investment theory and recent literature. Students may not receive credit for both Finance 442 and 541.

444 Options and Futures (3)

454 Real Estate Market Analysis (3)

461 Business Property and Liability Risk Management (3)
Prerequisite: Finance 360. Duties and functions of a corporate risk manager, the major commercial property liability lines, including business income, general liability, commercial auto workers compensation, business owner insurance and operation of property liability insurers.

462 Life and Health Insurance (3)
Prerequisite: Finance 360. Analysis of various types of life annuity and health insurance contracts, major employee benefit plans adopted by corporations and the organization and management of life and health insurance companies.

463 Professional Ethics, Corporate Compliance and Regulation (3)
Prerequisites: Finance 320 and Management 246. How organizations can best assess and manage their exposure to legal, regulatory and ethical issues through corporate compliance programs.

464 Insurance Marketing and Distribution (3)
Prerequisites: Finance 320 and Marketing 351. Overview of practices and procedures involved in insurance marketing and distribution; Analyzes insurance marketing environment, marketing strategies and product promotion; introduction to insurance distribution channels and sales force management.

495 Internship (1-3)
Prerequisites: Finance 332, a concentration in finance, consent of department internship adviser, junior standing, 2.5 GPA and one semester in residence at the university. Also open to international business majors. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.
499 Independent Study (1-3)
Prerequisites: Finance 332, 340 and consent of the department chair. Open to undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

517 Managerial Finance (3)

523 Seminar in Corporate Financial Management (3)
Prerequisites: Finance 517 or equivalent and classified MCBE status. Analysis of financial decision-making process through case studies and seminar presentations. Current financial theory and models. International applications.

528 Financial Economics (3)
Prerequisite: Finance 517. Valuation or corporate liabilities and other securities. Economic decision-making under uncertainty and asset pricing theories are analyzed rigorously. Other topics may include optimal capital structure, the market for corporate control, or macroeconomic aspects of finance.

533 Seminar in Financial Administration (3)
Prerequisites: Finance 517 and classified MCBE status. Optimal financing and asset administration; advanced techniques of capital budgeting; application of analytical methods to the administration of the finance function of the business firm.

541 Seminar in Investment Management (3)
Prerequisites: Finance 517 or equivalent and classified MCBE status. Problems of investment and portfolio management; concepts of risk evaluation and investment criteria; analysis of interest rate movements; investment valuation and timing; regulation and administrative problems of the industry. Students may not receive credit for both Finance 442 and 541.

543 Entrepreneurial Finance (3)
Prerequisites: Finance 517, Accounting 510 and Accounting 511. Financing a new/small firm, including forecasting the firm’s investment needs, raising short-term funding and banking relationships, managing working capital, making fixed asset investments and managing risk.

551 Seminar in Real Estate Investment (3)
Prerequisites: Finance 517 or equivalent and classified MCBE status. Problems of real estate investment; concepts of evaluation and investment criteria; analysis of real property values; real estate development and financing. Case studies.

570 Seminar in International Financial Management (3)
Prerequisites: Finance 517 or equivalent and classified MCBE status. Financial problems of the multinational firm. International financing instruments, capital investment decisions and constraints on the profitability of multinational businesses.

597 Project (3)
Prerequisites: Finance 517 or equivalent and classified MCBE status, consent of instructor and approval by Department Chair. Directed independent inquiry. Not open to students on academic probation.

599 Independent Graduate Research (1-3)
Prerequisites: Finance 517 or equivalent and classified MCBE status, consent of instructor and approval by Department Chair and Associate Dean. May be repeated for credit. Not open to students on academic probation.
INTRODUCTION

Geography is the study of the earth as the home of humanity. Geography provides a broad understanding of the processes that unite people, places and environments. Geographers explore the diverse regions of the contemporary world in pursuit of global understanding. They tie together the study of human spatial organizations and cultural landscapes with an in-depth investigation of the earth’s landforms, climates and vegetation. Their methods range from fieldwork in foreign areas to advanced information technologies like computerized geographic information systems and remote sensing. Geography graduates find rewarding careers in environmental analysis and planning, business, government agencies and education.

International Learning Opportunities in Geography

The Department of Geography is strongly committed to providing students with an international perspective. Geography 100 Global Geography offers a broad overview of the major countries and regions of the earth. Upper-division courses in Latin America (Geography 333), Europe (Geography 336), Asia (Geography 340) and Africa (Geography 344) offer an opportunity for in-depth study of specific regions. Finally, many other courses (Geography 120 Global Environmental Problems and Geography 360 Geography of the World’s Economies, for example), include a strong international emphasis. In recent years, members of the geography faculty have conducted fieldwork in Asia, South America and Europe.

BACHELOR OF ARTS IN GEOGRAPHY

Credential Information

The bachelor’s degree in geography may be effectively combined with subject matter studies necessary for either the multiple subject teaching credential (K-8) or single subject credential (7-12) in social studies. Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

The Bachelor of Arts in Geography requires a minimum of 120 units, which includes courses for the major, General Education, all University requirements and free electives. The major consists of at least 39 units of geography, of which at least 21 must be in upper-division courses. Students may satisfy some requirements with equivalent coursework taken at other institutions. Each course counted toward the major must be completed with a grade of “C” (2.0) or higher. Students are encouraged to take additional geography courses beyond the minimum required for the major. 
MAJOR IN GEOGRAPHY

The major consists of a total of 39 units of coursework.

Core Courses (15 units)

Geography 100 Global Geography (3)
Geography 110 Introduction to the Natural Environment (3)
Geography 160 Human Geography (3)
Geography 281 Map Making with GIS (3)

Three additional units from courses numbered 280 to 289.

Upper-Division Courses

Environmental Geography (3 units), one of the following:
Geography 329 Cities and Nature (3)
Geography 350 Nature and Society (3)

Human Geography (3 units), one of the following:
Geography 357 Spatial Behavior (3)
Geography 360 Geography of the World's Economies (3)
Geography 370 Cities and Suburbs (3)
Geography 375 Population Geography (3)

Physical Geography (3 units), one of the following:
Geography 312 Geomorphology (3)
Geography 323 Weather and Climate (3)
Geography 325 Natural Vegetation (3)

Regional Geography (3 units)
Three units from courses numbered 330 to 349.

Advanced Geography (6 units)
Six units from courses numbered 400 to 489.

Geography Elective (3 units)
Three units lower- or upper-division geography not used to satisfy any other requirement.

Upper-Division Writing Requirement (3 units), one of the following:
English 301 Advanced College Writing (3)
English 360 Scientific and Technical Writing (3)

Capstone Requirement

Prior to graduation, each student must demonstrate a critical understanding of the major processes that shape the earth's landscapes, regions and places, and that influence human interaction with the earth's cultural and physical environments. This requirement will be met through satisfactory completion of one of the following capstone courses:

Geography 422 Global Climate Change (3)
Geography 425 Tropical Rainforests (3)
Geography 426 The Coastal Environment (3)
Geography 450 Human Response to Environmental Hazards (3)
Geography 452 Ecotourism (3)

Geography 475 Interpretation of Urban Landscapes (3)
Geography 478 Urban Planning Principles (3)
Geography 488 Land Use Analysis (3)

Units earned from the capstone course can be used to satisfy the Advanced Geography or Geography Elective requirements of the Geography Major.

EMPHASIS IN ENVIRONMENTAL ANALYSIS

Geography graduates often find employment in such areas as environmental planning and related technical fields. For this reason, an optional upper-division emphasis in environmental analysis is available within the major. The emphasis consists of a total of 39 units of coursework.

Core Courses (15 units)

Geography 100 Global Geography (3)
Geography 110 Introduction to the Natural Environment (3)
Geography 160 Human Geography (3)
Geography 281 Map Making with GIS (3)

Three additional units from courses numbered 280 to 289.

Upper-Division Courses

Environmental Geography (3 units)
Geography 350 Nature and Society (3)

Human Geography (3 units), one from the following:
Geography 357 Spatial Behavior (3)
Geography 360 Geography of the World's Economies (3)
Geography 370 Cities and Suburbs (3)
Geography 375 Population Geography (3)

Physical Geography (6 units), two from the following:
Geography 323 Weather and Climate (3)
Geography 325 Natural Vegetation (3)

Regional Geography (3 units)
Three units from geography courses numbered 330 to 347.

Advanced Geography (6 units), two from the following:
Geography 329 Cities and Nature (3)
Geography 312 Geomorphology (3)
Geography 323 Weather and Climate (3)
Geography 325 Natural Vegetation (3)

Upper-Division Writing Requirement (3 units), one of the following:
English 301 Advanced College Writing (3)
English 360 Scientific and Technical Writing (3)
Capstone Requirement

Prior to graduation, each student must demonstrate a critical understanding of the major processes that shape the earth’s landscapes, regions and place, and that influence human interaction with the earth’s cultural and physical environments. This requirement will be met through satisfactory completion of one of the following capstone courses:
- Geography 422 Global Climate Change (3)
- Geography 425 Tropical Rainforests (3)
- Geography 426 The Coastal Environment (3)
- Geography 450 Human Response to Environmental Hazards (3)
- Geography 452 Ecotourism (3)
- Geography 488 Land Use Analysis (3)

Units earned from the capstone course can be used to satisfy the Advanced Geography requirement of the Emphasis in Environmental Analysis.

MINOR IN GEOGRAPHY

The minor in geography serves students seeking a geographic perspective to complement their major. Interested students should take at least 21 units of geography, including Geography 100 and three units from the following: 110, 120, 160 or 281; and a minimum of 12 units of upper-division work. All courses counted toward the minor must be completed with a grade of “C” (2.0) or higher. Faculty advisers are available to help students structure their minor in geography.

MASTER OF ARTS IN GEOGRAPHY

This program provides advanced study in human and physical geography with an emphasis on theory and research. Graduates are prepared in the application of interpretive and analytical concepts and techniques to a broad spectrum of geographic situations. Such study directly serves those whose careers involve urban, regional, and environmental planning and geographic education. Geographic perspectives and methods are highly applicable to a wide range of careers in business, industry and government.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission and Conditional Classification

The department requires a grade-point average of at least 3.0 in the last 60 semester units attempted and a 3.0 grade-point average in all geography courses. Students who have no, or a limited, background in geography will be expected to make up the deficit by taking appropriate coursework in consultation with the departmental graduate adviser.

All students are required to demonstrate competency in each of geography’s four main subfields: human, physical, regional and technical. Competency is normally demonstrated by completion of at least 18 units at the upper-division or graduate level with a 3.0 grade-point average.

Graduate Standing: Classified

After completion of all prerequisites and removal of deficiencies, the student must develop an approved study plan in consultation with a personal faculty adviser and the graduate program adviser in order to be classified.

All students must complete six units of upper-division technical courses. Three units are prerequisite to classified standing. If the remaining three units were not taken as undergraduate work, they may be included in the study plan.

Study Plan

The study plan consists of 30 units of coursework distributed as follows:

Required Courses
- Geography 500 Seminar in Geographic Research (3)
- Geography 520 Seminar in Physical Geography (3)
- Geography 550 Seminar in Human Geography (3)
- Geography 599 Independent Graduate Research (3)

One additional 500-level geography course (3) for the Master of Arts in Geography

Electives (12-15 units)
- Senior-level or graduate coursework in geography (15 units unless approved for thesis; may include additional Geography 500-level courses; up to six units from related fields).

Thesis or Comprehensive Exam (0-3 units)
- Geography 598 Thesis (3) (department approval required)
  - Students must follow one of two plans: Plan A, requiring a comprehensive examination; or Plan B, requiring a thesis.
  - Plan A requires the development of a specific field of interest and a written, three-part comprehensive exam testing knowledge in human geography, physical geography and the student’s specified area of interest. The examination may be repeated only once. Plan B requires the development of a specific field of interest, a written thesis and a subsequent oral defense.
  - All students will follow Plan A unless approval for the thesis option is granted. In order to follow Plan B, the thesis option, students must have the written consent of their thesis supervisor and all members of a thesis committee. Permission to write a thesis may be granted only to students who have (1) achieved a 3.25 grade-point average after 15 units of upper-division and graduate coursework and (2) demonstrated proficiency in research and writing skills.
  - For further details or advisement, communicate with the Department of Geography graduate program adviser.

GEOGRAPHY COURSES

Courses are designated as GEOG in the class schedule.

100 Global Geography (3)

Introduction to world’s geographical regions. Cultural patterns and their evolution in diverse physical environments. One or more sections offered online.
110 Introduction to the Natural Environment (3)
Prerequisite: completion of General Education (G. E.) Categories III.A.1 and III.A.2. Introduction to the major components of the physical environment, including landforms, climate, natural vegetation and soils. One or more sections offered online.

120 Global Environmental Problems (3)
Prerequisite: completion of G. E. Category III.A.2. Geographical analysis of the Earth’s principal environmental problems. Subjects include population growth, agriculture and pesticides, climate change, forestry and fishing, energy, endangered species and appropriate development. One or more sections offered online.

160 Human Geography (3)
Prerequisite: completion of G. E. Category III.C.1. An Introduction to Human Geography. Understanding the regional distribution of language, religion, population, migration and settlement patterns, political organization, technology, methods of livelihood over the earth. One or more sections offered online.

281 Map Making with Geographic Information Systems (3)
Principles and practice of effective map making using computerized geographic information systems technology. (2 hours lecture, 2 hours laboratory)

283 Introduction to Spatial Data (3)
Introduction to the variety of evidence used in geographic analysis and the sources and techniques for acquiring geographic evidence.

312 Geomorphology (3)
Prerequisites: Geog 110, Geology 101. Landforms and the processes responsible for their evolution.

323 Weather and Climate (3)
Prerequisite: Geog 110. Atmospheric elements and controls, fronts, severe weather and climatic classification systems.

325 Natural Vegetation (3)
Geography of the globe’s natural vegetation associations. Role of plate tectonics, climate, soils, fire and humans as agents of landscape-level vegetation change.

329 Cities and Nature (3)
Prerequisites: completion of G. E. Categories III.A.1 and III.A.2 or III.A.2.b. Overview of the impact of urbanization on landforms, climate, vegetation, and animals. Planning implications and case studies.

330 California (3)
Landscapes of California, their environmental characteristics, development patterns and current problems.

332 United States and Canada (3)
Prerequisite: completion of G. E. Category III.C.1. United States and Canada. Interrelated physical and cultural features that give geographic personality to the regions.

333 Latin America (3)
Prerequisite: completion of G. E. Category III.C.1. Mexico, Central America, the Caribbean and South America. Explores the regions’ physical and cultural landscapes. Emphasizes nature-society problems.

336 Europe (3)
Basic physical and human lineaments of Europe. Elements that distinguish and give character to its major regional divisions.

340 Asia (3)
Prerequisite: completion of the G. E. Category III.C.1. Physical, human and regional geography of Asia, from Pakistan and India through Southeast Asia and the Malay Archipelago to China, Japan and Korea. One or more sections offered online.

342 The Middle East (3)
Prerequisite: completion of the G. E. Category III.C.1. Geography of the Middle East from North Africa to Central Asia, with emphasis on the region’s physical, cultural, historical, economic, and political geography and contemporary issues facing the region.

344 Africa (3)
Physical, human and regional geography of Africa. Saharan borderlands, East Africa and Southern Africa.

350 Nature and Society (3)
Prerequisite: completion of G. E. Category III.C.1. Interface between human systems and natural systems. Factors affecting human interaction with the earth, including environmental ethics, public policy and technology.

352 The National Parks (3)
The park system and its evolution as related to conservation, preservation and recreational land use. Cultural heritage and physical environment.

357 Spatial Behavior (3)
Geographic approach to perception and behavior in local and global spatial settings.

360 Geography of the World’s Economies (3)
Geographic perspectives on the global production of goods and services and their distribution to consumers. Key geographic issues in uneven development, international trade, investment patterns, and the spatial integration of local and regional economies.

370 Cities and Suburbs (3)
American metropolitan systems and city-region linkages. Theories and spatial models of social and economic patterns within cities and suburbs; planning implications of these locational patterns.

375 Population Geography (3)
Prerequisites: Geog 160 and junior standing. Theories, models, concepts and facts in the field of population geography, growth and distribution, with an emphasis on birth, death and migration processes.
Global Climate Change (3)
Prerequisite: Geog 323. Physical factors that produce climatic patterns and regional impacts of climate change.

Tropical Rainforests (3)
Prerequisites: Geog 110 and Geog 325 or equivalent. Discussion/seminar examining the geography, ecology and human use of tropical rainforests. Causes and consequences of deforestation, sustainable development and preservation.

The Coastal Environment (3)
Prerequisites: Geog 110 and one upper-division physical geography course. An overview of coastal geomorphology, climatology, and plant geography with an emphasis on Southern California. Human interaction, modification, and management of those systems.

Human Response to Environmental Hazards (3)
Prerequisites: Geog 110 and at least one 300-level geography course; Geography 350 preferred. Issues involved as humans endeavor to minimize the impact of hazards in the environment. Importance of cognition, perception, communication, mitigation and preparedness as societies cope with hazards posed by the natural world and human action.

Ecotourism (3)
Evolution and distribution of nature-based tourism. Role of ecotourism in regional development and environmental conservation. Sociocultural impacts in less developed countries.

Interpretation of Urban Landscapes (3)
Prerequisites: Geog 357 or 370 and consent of instructor. Geographic view of the city as a landscape composite of structure, space, place and experience. Emphasizes the European and North American city.

Urban Planning Principles (3)
Prerequisite: Geog 370 or Poli Sci 320. Seminar/discussion on conceptual themes and legal foundations of American urban planning. Policy areas associated with urbanization and suburbanization processes: land use, economic development, redevelopment, housing systems, neighborhood dynamics and growth management. (Same as Political Science 478)

Geographic Information Systems: Introduction (3)
Methods and applications of computer-assisted mapping and geographic information systems. (2 hours discussion, 3 hours lab)

Environmental Impact Assessment (3)
Prerequisites: Geog 350, 478, or equivalent. Techniques relevant to environmental impact assessment in accord with CEQA (state) and NEPA (federal) regulations. Systematic evaluation of major environmental impact topics. Individual and small team activities.

Urban Planning Methods (3)
Prerequisite: Geog 478 or Poli Sci 478. Seminar and Practicum on methods in urban planning. Analytical techniques and basic data sources. Population forecasting, housing surveys, economic development, fiscal impacts and area revitalization. Individual and team projects. (Same as Political Science 484)

Geographic Information Systems: Principles and Applications (3)
Prerequisite: Geog 481 or equivalent. Integrated computer-assisted methods for handling spatial data, including database design, data conversion and updating, information retrieval, analysis, modeling and mapping. Instructional fee.

Environmental Remote Sensing (3)
Prerequisite: Geog 481. Fundamentals of remote sensing science and digital image processing. Remote sensing principles and the processing and interpretation of remotely sensed data using image processing techniques and software.

Land Use Analysis (3)
Prerequisites: junior, senior or graduate standing and consent of instructor. Urban and rural land use and settlement; geographic field problems. Application of geographic techniques and tools to local field studies.

Internship in Applied Geography (1-3)
Students work specified number of hours in appropriate public or private organizations under the supervision of their staff and as coordinated by departmental faculty. Interns meet with instructor by arrangement. May be repeated for a maximum of three units of credit.

Independent Study (1-3)
Prerequisite: senior standing. Consent of instructor under whom study will be taken required before enrolling. May be repeated for a maximum of six units of credit.

Seminar in Geographic Research (3)
Prerequisites: graduate standing and consent of instructor. A required seminar to be taken prior to the development of a thesis.

Seminar in Physical Geography (3)
Prerequisite: graduate standing. Research in physical geography: methods and contemporary themes. Case studies in climatology, geomorphology and plant geography.

Seminar: Selected Topics in Geography (3)
Prerequisite: graduate standing. Various topics selected from any of the subfields of geography. The topic chosen and a general outline of the seminar are circulated prior to registration. May be repeated for credit.

Seminar in Human Geography (3)
Prerequisite: graduate standing. Survey of methodology and case studies, including: experiential environments; rural landscapes; urban, social and economic structure; geography and public policy; and Third World development. Meets the graduate level writing requirement.

Project (3)
Prerequisites: Geog 500 and consent of adviser.

Thesis (3)
Prerequisites: completion of Geog 500, advancement to candidacy and consent of instructor.

Independent Graduate Research (1-3)
Open to graduate students by consent of instructor. May be repeated for credit.
INTRODUCTION

Geological Sciences is the study of Earth through time, including its physical nature, chemical composition and dynamics, as well as its origin and evolution. In addition to the quest for understanding the way Earth works and its relation to the solar system, geological scientists are involved in the search for energy, mineral and water resources, the evaluation and remediation of environmental hazards, and the prevention and/or prediction of natural disasters such as earthquakes, volcanic eruptions, landslides, coastal erosion and floods. About 60 percent of all geological scientists are employed by private industry, primarily by engineering, environmental, petroleum and mining companies. Others are employed by government agencies, educational institutions and research centers.

Faculty expertise spans much of the breadth of the Earth Sciences and that breadth is reflected in the curriculum. Faculty research focuses on aspects of Earth’s recent history and the record of past surface environments. Research specialties, including seismology, active tectonics, Quaternary geology, geomorphology, hydrology, engineering geology, volcanism, sedimentation, environmental geology and climate change reflect this focus. Each undergraduate and graduate student is required to work one-on-one with a faculty member to complete a research project. Thus, through the combination of coursework and thesis research, CSUF graduates obtain both breadth and specialization in the geological sciences.

The B.S. and M.S. requirements are designed to help students develop an appreciation and understanding of Earth, as well as prepare them for: (1) employment in industry or government; (2) teaching at the elementary, high school and community college level; and (3) further graduate studies in the geological sciences. The B.S. core is firmly rooted in field-based instruction and culminates in a summer field course; the M.S. core focuses on original research, analyzing primary literature and writing research proposals. Over thirty 300-, 400- and 500-level electives are offered on a regular schedule, enabling students to design individual study plans that satisfy their personal educational goals.

Evening Program

Most graduate courses are offered in the late afternoon and evening (with weekend field trips). Consult the department for details.

BACHELOR OF SCIENCE IN GEOLOGY

Of the 120 units required for graduation, a minimum of 48 are in geological sciences, 30 in related fields and 39 in general education courses. The remaining 3 undesignated units are selected to meet the particular needs of each student. To qualify for the B.S. degree, students must have a “C” (2.0) or better in all geological sciences courses applied towards the 48-unit requirement; in addition, students must have a 2.0 average in required courses in related fields. Proficiency in English composition is required.
Undergraduate Thesis (3 units)

In this capstone experience, majors work one-on-one with a faculty adviser on a research project that encompasses all phases of the scientific process, beginning with defining a hypothesis in a written research proposal, collecting and analyzing appropriate data, and writing a report. Students are encouraged to begin research during their junior year. The presentation of undergraduate theses at professional meetings and/or in peer-reviewed literature is strongly encouraged. The Undergraduate Thesis (Geological Sciences 498) satisfies the university’s upper-division writing requirement.

Minimum Course Requirements for the Major

Geological Sciences 101 Physical Geology (3)
OR Geological Sciences 110T Topics in Earth Science (4)
OR Geological Sciences 140 Earth’s Atmosphere and Oceans (3)
Geological Sciences 101L Physical Geology Lab (1)
Geological Sciences 201 Earth History (3)
Geological Sciences 303A Mineralogy and Introduction to Petrology (4)
Geological Sciences 303B Igneous and Metamorphic Petrology (4)
Geological Sciences 321 Sedimentation and Stratigraphy (4)
Geological Sciences 335 Hydrology and Surface Processes (3)
Geological Sciences 360 Structural Geology (4)
Geological Sciences 380 Geologic Field Techniques (3)
Geological Sciences 456 Geophysics (3)
OR Geological Sciences 406 Geochemistry (3)
Geological Sciences 481A Geology Field Camp I (4)
Geological Sciences 498 Undergraduate Thesis (1-3)

Upper-Division Geological Sciences Electives (8-9 units)

The department offers more than thirty 300-, 400- and 500-level electives that may be applied to the Geology B.S., assuming prerequisites are met. Students choose electives to explore fields of interest within the geosciences and to develop strengths necessary for their chosen undergraduate research projects and/or post-graduate plans. Electives should be selected in consultation with an adviser. No more than 3 units from any combination of Geological Sciences 493, 495, 496L and 499L can be selected in consultation with an adviser. No more than 3 units from any combination of Geological Sciences 493, 495, 496L and 499L can be selected in consultation with an adviser.

Note: Geological Sciences 310T is not accepted as credit toward meeting requirements for the major.

Related Fields (30 units minimum)

Geoscientists address an extremely wide variety of issues and their scientific strengths vary accordingly. For example, environmental geology requires strength in chemistry and statistics; seismology requires knowledge of physics, math and computer science; and paleontology requires strength in biology and statistics. The flexible organization of the related field’s requirements enables students and their advisers to select a package of courses that best supports the student in their educational and professional endeavors. At least one of the related field’s tracks must include a second-semester lab course. If the selected related field’s courses total less than 30 units, additional units must be taken from other science-math-engineering departments (see list below). Courses not included on the list must be approved in writing by an undergraduate adviser.

Biology 101 Elements of Biology (3)
OR Biology 171 Evolution and Biodiversity (5)
OR a life science course from another institution that is acceptable to CSUF and demonstrates treatment of whole-organism biology and concepts of evolution and ecology.
Chemistry 120A and 120B General Chemistry (5,5)
OR Chemistry 120A General Chemistry (5)
AND Chemistry 125 General Chemistry for Engineers (3)
Mathematics 150A and 150B Calculus (4,4)
OR Mathematics 130 A Short Course in Calculus (4)
AND EITHER Mathematics 337 Introduction to Experimental Design and Statistics in the Laboratory Sciences (3)
OR Mathematics 338 Statistics Applied to Natural Sciences (4)
Physics 225, 225L Fundamental Physics - Mechanics (3,1)
AND Physics 226 Fundamental Physics - Electricity & Magnetism (3)
OR Physics 211, 211L, 212 Elementary Physics (3,1,3), with consent of adviser.

One additional semester course selected with approval of adviser from courses such as the following:

Biology 172, 210, 300, 319
Chemistry 301A, 315, 325, 361A
Computer Science 241
EGCE 301, 324, 436, 441
Geography 481, 485
Mathematics 250A, 250B
Physics 227, 227L, 300, 310, 320, 330
Science- or engineering-based transferable extension certificate courses from other universities.

Undesignated Units (0-3 units)

These are to be taken in geological sciences, related fields and/or career-supporting fields, with adviser approval.

General Education (39 additional units required)

Twelve General Education units (Category III.A.) are embedded in the Related Fields requirements for the Geology B.S. The remaining 39 units are selected by the student.

See University catalog and consult your adviser for proper course selection.

MINOR IN GEOLOGICAL SCIENCES

A minimum of 20 units in geological sciences courses is required for the minor, of which at least 12 must be upper division and at least six of these 12 must be taken in residence. Up to three units of Geological Sciences 310T may be applied. Prospective minors should make an appointment with a department adviser in order to select courses that most closely match their educational goals.
Prospective teachers should include courses in physical geology, Earth history, hydrology and surface processes, oceanography, mineralogy, petrology, Earth Science for Science Teachers (Geological Sciences 420).

**CREDENTIAL PROGRAM**

The Bachelor's Degree in Geology may be effectively combined with subject matter studies necessary for the Single Subject Teaching Credential in science. Science teachers are in great demand, and candidates may qualify for scholarships and paid teaching internships while completing their credential. Undergraduates are encouraged to contact the Center for Careers in Teaching (657-278-7130, www.fullerton.edu/cct) and the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied) for early advisement and to plan efficient course selections for general education, the major and credential program coursework. Postbaccalaureate and graduate students should contact the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied). Additional information is found under Science Education Programs in the University Catalog as well as at http://mast.wikispaces.com.

**GRADUATE EMPHASIS IN GEOCHEMISTRY**

The Geochemistry Emphasis is offered jointly by the Department of Chemistry and Biochemistry and Department of Geological Sciences. Contact the graduate program adviser in the Department of Chemistry and Biochemistry for information regarding the Chemistry M.S. requirements, and the Department of Geological Sciences regarding the selection of appropriate graduate electives.

**GEOLOGICAL SCIENCES COURSES**

For all courses, prerequisites may be waived if the instructor is satisfied that the student is qualified to take the course.

Geological Sciences 101, 101L, 102, 105 and 201 are offered each semester. The department offers Geological Sciences 303A, 321 and 380 each fall and Geological Sciences 303B, 335 and 360 each spring. Geological Sciences 481A is offered each summer and the remaining courses are offered on a three- to four-semester rotation. A schedule of projected class offerings is available from the department.

**MASTER OF SCIENCE IN GEOLOGY**

The program is based on the assumption that every geologist must have a thorough knowledge of fundamental geologic principles and that this knowledge must be rooted in field- and laboratory-based experiences. No matter how graduating students may choose to apply this knowledge, the sound geologic basis provided by the master of science degree will enable them to meet new intellectual challenges in their future professional or academic careers. The program is sufficiently flexible to meet a student’s interest in the application of geology to the solution of environmental, hydrogeologic or engineering geologic problems facing our society.

The program is designed to prepare students for: (a) employment in all fields of geology; (b) teaching at the elementary, secondary and community college levels; and/or (c) doctoral study in the geosciences or related fields.

**Admission Requirements**

An applicant must meet the university requirements for admission, which include a baccalaureate degree from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see catalog section on Graduate Admissions for complete statement and procedures). In addition, acceptance into this program in a classified standing is contingent upon the following:

1. a bachelor’s degree in geology from an accredited institution, with an expected grade-point average of 3.0 in geology courses, which normally includes the equivalent to core courses of the Cal State Fullerton Geology B.S. program and a 2.5 grade-point-average in related science and mathematics courses; or, in the case of a bachelor’s degree in a related area, a selection of science courses deemed as adequate preparation for further study in geology by the Department Graduate Committee

2. satisfactory performance on the Graduate Record Examination Aptitude Test with an expected score in the 50th percentile or better on the verbal and quantitative tests

3. two letters of recommendation

4. completion of the departmental application and

5. availability of faculty and resources in the student’s stated area of interest

Students with limited subject or grade deficiencies may be considered for conditional acceptance into the program if they meet all other departmental and university requirements. Conditionally classified graduate standing may be removed upon completion of adviser- and graduate-committee-approved postgraduate courses in geology, mathematics, chemistry or physics, with grades of “B” (3.0) or better.

Students with a degree in a related field and/or substantial subject deficiencies are encouraged to apply. Such applicants may be considered for conditional acceptance if they meet all other departmental and university requirements. Such a student may later qualify for classified standing by completing all courses recommended by the Department Graduate Committee and by maintaining a 3.0 grade-point average in geology and in related science and mathematics courses.

**Application Deadlines**

Financial aid (teaching and research assistantships) are ordinarily awarded only to fall semester applicants. Students who wish to be considered for financial aid must have their application received by February 15 for admission to the following fall semester.

The deadlines for completing online applications are March 1 for the fall semester and October 1st for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.
Classified Standing

Students should achieve classified graduate standing as soon as they are eligible, since no more than nine units of graduate work taken before classification can be included on the study plan for the degree (see below). Students may apply for classified standing when they: (1) have met all university and departmental admission requirements; and (2) have filed a study plan approved by the adviser, the Department Graduate Committee and the Associate Vice President for Graduate Studies and Research.

Students must meet the Graduate Level Writing Requirement as described in this catalog under “Master’s Degree Requirements.” Students will meet this requirement by taking Geological Sciences 501, Research Methods in Geology.

Advancement to Candidacy

Advancement to candidacy is attained by applying for graduation and receiving a recommendation by the Department Graduate Committee.

STUDY PLAN

A study plan must contain a minimum of 30 units and be approved by the Graduate Adviser. At least 21 units must be at the graduate level; a maximum of nine units may be 400 level. A minimum grade point average for courses satisfying the study plan is 3.0. The study plan must consist of the following:

Required Courses (9-12 units)

Geological Sciences 500 Advanced Concepts in Geology (3)
Geological Sciences 501 Research Methods in Geology (1)
Geological Sciences 590 Graduate Seminar (1, 1) – must be taken twice for one unit each time
Geological Sciences 598 Thesis (1-3) – must be taken for a total of at least three, but not more than six units

A public, oral defense of the thesis is required.

Focus and Breadth Courses (18-21 units)

Focus Geology Courses: Graduate adviser-approved 400- or 500-level geology courses. A maximum of three units of Geological Sciences 599 (Independent Study) and a maximum of three units of Geological Sciences 593 (Directed Study) may be taken. Course selection will be dependent on the student’s academic objectives and selected in consultation with the student’s thesis adviser.

Breadth Courses in Related Fields: A maximum of six units of graduate adviser-approved 400- or 500-level breadth courses offered by departments other than Geological Sciences. Courses may be taken from departments or programs such as, but not restricted to, Biological Sciences, Chemistry and Biochemistry, Physics, Mathematics, Geography, Civil and Environmental Engineering, or Environmental Studies. Course selection will be dependent on the student’s academic objectives and selected in consultation with the student’s thesis adviser.

COURSES IN GEOLOGY

Courses are designated as GEOL in the class schedule.

101 Physical Geology (3)
Prerequisite: high school chemistry or physics, or equivalent. Physical nature of the planet Earth, genesis of rocks and minerals, erosion processes and their effects.

101H Physical Geology (Honors) (3)
Prerequisite: high school chemistry or physics, or equivalent. Physical nature of the planet Earth, genesis of rocks and minerals, erosion processes and their effects. (weekend field trips)

101L Physical Geology Laboratory (1)
Pre- or corequisite: Geological Sci 101, 110T or 140. Laboratory on minerals, rocks, earthquakes and map and aerial photographic interpretation. (3 hours laboratory or field trip) Corequisite: Geological Sci 101 or 101H. Laboratory on minerals, rocks, earthquakes, and map and aerial photographic interpretation. (3 hours laboratory and weekend field trips)

102 Earth and Astronomical Science for Future Elementary Teachers (3)
Designated especially for the prospective elementary school teacher, this activity-based course examines fundamental Earth/astronomical science concepts and the potential impacts of natural hazards on ecosystems on planet Earth.

105 Field Experiences in California Geology (1)
Pre- or corequisite: Geological Sci 101 or 110T or 140. Three field trips that examine the rich geology of California. Students will read and discuss topical papers and make presentations on selected topics. Weekend field trips are required. May be repeated once for credit.

110T Topics in Earth Science (4)
Prerequisite: high school chemistry or physics, or equivalent. Public interest topics in Earth science. Alternating topics include: dinosaur world; earthquakes and volcanoes. Each course includes integrated labs, lectures and field trips that explore mainstream Earth science issues. (3 hours lecture, 3 hours lab and field trips.)

140 Earth’s Atmosphere and Oceans (3)
Prerequisite: high school chemistry or physics, or equivalent. Composition, structure and circulation of the Earth’s atmosphere and oceans with a general focus on their interactions. Interdisciplinary topics that highlight atmosphere-ocean interactions will include global warming, ice ages, El Nino, Southern California storms activity and Santa Ana winds. (3 hours lecture, field trips)

201 Earth History (3)
Prerequisite: Geological Sci 101L. Evolution of Earth as interpreted from rocks, fossils and geologic structures. Plate tectonics provides a unifying theme for consideration of mountain building, evolution of life and ancient environments. (2 hours lecture, 3 hours laboratory, field trips)
201L Earth History Supplemental Lab (1)
  Prerequisite: Geological Sci 101L; corequisite: Geological Sci 201. Supervised research on topics related to Earth history. Project will result in a term paper and/or web page. (3 hours laboratory, field trips)

303A Mineralogy and Introduction to Petrology (4)
  Prerequisites: Geological Sci 101 and 101L; pre- or corequisite, Chemistry 120A; English 101: pre- or corequisite, Mathematics 125 or equivalent. Mineral structure and composition; relating mineral occurrence with rock lithology; identifying minerals in hand sample and thin section based on physical and optical properties; interpreting the significance of a rock’s mineral assemblage in terms of its geologic origin. (2 hours lecture, 6 hours laboratory, field trip)

303B Igneous and Metamorphic Petrology (4)
  Prerequisites: Chemistry 120B or 125; Geological Sci 303A, 380. Description, classification, occurrence and origin of igneous and metamorphic rocks. (2 hours lecture, 6 hours laboratory, field trips)

305 Earthquake Impact on Structures (3)
  (Same as Civil and Environmental Engineering 305)

310T Topics in California-Related Geology (1-3)
  Prerequisites: completion of one course each from General Education (G. E.) Categories III.A.1 and III.A.2. Directed investigations of one aspect of Earth science. Alternating topics are geology of national parks, California geology, ocean off California, California earthquakes, geological hazards of California and California gems and minerals. May be repeated for credit with a different topic. (3 hours lecture for 5, 10, or 15 weeks; optional field trip)

321 Sedimentation and Stratigraphy (4)
  Prerequisites: Geological Sci 201, 303A. Sedimentary rocks, including classification, texture, mineralogy and provenance; sedimentary environments and interpretation of ancient environments in the rock record; stratigraphic methods and patterns. (2 hours lecture, 6 hours laboratory, field trips)

322 Paleontology (3)
  Prerequisites: Geological Sci 201; Biology 101 or 171 or equivalent. Paleontology, including evolution, taxonomy, ichnology, biostratigraphy, taphonomy, mass extinctions and paleoecology. Review of the major fossil groups. (2 hours lecture, 3 hours laboratory, field trips)

333 General Oceanography (3)
  Prerequisites: Geological Sci 101L and upper-division standing. Chemical, physical and geological nature of the oceans. (2 hours lecture, 3 hours laboratory, field trips)

335 Hydrology and Surface Processes (3)
  Prerequisite: Geological Sci 101 or equivalent, or completion of G. E. Category III.A.2. Impact of surface water on the formation of soils, weathering, surface features (rivers) and groundwater. Application of hydrology as a predictive and postdictive tool on geologic, biotic and engineering problems.

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355 Earth’s Interior (3)
  Prerequisites: Geological Sci 101; Math 150A; Physics 225, 225L or 211, 211L; Chemistry 120A or equivalent. Geophysical, geochemical properties of mantle and core. Data collection techniques. Impact of internal processes on crustal/surface phenomena.

360 Structural Geology (4)
  Prerequisites: Geological Sci 380; Math 125. Faults, folds, mechanics of rock deformation and elementary tectonics; solution of problems by geometric, trigonometric and stereographic analysis. (3 hours lecture, 3 hours laboratory, field trips)

376 Engineering Geology (3)
  Prerequisites: Math 130 or 150A; Geological Sci 380 or EGCE 214 and 214L. Geology applied to engineering works. Earth materials, processes; site evaluation techniques; geologic hazard analysis; case histories. (2 hours lecture, 3 hours laboratory, field trips)

380 Geologic Field Techniques (3)
  Prerequisites: Geological Sci 101 and 101L; pre- or corequisite, Geological Sci 201; English 101; Mathematics 115 or 125 or equivalent. Basic geologic field equipment. In-class and weekend field projects include: basic geologic mapping on topographic maps and aerial photographs; field note-taking methods; field data interpretation; preparing geologic maps; preparing stratigraphic columns and geologic cross-sections; technical report writing. (2 hours lecture, 6 hours in-field activity, weekend field trips)

404 Optical Mineralogy and Petrography (3)
  Prerequisites: Geological Sci 303B. Principles of optical mineralogy. Use of petrographic microscope to analyze minerals and textures of igneous, metamorphic and sedimentary rocks. (1 hour lecture, 6 hours laboratory, field trip)

406 Geochemistry (3)
  Pre- or corequisites: Geological Sci 303B, Chemistry 120B or 125, Math 130 or 150A. Basic chemical and thermodynamic principles applied to the origin and alteration of igneous, sedimentary and metamorphic rocks and economic mineral deposits.

408 Volcanology (3)
  Prerequisites: completion of Geological Sci 303B; Mathematics 130 or 150A or equivalent. Volcanic eruptions as well as their deposits, hazards and impact on society. Classroom activities and field trips (required) will explore modern and ancient volcanic environments. (3 hours lecture, field trips)

410 Physical Earth/Space Systems (3)
  Prerequisites: completion of one course each from G. E. Categories III.A.1 and III.A.2. Physical and chemical interactions among major Earth systems (e.g., geosphere, atmosphere and hydrosphere) considered within the context of Earth’s position in its solar system and in space. Appropriate for elementary teachers. Not available for graduate degree credit in B.S. or M.S. in Geology; available for credit in M.A.T.S. in the Science Education program. (2 hours lecture, 2 hours activity)
420 Earth Science for Science Teachers (4)
Prerequisites: Geological Sci 101 and 101L plus upper-division standing or science teaching credential. Major concepts of the earth sciences with primary emphasis on physical and planetary geology and secondary emphasis on meteorology and oceanography. (3 hours of lecture, 3 hours of laboratory, field trips)

436 Hydrogeology (3)
Prerequisites: Geological Sci 101L and 335 or equivalent; Math 130 or 150A. Occurrence, movement and utilization of groundwater resources; geological, geophysical and hydrological methods for groundwater exploration and development. Well hydraulics and ground-water contamination. (2 hours lecture, 3 hours laboratory, field trips)

455 Earthquake Seismology (3)
Prerequisites: Geological Sci 101; Physics 225, 225L or 211, 211L, Math 130 or 150A. Seismic waves, their recording and measurement. Estimation of earthquake source strength, location and mechanism. Introduction to seismic risk and strong motion studies. (3 hours lecture, field trips)

456 Geophysics (3)
Prerequisites: Math 150B, 337 or 338; Physics 225, 225L or 211, 211L; Physics 226, 226L or 212, 212L recommended. Seismic refraction, gravity, magnetic and electrical techniques and fundamentals as applied to determination of subsurface structure, groundwater and location of mineral resources. (2 hours lecture, 3 hours laboratory, field trips)

470 Environmental Geology and Planning (4)
Prerequisites: Geological Sci 101L or 420. Geologic processes, hazards, mineral and energy resources and their interaction with planning and environmental regulations. (3 hours lecture, 3 hours lab, field trips)

475 Quaternary Tectonics (3)
Prerequisites: Geological Sci 360 and 380. Processes and products of relatively young Quaternary tectonics. Evaluation of surface tectonic features, their ages, deformation styles and structural regimes. Assessment of past and contemporary deformation rates. (2 hours lecture, 2 hours activity, field trips)

481A Geology Field Camp I (4)
Prerequisites: Geological Sci 303B, 321, 335, 360 and 380. Advanced geologic mapping in a variety of geologic settings. Field report, map and cross-sections required. Instructional fee required. (45 hours per week for four weeks during summer)

481B Geology Field Camp II (3)
Prerequisites: Geological Sci 380 and consent of instructor. Advanced geologic field work in a variety of geologic settings. Field report, map and cross-sections required. Instructional fee required. (45 hours a week for three weeks during summer)

481C Hydrology and Engineering Geology Field Camp (4)
Prerequisites: Geological Sci 376, 380 and 436. Geologic mapping and hydrologic mapping and techniques applied to integrated hydro-geologic model for selected areas. Field report(s), map(s), cross-sections required. Instructional fee required. (45 hours per week for three weeks during summer)

493 Directed Studies (1-3)
Prerequisites: upper-division standing and consent of instructor. Directed studies in specialized areas of the geological sciences, such as petroleum geology, sedimentology, optical and instrumentation techniques. Library research and written reports required. May be repeated once with a different topic. Not available for M.S. Geology graduate credit.

495 Geological Sciences Internship (3)
Prerequisite: junior or senior standing in geological sciences. Geological sciences work experience, salaried or volunteer, with industry, government or private agencies. Student intern will be supervised by faculty adviser and employer. (1 hour of seminar per week plus a total of 120-150 hours of work experience)

496L Geological Sciences Tutorial (2)
Prerequisite: at least 20 completed units in geological sciences, in good academic standing. Provides a maximum of 6 hours per week of supervised tutoring or teaching experiences (including office hours) for undergraduate students assisting in laboratory or field geology classes. Not available for M.S. geology graduate credit.

498 Undergraduate Thesis (1-3)
Prerequisites: approval of thesis adviser for first unit. Completion of thesis proposal that is approved by thesis adviser and the Department Undergraduate Adviser for second and subsequent units. Extension of an advanced course, conducted independently by the student under faculty supervision, culminating in a paper of professional quality. Must be repeated for three units total.

499L Independent Study (1-3)
Independent study of a topic selected in consultation with and completed under the supervision of the instructor. Not available for M. S. Geology degree credit.

500 Advanced Concepts in Geology (3)
Current advances in geological concepts with emphasis on Southern California geology. Concepts include: plate tectonics; igneous processes; sedimentary record; surficial processes; water resources. (2 hours lecture, 2 hours activity, field trips)

501 Research Methods in Geology (1)
Prerequisite: Geological Sci 500. Introduction to research planning: choosing a thesis topic; bibliographic search; research design (laboratory and field); research proposal preparation. (2 hours activity)
506T  Advanced Topics in Geochemistry (3)
Prerequisite: Geological Sci 406 or consent of instructor. Special topics on modern techniques and recent advances in geochemistry, such as geochronology and environmental isotope geochemistry. May be repeated for credit with a different topic. (3 hours lecture; field trips)

510T  Advanced Topics in Geology (3)
Prerequisite: consent of instructor. Modern techniques and recent advances in geology, such as basin analysis, igneous petrology, tectonics and paleoclimatology. May be repeated for credit with a different topic. (3 hours lecture; field trips)

535T  Advanced Topics in Hydrogeology (3)
Prerequisite: graduate standing or consent of instructor. Modern techniques and recent advances in hydrogeology, such as groundwater modeling, well hydraulics and aquifer analysis, contaminant hydro-geology, hydrogeochemistry and environmental sampling and protocols. May be repeated for credit with a different topic. (3 hours lecture; field trips)

555T  Advanced Topics in Geophysics (3)
Prerequisite: consent of instructor. Selected topics in geophysics. Evaluation of whole-Earth geodynamics; geophysical evidence of large-scale Earth properties; links between earthquakes and plate tectonics. (3 hours lecture/discussion, field trips.) May be repeated for credit with different topic.

575T  Advanced Topics in Engineering Geology (3)
Prerequisite: consent of instructor. Modern techniques and recent advances in engineering geology, such as Quaternary geology, landslide analysis and paleoseismology. May be repeated for credit with a different topic. (3 hours lecture; field trips)

590  Geoscience Seminar (1)
Attendance at departmental and other seminars. Discussion and/or written assignments based on seminar topics required. Must be repeated at least once.

593  Directed Graduate Studies in the Geosciences (1-3)
Prerequisites: Postbaccalaureate standing and consent of instructor. Directed studies of specialized geoscience topics not covered by existing courses and tailored to individual student interest. Literature research, recitations and written reports required. May be repeated for a total of 3 units.

598  Thesis (1-3)
Prerequisites: approval of thesis adviser for the first unit. Completion of M.S. Thesis proposal that is approved by thesis committee and the Department Graduate Committee Chair for second and subsequent units. Design, analysis and presentation of a research problem culminating in a thesis for the master’s degree. May be repeated for up to six units total.

599  Independent Graduate Research (1-3)
Prerequisites: approval of adviser and Department Graduate Committee. Independent research on an approved topic. May be repeated for up to 3 units maximum.
INTRODUCTION

Gerontology, the study of aging, is a multidisciplinary field that examines the biological, psychological, social and health/fitness aspects of the aging process. The unprecedented growth of the older population has created a growing demand for professionals in a variety of fields who understand issues related to the aging process.

Programs in Gerontology provide students with knowledge and critical understanding of the processes of adult development and aging. They prepare students for a variety of career opportunities in business, government, industry, public and private agencies, health and human services, research and education, and entrepreneurial endeavors. Many career options involve working with healthy and independent older adults, while other positions involve working with older adults who have health problems and other age-related limitations.

ADVISEMENT

Academic and career advisement is provided by the Coordinator of the Gerontology Program and members of the Gerontology Program Council. Student advising is provided at the Gerontology Academic Program Office, CP-900.

Information on job and volunteer opportunities, as well as professional events in gerontology, is posted near the Gerontology Institute office, Ruby Gerontology Center, Room 8. Students are urged to take advantage of programs available through the Career Development and Counseling Center, Langsdorf Hall 208.

RUBY GERONTOLOGY CENTER

The Charles L. and Rachael E. Ruby Gerontology Center serves as a forum for intellectual activity and creative scholarship in the area of gerontology. The center houses the activities of the Continuing Learning Experience, the Institute of Gerontology, as well as being a resource center on aging for the Orange County region.

The center’s goals include: promoting educational programs concerning adult development and aging; developing productive intergenerational activities in education and research; fostering cross-disciplinary research on topics related to aging and later life; providing opportunities for lifelong learning; and expanding opportunities for professional growth and development for those interested in gerontology.

Students are encouraged to become involved in research, conferences and community service activities of the Center.

GERONTOLOGY AWARDS AND SCHOLARSHIPS

The Beverly and Arnold Miller University Scholarships in Gerontology are open to continuing junior/senior students with a declared minor, emphasis or concentration in aging, gerontology or older adult health/wellness and to graduate students accepted into the M.S. in Gerontology degree program. Students must have demonstrated an interest in a career in the field of gerontology and/or older adult health/wellness.

The Kirt and Donna Spradlin Scholarships in Gerontology are open to continuing graduate students in gerontology. Criteria include academic achievement, professional promise and demonstrated interest in a career in the field of aging.
The Mary Lois Ayres Scholarships in Gerontology are open to continuing upper division undergraduate students with a concentration or minor in gerontology and first year graduate students in gerontology. Criteria include academic achievement, professional promise and demonstrated interest in a career in the field of aging.

The Osher Lifelong Learning Institute (OLLI) Outstanding Graduate Student Award is offered each June to a MS Gerontology candidate graduating in June or having graduated in the preceding summer or fall semester at California State University, Fullerton. This award will come from a special account funded by contributions from OLLI members.

**STUDENT ACTIVITIES**

Students interested in gerontology are encouraged to join the Student Association for Gerontology Education (SAGE) and the Gamma Kappa Chapter of Sigma Phi Omega, a national honor society. Opportunities are available to become involved in research, conferences and community service activities. Students are also encouraged to become active in professional gerontology organizations such as the California Council on Gerontology and Geriatrics (CCGG). Applications are available at the Gerontology Program office, Ruby Gerontology Center, Room 8 and in the Gerontology Academic Program Office, College Park 900.

**MINOR IN GERONTOLOGY**

The Gerontology minor consists of 21 units in the following areas:

**Lower-Division Requirements (3 units)**
- Sociology 133 Introduction to Gerontology (3)*

**Upper-Division Requirements (9 units from the following)**
- Biology 306 Biology of Aging (3)*
- Kinesiology 454 Physical Dimensions of Aging (3)
- Psychology 362 Psychology of Aging (3)*
- Sociology 443 Sociology of Aging (3)

**Required Internship (3 units)**
One three-unit internship at the 300/400 level in a related field. An internship is a supervised experience working within the community. Internships are coordinated through the student’s major department.

**Upper-Division Electives (6 units, adviser approved)**
- Anthropology 308 Culture and Aging: Anthropological Gerontology (3)
- Anthropology 408 Ethnogerontology (3)
- Anthropology 417 Life Quests (3)
- Biology 306 Biology of Aging (3)
- Biology 311 Nutrition and Disease (3)*
- Child/Adolescent Studies 312 Human Growth and Development (3)*
- Counseling 475T Counseling Special Populations (3)
- Finance 411 Retirement and Estate Planning (3)
- History 413 Oral History/Guided Autobiography (3)
- Health Sci 342 Stress Management (3)*
- Health Sci 401 Epidemiology (3)
- Health Sci 440 Determinants of Health Behavior (3)
- Health Sci 450 Applied Health Promotion in Aging Populations (3)
- Human Comm 320 Intercultural Communication (3)*
- Human Comm 345 Communication and Aging (3)*
- Human Services 310 Case Management (3)
- Human Services 380 Theories and Techniques of Counseling (3)*
- Human Services 385 Program Design and Proposal Writing (3)
- Human Services 400 Ethical and Professional Issues in Human Services (3)
- Human Services 410 Crisis Intervention (3)
- Human Services 420 Human Services Management (3)
- Human Services 480 Case Analysis and Intervention Techniques (3)
- Kinesiology 353 Physical Activity and Lifelong Well-Being (3)*
- Kinesiology 364 Motor Development (3)
- Kinesiology 371 Human Motor Learning and Control (3)
- Kinesiology 400 Program Design in Kinesiology (3)
- Kinesiology 454 Physical Dimensions of Aging (3)
- Kinesiology 455 Functional Performance Assessment and Programming for Older Adults (3)
- Management 435 Service Organizations and Operations (3)
- Marketing 351 Principles of Marketing (3)
- Nursing 301 Promotion of Optimal Health (3)*
- Nursing 303 Women’s Health and Healing (3)*
- Nursing 357 Health Promotion: Adult-Aged Nursing (3)
- Philosophy 314 Medical Ethics (3)*
- Philosophy 448 Death, Dying and Meaning (3)
- Psychology 302 Learning and Memory (3)
- Psychology 303 Sensation and Perception (3)
- Psychology 361 Developmental Psychology (3)
- Psychology 362 Psychology of Aging (3)
- Psychology 415 Cognitive Processes (3)
- Psychology 474 Medical Psychology (3)
- Psychology 475 Psychopharmacology (3)
- Sociology 351 Sociology of Families (3)*
- Sociology 354 Gender, Sex and Society (3)*
- Sociology 360 Death and Dying (3)*
- Sociology 361 Population and the Environment (3)*
- Sociology 371 Sociology of City Life (3)*
- Sociology 433 Aging and Social Services (3)
- Sociology 443 Sociology of Aging (3)
- Women’s Studies 410 Women, Health and Aging (3)
Additional elective courses are available in selected departments across campus. Such additional electives are chosen in consultation with the major department adviser and with the approval of the Coordinator of Gerontology Program. Up to nine units of coursework may be applied to both the major and Gerontology minor.

MAJORS THAT COMPLEMENT THE MINOR IN GERONTOLOGY

The Gerontology minor is available and appropriate to strengthen and otherwise complement the coursework of students in many majors. Notation of the minor appears on the transcript and the diploma.

MASTER OF SCIENCE IN GERONTOLOGY

The Master of Science program combines training in both scientific and applied areas of gerontology. Because various departments across the university participate in the program, the student is able to design a study plan that will meet his or her individual needs. In addition to coursework in research and theory, the program provides preparation for work in a variety of settings. It can also be tailored to meet the needs of the student who wants to prepare for a doctoral program.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections. Check for current information at http://hss.fullerton.edu/gerontology.

Admissions to Graduate Standing: Conditionally Classified

An applicant who meets the following requirements may be considered for conditionally classified graduate standing: a baccalaureate degree from an accredited institution and a grade point average of at least 3.0 in the last 60 units attempted; submission of the formal application form; submission of two copies of transcripts from all institutions attended; three letters of recommendation; and a letter from the student stating professional objectives. A Gerontology Program Application form must be filed with the Gerontology Program Office.

The baccalaureate must be in gerontology or a related field in conjunction with an undergraduate minor, certificate or emphasis in gerontology or the equivalent. In the absence of the above, the student should have the following 12 units of upper-division coursework in gerontology or their equivalent:

- Biology 306 Biology of Aging (3 units)
- Kinesiology 454 Physical Dimensions of Aging (3 units)
- Psychology 362 Psychology of Aging (3 units)
- Sociology 443 Sociology of Aging (3 units)

The following additional criteria may be taken into consideration: research experience, previous paid or volunteer experience in working with elderly people.

Admissions to Graduate Standing: Classified

Each student, in consultation with the Program Coordinator, will develop a study plan. This will be outlined on an official university Study Plan Form. Students who have met the requirements for conditionally classified standing will be granted classified standing upon submission of an adviser-approved study plan to the Graduate Studies office.

Study Plan

The Master of Science in Gerontology requires 30 units of approved graduate work with a minimum of 21 units at the 500 level.

Required Core Courses (12 units)

- Gerontology 500 Adult Development and Aging (3)
- Gerontology 501 Research Methods in Gerontology (3)
- Gerontology 503 Aging and Public Policy (3)
- Gerontology 595 Gerontology Internship (3)

Gerontology Electives (6-9 units)

Multidisciplinary Electives (6-9 units)

Selected from two or more departments with the program coordinator’s approval:

Exit Option (0-3 units)*

- Gerontology 598 Thesis (3)
- OR Gerontology Project 597 (3)
- OR Comprehensive Exam (0 units)

*If a project or thesis is not done, an additional three units of a Gerontology 500-level elective course and a comprehensive examination must be taken.

OTHER GERONTOLOGY PROGRAMS

Sociology, B.A.

A concentration in Gerontology is offered within the Bachelor of Arts in Sociology. Degree requirements are outlined in the Sociology Department concentration options section of this catalog.

Kinesiology, B.S., M.S.

Students pursuing the B.S. or M.S. in Kinesiology may choose a focus area in Gerontology. Requirements are available through the Department of Kinesiology.

Human Services, B.S.

Students pursuing a B.S. in Human Services may choose a gerontology track. Requirements are available through the Department of Human Services.
GERONTOLOGY COURSES

Courses are designated as GERO in the class schedule.

133 Introduction to Gerontology (3)
(Same as Sociology 133)

410 Women, Health and Aging (3)
(Same as Women’s Studies 410)

413 Oral History/Guided Autobiography (3)
(Same as History 413.)

420 Aging and Dementia (3)
Prerequisites: completion of G. E. Section I; satisfies the upper-division writing requirement; Psychology 201 or Sociology 303 or equivalent; or classified graduate standing. Physiological, psychological, social, economic aspects of dementia; its impact on the individual, family and society, with an emphasis on Alzheimer’s disease. One or more sections offered online.

425 Successful Aging and Gerotechnology (3)
Prerequisites: Completion of G. E. Category I.A., I.B., and I.C.; Sociology/Gero 133, or classified graduate standing. Gerotechnology is the study of technology and aging. This course explores the impact of computer and internet, devices for sensory impairments, telehealth, smart home, automobile and transportation innovation on older adults, caregivers and society.

433 Aging and Social Services (3)
(Same as Sociology 433)

443 Sociology of Aging (3)
(Same as Sociology 443)

450 Applied Health Promotion in Aging Populations (3)
(Same as Health Science 450)

500 Adult Development and Aging (3)
Prerequisite: graduate standing and/or admission into a master’s program. Overview of theory and research on biological, psychological and social changes that accompany adult development and aging. May include a service learning component. One or more sections offered online. (Same as Sociology 500)

501 Research Methods in Gerontology (3)
Prerequisite: admission to M.S. in Gerontology. Overview of research processes and problems in gerontology; more detailed study of applied research, including program evaluation in the field of gerontology.

503 Aging and Public Policy (3)
Prerequisites: Gero 500, Sociology 443, Political Science 309 or 315 or classified graduate student status. Origin, development and overview of public policies affecting older persons, families and service providers. Political administrative, advocacy and private sector involvements in employment, retirement, income security, health care, social services and housing of older persons. May include a service learning component. (Same as Political Science 503 and Sociology 503)

504T Selected Topics in Gerontology (3)
Prerequisites: classified status in a master’s program. A detailed examination of a selected area of gerontology. Emphasis will be both on the relevant literature and on the preparation, presentation (oral and written) and discussion of research papers. May be repeated once for credit with a different topic. (Same as Sociology 504T)

506 Economics of Aging (3)
Prerequisites: admission into the Gerontology M.S. Program or classified BAE status and Gero 501 or Economics 340. Economic consequences of population aging and the economic status of the aged. Income adequacy in old age: dependency, work income, retirement planning, social security, employer-sponsored pensions and financing health care. Economic security today and tomorrow. International comparisons. (Same as Economics 506)

507 Professional Issues in Gerontology (3)
Prerequisite: classified graduate student status. An introduction to the concepts, attitudes, knowledge, skills and ethical issues upon which professional practice in gerontology is based.
508 Social and Ethical Issues in Aging (3)
Prerequisite: graduate standing in Gerontology, Sociology or Public Health. Analysis of social and ethical issues facing an aging society. Review of ethical terminology, ethical decision making and social implications of ethical issues related to such topics as nursing homes, caregiving, suicide and intergenerational equality. (Same as Sociology 508.)

526 Administration and Systems Management (3)
(Same as Political Science 526).

595 Gerontology Internship (3)
Prerequisites: classified status in the M.S. in Gerontology degree program and consent of instructor and Program Coordinator. Supervised experience in organizations that serve older adults and their families. May be repeated once for credit.

597 Project (3)
Prerequisites: classified status in the M.S. in Gerontology Program and consent of instructor and Program Coordinator. Under the direction of a faculty member, a topic that integrates learning in the program with an applied area of student interests will be selected and a major project on the topic will be developed and submitted.

598 Thesis (3)
Prerequisites: classified status in the M.S. in Gerontology degree program and consent of instructor and Program Coordinator. Individual research under supervision, reported in a thesis and defended successfully in an oral examination conducted by a faculty thesis committee.

599 Independent Study in Gerontology (1-3)
Prerequisites: completion of the M.S. in Gerontology core courses. Individualized study with an instructor whose recognized interests are in the area of the planned study. Conferences with the instructor as necessary and the work will culminate in one or more papers. May be repeated once for credit.
INTRODUCTION

The mission of health science focuses on understanding and promoting health in diverse populations. Health science bridges the gap between scientific discoveries and the application of this knowledge to improve the quality of people’s lives. Health science research reflects the range of diverse health problems, settings and populations. The approach considers the multi-level determinants of health and well-being, including individuals, groups, organizations and communities. Health science professionals work at these various levels to implement and evaluate efforts that promote health and prevent illness and disease. An important aspect of this process involves empowering people to change the factors that influence their health and well-being, be it within the individual or in their social environment.

The health science program offers a Bachelor of Science degree in Health Science with focus areas in health promotion and disease prevention, occupational and environmental health or special studies. The undergraduate minor in Health Science, based on core curricula, provides opportunities for professional and/or personal enhancement.

The Master of Public Health (MPH) degree combines the study of the biological, physical, psychological, economic and social forces affecting the human condition. The degree’s curriculum seeks to analyze not only the nature and context of public health problems, but the organizational, behavioral, socio-cultural and political constraints to ameliorating these problems. Through experiences in and out of the classroom, students develop the habit of intellectual inquiry, prepare for challenging professions, strengthen relationships to their communities and contribute productively to society.

The Master of Public Health has a required core curriculum, plus individualized courses leading to professional or disciplinary specific preparation. In addition, select courses within the curriculum service various credential programs and other university degree programs that require health science foundations. Internships, practica, independent study and scholarly outreach provide opportunities for interaction and service within the community.

Learning Goals and Student Learning Outcomes

The following goals and learning outcomes have been established for students pursuing a degree in health science:

**Multilevel ecological framework**
- Implement and evaluate multilevel efforts that promote health and prevent illness and disease in various settings among diverse populations

**Critical thinking and problem solving**
- Interpret and analyze scholarly research and literature and advocate for health science issues
- Understand theories, research design, sampling methodology and measurement
- Evaluate health promotion programs and critique information provided by media and other primary and secondary sources
**Information and health literacy**
- Access and comprehend quality information sources relevant to specific health issues
- Integrate and evaluate information to draw reasonable conclusions based on evidence
- Articulate ideas, taking into consideration purpose, audience and presentation mode

**Field-based practice**
- Integrate the multilevel health science framework to foster effective practice and work successfully with diverse populations
- Exhibit knowledge of the purpose, structure and processes of community organizations and government agencies focused on health needs through the lifespan and demonstrate an ability to use that knowledge effectively to shape and enhance communities
- Understand that the needs of populations are multifaceted and may best be addressed from a collaborative, interdisciplinary approach

**Professional growth**
- Engage in regular self-assessment of professional public health and health education competencies and practice within the scope of expertise
- Develop collaborative skills to work productively in groups and demonstrate an understanding of professional standards, ethical practice and legal mandates
- Commit to using health science knowledge to advocate on behalf of underserved populations

**Student Awards/Scholarships**
Awards and scholarships are presented each year to outstanding undergraduate and graduate students. Additional information is available in the Health Science Department office.

**Advisement**
Entering students interested in Health Science should contact the Health Science Student Advising Center in KHS 251 prior to their first semester at Cal State Fullerton to receive appropriate advisement materials. Students transferring coursework from other colleges and universities should provide official transcripts of all prior coursework to the Health Science Student Advising Center.

Transfer students and students seeking advisement related to completion of General Education requirements, should visit the Academic Advisement Center located in University Hall 123.

**BACHELOR OF SCIENCE IN HEALTH SCIENCE**
The Bachelor of Science degree in Health Science is offered for students who are preparing for careers as health educators, as well as for those who seek quality preparation for advanced study. Students in Health Science learn how to effectively plan, implement and evaluate prevention strategies that are practical and effective at the community, state and national levels. In addition, through required and elective coursework, students must complete a focus area in health promotion and disease prevention, occupational and environmental health or special studies. The competency-based degree program prepares students for certification as health education specialists and for careers in community health, worksite health promotion, occupational health and safety and/or environmental health. The degree consists of 120 units with 52 units required in the major.

Each course counted toward the major, including prerequisites, must be completed with a grade of “C” (2.0) or higher. All courses counted toward the major must be taken on an Option 1 (letter grade) basis.

**Prerequisite Coursework Applicable to General Education (13 units)**
- Biology 101 Elements of Biology (3)
- Chemistry 100 Survey of Chemistry (3)
- Chemistry 100L Survey of Chemistry Lab (1)
- Psychology 101 Introduction to Psychology (3)
- Human Comm 102 Public Speaking (3)

**Core Courses (28 units)**
- Health Sci 101 Personal Health (3)
- Kinesiology 210 Human Anatomy and Physiology (3)
- Health Sci 220 Concepts in Health Science (3), prerequisite for all Health Sci 400-level courses; concurrent with Health Sci 494 Practicum in Health Science (1)
- Health Sci 349 Measurement and Statistics in Health Science (3)
- Health Sci 400 Program Design for Kinesiology and Health Promotion (3)
- Health Sci 401 Epidemiology (3)
- Health Sci 440 Determinants of Health Behavior (3)
- Health Sci 475 Health Science Planning, Research and Evaluation (3)
- Health Sci 495 Internship in Health Science (3)

**Advising Tracks (21 units)**
In addition to the core requirements that all health science majors must complete, students are required to select one of the three advising tracks to successfully complete the requirements of the degree.

**Health Promotion and Disease Prevention Advising Track (21 units)**
- Required (9 units)
  - Health Sci 410 Community Health Education (3)
  - Health Sci 411 Promoting Health in Multicultural Populations (3)
  - Health Sci 460 Worksite Health Promotion (3)
- Electives (6-12 units)
  - Health Sci 321 Drugs and Society (3)
  - Health Sci 325 Consumer Health (3)
  - Health Sci 342 Stress Management (3)
Health Sci 350 Nutrition (3)

Health Sci 353 Physical Activity and Lifelong Well-being (3)

Health Sci 358 Contemporary Issues in Children's Health (3)

Health Sci 405 Worksite Injury Prevention and Rehabilitation (3)

Health Sci 415 Environmental Health (3)

Health Sci 450 Applied Health Promotion in Aging Populations (3)

Health Sci 461 Occupational Safety and Health (3)

*Elective Courses from other Departments (0-6 units)*

Students choose a maximum of six adviser-approved units from the following:

- Afro Ethnic 304 The Black Family (3)
- American Studies 438 American Minds: Images of Sickness and Health (3)
- Anthro 308 Culture and Aging: Anthropological Gerontology (3)
- Anthro 315 Culture and Nutrition (3)
- Anthro 322 Human Behavioral Ecology (3)
- Anthro 344 Human Evolution (3)
- Asian Amer 340 Asian American Communication (3)
- Asian Amer 342 Asian Pacific American Families (3)
- Asian Amer 346 Asian American Psychology (3)
- Asian Amer 348 Asian American Perspectives in Aging (3)
- Biology 300 Environmental Biology (3)
- Biology 302 General Microbiology (3)
- Biology 305 Human Heredity and Development (3)
- Biology 306 Biology of Aging (3)
- Biology 310 Human Physiology (3)
- Biology 360 Biology of Human Sexuality (3)
- Biology 361 Human Anatomy (4)
- Chemistry 301A Organic Chemistry (3)
- Chemistry 301B Organic Chemistry (3)
- Chemistry 302 Organic Chemistry Lab (2)
- Chemistry 302A Organic Chemistry Lab (1)
- Chemistry 302B Organic Chemistry Lab (1)
- Chemistry 303A Biotechnology: Business and Society (1)
- Chemistry 303B Medical Biotechnology (1)
- Chemistry 303C Agricultural/Environmental Biotechnology (1)
- Chemistry 311 Nutrition and Disease (3)
- Chemistry 313A Air Pollution (1)
- Chemistry 313B Water Pollution (1)
- Chemistry 313C Land Pollution (1)
- Chicana/o 305 The Chicano Family (3)
- Geography 350 Nature and Society (3)
- Kinesiology 348 Physiology of Exercise (3)
- Kinesiology 351 Principles of Strength and Conditioning (3)
- Kinesiology 432 Applied Exercise Psychology (3)
- Kinesiology 454 Physical Activity and the Aging Process (3)
- Nursing/Health Sci 301 Promotion of Optimal Health (3)
- Philosophy 314 Medical Ethics (3)
- Psychology 312 Psychology of Human Sexual Behavior (3)
- Psychology 341 Abnormal Psychology (3)
- Psychology 350 Environmental Psychology (3)
- Psychology 351 Social Psychology (3)
- Psychology 362 Psychology of Aging (3)
- Psychology 391 Industrial/Organizational Psychology (3)
- Sociology 300 Introduction of Social Welfare (3)
- Sociology 354 Gender, Sex and Society (3)
- Sociology 360 Sociology of Death and Dying (3)
- Sociology 361 Population and the Environment (3)
- Sociology 381 Sociology of Human Sexualities (3)
- Sociology 385 Family Violence (3)
- Sociology 443 Sociology of Aging (3)
- Special Ed 371 Exceptional Individual (3)
- Women's Studies 410 Women's Health and Aging (3)

*Environmental and Occupational Health and Safety Advising Track (21 units)*

*Required (9 units)*

- Health Science 405 Worksite Injury Prevention and Rehabilitation (3)
- Health Science 415 Environmental Health (3)
- Health Science 461 Occupational Safety and Health (3)

*Electives (6-12 units)*

- Health Sci 321 Drugs and Society (3)
- Health Sci 325 Consumer Health (3)
- Health Sci 342 Stress Management (3)
- Health Sci 350 Nutrition (3)
- Health Sci 353 Physical Activity and Lifelong Well-being (3)
- Health Sci 358 Contemporary Issues in Children's Health (3)
- Health Sci 410 Community Health Education (3)
- Health Sci 411 Promoting Health in Multicultural Populations (3)
- Health Sci 450 Applied Health Promotion in Aging Populations (3)
- Health Sci 460 Worksite Health Promotion (3)

*Elective Courses from other Departments (0-6)*

Students choose maximum six adviser-approved units from the department's approved list of elective courses (see elective list above under "Health Promotion and Disease Prevention" electives from other departments).
Special Studies Advising Track (21 units)
Students meet with an adviser and develop a “Special Studies” program consisting of 21 adviser-approved units from the following:
- Health Sci 321 Drugs and Society (3)
- Health Sci 325 Consumer Health (3)
- Health Sci 342 Stress Management (3)
- Health Sci 350 Nutrition (3)
- Health Sci 353 Physical Activity and Lifelong Well-Being (3)
- Health Sci 358 Contemporary Issues in Children's Health (3)
- Health Sci 405 Worksite Injury Prevention and Rehabilitation (3)
- Health Sci 410 Community Health Education (3)
- Health Sci 411 Promoting Health in Multicultural Populations (3)
- Health Sci 415 Environmental Health (3)
- Health Sci 450 Applied Health Promotion in Aging Populations (3)
- Health Sci 460 Worksite Health Promotion (3)
- Health Sci 461 Occupational Health and Safety (3)
- Biology 302 General Microbiology (4)
- Biology 305 Human Heredity and Development (3)
- Biology 306 Biology of Aging (3)
- Biology 310 Human Physiology (3)
- Biology 360 Biology of Human Sexuality (3)
- Biology 361 Human Anatomy (4)
- Chemistry 301A Organic Chemistry (3)
- Chemistry 301B Organic Chemistry (3)
- Chemistry 302 Organic Chemistry Lab (2)
- Chemistry 302A Organic Chemistry Lab (1)
- Chemistry 302B Organic Chemistry Lab (1)
- Chemistry 303A Biotechnology: Business and Society (1)
- Chemistry 303B Medical Biotechnology (1)
- Chemistry 303C Agricultural/Environmental Biotechnology (1)
- Chemistry 311 Nutrition and Disease (3)
- Chemistry 313A Air Pollution (1)
- Chemistry 313B Water Pollution (1)
- Chemistry 313C Land Pollution (1)
- Chemistry 313B Medical Biotechnology (1)
- Chemistry 313C Agricultural/Environmental Biotechnology (1)
- Chemistry 311 Nutrition and Disease (3)
- Chemistry 313A Air Pollution (1)
- Chemistry 313B Water Pollution (1)
- Chemistry 313C Land Pollution (1)
- Geography 350 Nature and Society (3)
- Kinesiology 348 Physiology of Exercise (3)
- Kinesiology 351 Principles of Strength and Conditioning (3)
- Kinesiology 432 Applied Exercise Psychology (3)
- Kinesiology 454 Physical Activity and the Aging Process (3)
- Nursing/Health Sci 301 Promotion of Optimal Health (3)
- Philosophy 314 Medical Ethics (3)
- Psychology 312 Psychology of Human Sexual Behavior (3)
- Psychology 341 Abnormal Psychology (3)
- Psychology 350 Environmental Psychology (3)
- Psychology 351 Social Psychology (3)
- Psychology 362 Psychology of Aging (3)
- Psychology 391 Industrial/Organizational Psychology (3)
- Sociology 300 Introduction of Social Welfare (3)
- Sociology 354 Gender, Sex and Society (3)
- Sociology 361 Population and the Environment (3)
- Sociology 381 Sociology of Human Sexualities (3)
- Sociology 385 Family Violence (3)
- Sociology 443 Sociology of Aging (3)
- Special Ed 371 Exceptional Individual (3)
- Women’s Studies 410 Women’s Health and Aging (3)

English Proficiency Requirement (3 units)
In order to satisfy the upper-division writing requirement of the university, Health Science majors must pass: (1) English 301 Advanced College Writing with a grade of “C” (2.0) or better; and (2) the Cal State Fullerton Examination in Writing Proficiency (EWP). Please see additional information provided in this catalog on the writing requirement.

MINOR IN HEALTH SCIENCE
The Department of Health Science offers a minor in health science consisting of 21-22 units. Students interested in personal growth, community service, intellectual stimulation and professional career opportunities in the health field will find this minor a method to achieve these goals. The minor provides a concentration of health-related courses that can enhance skills for students majoring in fields such as Biology, Chemistry, Child and Adolescent Studies, Human Services, Kinesiology, Psychology and Sociology.

The minor provides students with necessary tools to understand factors contributing to the promotion of health and well-being and the prevention of disease and disability. This sequence of courses offers traditional and modern approaches to education and career development in the Health Science field. It encourages a multi-disciplinary orientation.

There are two advising tracks: Health Promotion and Disease Prevention (21 units); and Environmental and Occupational Health (22 units). The Health Promotion and Disease Prevention track provides students with a broad overview of health and well-being, health behavior theory and specialized content areas to meet students’ interests. The Environmental and Occupational Health track provides students with the necessary coursework to become eligible.
for the Registered Environmental Health Specialist (REHS) Exam offered by the California Department of Health Services.

In completing the requirements for the minor, a minimum of 12 units, of which at least six must be upper division, must be distinct and different from the units used to complete the requirements of the major. Any units above the minimum requirement, which can be used to satisfy both the requirements for the minor and for the major, may be double counted. General education courses, however, may be used to meet minor requirements.

Coursework must be taken for a letter grade and completed with a “C” (2.0) grade or better to be counted toward the minor.

Core Courses (6 units)
Health Sci 101 Personal Health (3)
Health Sci 401 Epidemiology (3)
OR Health Sci 440 Determinants of Health Behavior (3)

Students preparing to take the REHS exam should select Health Science 401.

Health Promotion and Disease Prevention Track Electives (15 units)
Health Science Electives (9-15 units of the following):
Health Sci 321 Drugs and Society (3)
Health Sci 325 Consumer Health (3)
Health Sci/Kinesiology 342 Stress Management (3)
Health Sci/Kinesiology 350 Nutrition (3)
Health Sci 358 Contemporary Issues in Children’s Health (3)
Health Sci 405 Worksite Injury Prevention and Rehabilitation (3)
Health Sci 410 Community Health Education (3)
Health Sci 411 Promoting Health in Multicultural Populations (3)
Health Sci 450 Applied Health Promotion in Aging Populations (3)
Health Sci 460 Worksite Health Promotion (3)
Health Sci 461 Occupational Health and Safety (3)
Kinesiology/Health Sci 353 Physical Activity and Lifelong Well-Being (3)

Elective Courses from other Departments (0-6 units with adviser approval):
Afro Ethnic 304 The Black Family (3)
American Studies 438 American Minds: Images of Sickness and Health (3)
Anthro 308 Culture and Aging: Anthropological Gerontology (3)
Anthro 315 Culture and Nutrition (3)
Anthro 322 Human Behavioral Ecology (3)
Anthro 342 Anthropology and Health (3)
Anthro 344 Human Evolution (3)
Asian Amer 201 History of Asian Americans (3)
Asian Amer 300 Introduction to Asian Pacific American Studies (3)
Asian Amer 340 Asian American Communication (3)
Asian Amer 342 Asian Pacific American Families (3)
Asian Amer 346 Asian American Psychology (3)
Biology 300 Environmental Biology (3)
Biology 305 Human Heredity and Development (3)
Biology 306 Biology of Aging (3)
Biology 310 Human Physiology (3)
Biology 360 Biology of Human Sexuality (3)
Biology 361 Human Anatomy (4)
Chemistry 303A Biotechnology: Business and Society (1)
Chemistry 303B Biotechnology: Medical Biotechnology (1)
Chemistry 303C Biotechnology: Agricultural and Environmental Biotechnology (1)
Chemistry 311 Nutrition and Disease (3)
Chemistry 313A Air Pollution (1)
Chemistry 313B Water Pollution (1)
Chemistry 313C Land Pollution (1)
Chicana/o 106 Introduction to Chicano Studies (3)
Chicana/o 305 The Chicano Family (3)
Chicana/o 345 History of the Chicana/o (3)
Geography 350 Nature and Society (3)
Kinesiology 348 Physiology of Exercise (3)
Kinesiology 351 Principles of Strength and Conditioning (3)
Kinesiology 454 Physical Dimensions of Aging (3)
Nursing/Health Sci 301 Promotion of Optimal Health (3)
Psychology 312 Psychology of Human Sexual Behavior (3)
Psychology 341 Abnormal Psychology (3)
Psychology 351 Social Psychology (3)
Psychology 362 Psychology of Aging (3)
Sociology 300 Introduction to Social Welfare (3)
Sociology 354 Gender, Sex and Society (3)
Sociology 360 Sociology of Death and Dying (3)
Sociology 381 Sociology of Human Sexualities (3)
Sociology 385 Family Violence (3)
Sociology 443 Sociology of Aging (3)
Special Ed 371 Exceptional Individual (3)
Women's Studies 410 Women's Health and Aging (3)

Environmental and Occupational Health Track (16 units)

Required Courses (12 units)
Health Sci 415 Environmental Health (3)
Health Sci 461 Occupational Health (3)
Health Sci 349 Measurement and Statistics in Health Science (3)
OR Mathematics 120 Introduction to Probability and Statistics (3)
Poli Sci 320 Introduction to Public Management and Policy (3)
**Elective Courses (4 units)**
- Biology 438  Public Health Microbiology (4)
- Chemistry 313A  Environmental Pollution and its Solutions: Air Pollution (1)
- Chemistry 313B  Environmental Pollution and its Solutions: Water Pollution (1)
- Chemistry 313C  Environmental Pollution and its Solutions: Land Pollution (1)
- Chemistry 435  Chemistry of Hazardous Materials (3)
- Geology 335  General Hydrology (3)

**MASTER OF PUBLIC HEALTH**

The purpose of the Master of Public Health program is to prepare public health professionals to draw on the knowledge and skills from a variety of disciplines and to define, critically assess, evaluate and resolve public health problems. MPH program graduates will have a common educational grounding that will enable them to work effectively with the broad spectrum of public health issues related to their public health careers.

**Application Deadlines**

The deadline for completing online applications is March 1 for the following fall semester (see [http://www.csumentor.edu](http://www.csumentor.edu)). Mailed applications need to be postmarked by the same deadline. However, the deadline may be changed based upon enrollment projections.

**Admission to Graduate Standing: Classified**

Students must apply to the department and university for admission. Minimum requirements for admission to the university are:

1. An earned baccalaureate degree from an accredited college or university
2. GPA of 2.5 in the last 60 units attempted
3. Good standing at the last college attended

After meeting the above criteria, additional requirements for acceptance in the MPH program include:

1. Copy of official transcript(s) from all college work sent directly to the MPH Graduate program coordinator
2. Two letters of recommendation
3. A narrative statement (300-500 words describing how the program relates to professional goals)
4. A current résumé
5. Completion of six units of statistics and research methods (appropriate courses include statistics, epidemiology, research methods, program design and evaluation, etc.) with a grade “C” (2.0) or better
6. Appropriate education background for career track courses (nine units or equivalent within specialized track. Professionals currently in field can demonstrate proficiency by coursework or by portfolio review or similar supporting evidence).

7. GPA of 3.0 in the last 60 units completed
8. Paid or volunteer experience in public health, health education or related health area
9. Communication skills utilizing a second language encouraged

**Admission to Graduate Standing: Conditionally Classified**

It may also be possible for applicants who have minimal deficiencies in prerequisite requirements, as detailed above, but are otherwise highly qualified, to be admitted in conditionally classified graduate standing; with provisions made for removal of deficiencies prior to the granting of classified standing. For further information, consult with the MPH Program Coordinator.

**GRADUATE STUDY PLAN**

The Master of Public Health requires 42 units of approved graduate work. Twenty-seven units are core competency classes (which includes a six-unit internship) and an additional 15 units are electives, 75 percent of which must be 500-level courses. Students work with a faculty adviser to select these electives to support career areas in health promotion, environmental and occupational health, gerontological health, nursing leadership, or in a special studies track such as health anthropology or health counseling or other special academic/career needs.

**Core Course Requirements (27 units)**
- Health Sci 500  Issues in Public Health (3)
- Health Sci 501  Advanced Methods in Epidemiology (3)
- Health Sci 508  Statistical Methods in Health Science (3)
- Health Sci 515  Advanced Environmental Health (3)
- Health Sci 524  Public Health Administration (3)
- Health Sci 540  Advanced Study in Health Promotion and Disease Prevention (3)
- Health Sci 550  Graduate Internship (6)
- Health Sci 597/598  Project/Thesis (3) or Comprehensive Examination*

*Students who select the Comprehensive Examination shall be required to complete an additional adviser-approved 500-level course (3 units).

**Electives (15 units)**

Electives must be approved by an adviser. Three units must be an approved research methods course. HESC 510 is recommended.

**HEALTH SCIENCE COURSES**

Courses are designated as HESC in the class schedule.

**101 Personal Health (3)**

Basic concepts relating to health and well-being from a holistic perspective. Mental, emotional, physical and socio-environmental dimensions of health, sexuality and relationships; nutrition and physical fitness; use and abuse of drugs; health care services and current health problems.
102 Prevention and First Aid (2)

The hazards in environment. Care and prevention of accidents. Standard first aid certification by the American Red Cross granted upon successful completion of requirements.

203 CPR, Automated External Defibrillator and Standard First Aid (1)

Provides knowledge and skills necessary to respond to injuries and sudden illnesses in the community. Successful completion provides American Red Cross certifications in infant, child and adult Cardiopulmonary Resuscitation (CPR), Automated External Defibrillator (AED) and Standard First Aid. Credit/no credit only.

220 Concepts in Health Science (3)

Prerequisite: one course from General Education (G. E.) Category III.A.2. or 3. Corequisite: Health Sci 494 (1 unit). Theoretical and practical issues of Health Science as a profession. Topics include history, status, resources, roles in various settings, legal and ethical issues in health education.

301 Promotion of Optimal Health (3)

(Same as Nursing 301)

303 Professional Rescuer CPR, Automated External Defibrillator and First Aid (3)

Prerequisites: Kinesiology 210 and upper-division standing. Designed for students considering working in medical and health-related fields who must obtain Professional Rescuer (CPR), Automated External Defibrillator (AED) and First Aid certification. Back injury prevention, stress management and cardiovascular function.

321 Drugs and Society (3)

Prerequisites: completion of lower-division general education science requirement and junior or senior status. Habit-forming substances such as alcohol, tobacco, narcotics, hallucinogens, and related drugs, stimulants and depressants. Social, historical and legal aspects of the drug problem are considered.

325 Consumer Health (3)

Prerequisites: Health Sci 101 and junior or senior standing. Analysis and evaluation of health information, products and services; medical quackery, fraudulent health practices and laws and agencies protecting the consumer will be explored. One or more sections offered online.

342 Stress Management (3)

Prerequisites: one course from G. E. Category IV.B; at least sophomore standing. Nature of stress and physiological and psychological effects of prolonged stress responses. Short- and long-term somatic and behavioral techniques (exercise, relaxation, meditation, nutrition, time management and goal setting) for management of stress. Health Science majors may not count this course for General Education. Kinesiology majors may count this course either for the major or for General Education. (Same as Kinesiology 342)

349 Measurement and Statistics in Health Science (3)

Prerequisites: completion of G. E. Categories III.A.1 and III.C.1. Measurement theory and statistics used in the evaluation of health and human performance, with a special focus on the analysis and interpretation of data in different environments. Lecture, discussion, cooperative learning and field observation. All of these strategies are intended to provide active participation and experiential learning.

350 Nutrition (3)

Prerequisites: Chemistry 100 or equivalent course and junior or senior standing. Concepts of nutrition as they relate to nutritional needs, practices and problems throughout the life cycle. Nutritional counseling and education of individuals/groups toward health promotion and disease prevention. Open to non-nursing majors. One or more sections offered online. (Same as Kinesiology/Nursing 350)

353 Physical Activity and Lifelong Well-Being (3)

(Same as Kinesiology 353)

358 Contemporary Issues in Children's Health (3)

Prerequisite: junior or senior standing. Overview of common causes of interrelationships between and prevention of morbidity and mortality among children and youth; Preventive and promotive health concepts and practices; connections between health and learning.

400 Program Design in Kinesiology and Health Promotion (3)

Prerequisite: Kinesiology 202 or Health Sci 220. Provides skills necessary for developing, implementing and evaluating human movement and/or health promotion programs for specific target populations.

401 Epidemiology (3)

Prerequisites: Health Science 220 and Health Sci 349. Application of epidemiologic procedures to the understanding of the occurrence and control of infectious and chronic diseases, mental illness, environmental health hazards, accidents and geriatric problems. One or more sections offered online.

405 Worksite Injury Prevention and Rehabilitation (3)

Prerequisite: Kinesiology 210 or Health Sci 220. How work style, equipment and environment contribute to workplace musculoskeletal injuries. Strategies that can minimize human error, injuries, discomfort and dissatisfaction through injury prevention and rehabilitation of the worker. (Same as Kinesiology 405).

410 Community Health Education (3)

Prerequisites: Health Sci 220 and junior or senior standing. Multiple settings for community health education practice and professional roles and skills that are required for health educators. Identification of community health education concepts with application to various segments of the nation’s health. One or more sections offered online.
411 Promoting Health in Multicultural Populations (3)
Prerequisite: Health Sci 220. Impact of cultural variables on health/illness. Current and potential strategies to improve health care delivery to ethnic groups. Identification of cultural competence skills that are essential for health educators.

415 Environmental Health (3)
Prerequisite: Health Sci 220. Overview of environmental concerns as they relate to human health. How environmental factors are involved in the transmission and prevention of diseases and health hazards resulting from exposures.

420 Chronic Disease Epidemiology (3)
Prerequisite: Health Sci 220. Discussion of areas in chronic disease epidemiology, the leading causes of death and disability and the risk factors related to causes and the prevention of disease. May be repeated once for credit.

421 Infectious Disease Epidemiology (3)
Prerequisite: Health Sci 401. Applies epidemiological concepts to the study and control of infectious disease in human populations. Epidemiologic profile, including agents, modes of transmission, occurrence, clinical characteristics and prevention methods of specific infectious disease.

430 Health Psychophysiology I (3)
Prerequisites: Biology/Kinesiology 210, Psychology 101 and two 300-level psychology courses. History, theory, research, physiology and applications of biofeedback and other self-regulatory techniques. By completing Health Sci 430 and 431, the student will meet the requirements to sit for the Biofeedback Certification Institute of America exam.

431 Health Psychophysiology II (3)
Prerequisites: Health Sci 430 and junior standing. Didactic training and lab experience in the treatment of psycho physiological disorders incorporating biofeedback therapy. Work completed will meet the practical and mentoring (supervision) requirements for Biofeedback Certification Institute of America certification in general biofeedback.

440 Determinants of Health Behavior (3)

450 Applied Health Promotion in Aging Populations (3)
Prerequisite: Health Sci 220 or graduate standing. Promotion/risk reduction program content, development, implementation and evaluation. Topics include weight control, stress management, substance abuse, physical fitness and accident prevention. One or more sections offered online.

455 Designing Health Education Curricula (3)
Prerequisite: Health Sci 220 or graduate standing. Theory and skills necessary to develop curriculum based on analysis of individual, community and societal needs and interests. One or more sections offered online.

460 Worksite Health Promotion (3)
Prerequisite: Health Sci 220 or Kinesiology 202. Philosophy, rationale and guidelines for developing health promotion programs in the corporate setting. Unique considerations in assessing needs, planning and implementing programs, evaluating effectiveness and coordinating activities in the workplace are discussed. (Same as Kinesiology 460)

461 Occupational Health and Safety (3)
Prerequisite: Health Sci 220 or Kinesiology 202. Occupational health principles, including anticipation, recognition, evaluation and control of occupational hazards are presented to heighten awareness of workplace hazards on human health. Occupational health laws, regulations and methods of compliance.

475 Health Science Planning, Research and Evaluation (3)
Prerequisites: Health Sci 220, 349, 401. Identification and application of concepts related to Health Science planning, research and evaluation. Analysis of planning and research designs applicable to health professionals, as well as tools for measurement of health status at individual, community, national levels.

494 Health Science Practicum (1)
Corequisite: Health Sci 220. A requirement for Health Science majors offering an opportunity to plan, implement and evaluate special community-based projects under faculty supervision. May be repeated for six units maximum. Credit/no credit only.

495 Internship in Health Science (3)
Prerequisites: Health Sci 220, all Health Sci 400-level classes except 475, senior standing. Supervised observation and field experience in community health settings as conducted by government, voluntary, professional or industrial/corporate organizations. (May be repeated one time.)

499 Independent Study (1-3)
Prerequisites: minimum of 15 upper-division Health Sci courses completed and junior or senior standing. Topics based on a study plan prepared in cooperation with a faculty supervisor. Culminates in a paper, project, comprehensive examination or performance. Application forms must be completed and approved prior to enrollment. Maximum of three units in any one semester; may be repeated once.

500 Issues in Public Health (3)
Prerequisite: admission to MPH program. Historical perspectives, definitions and discussion of current public health issues. Prepares public health professionals to draw on knowledge and skills from a variety of disciplines to define, critically assess, evaluate and resolve public health problems.
501 Advanced Methods in Epidemiology (3)
Prerequisite: admission to MPH program. Advanced application of epidemiologic procedures to the understanding of the occurrence and control of diseases and other health problems. Emphasizes study design, data quality, statistical analysis and causal inference.

508 Statistical Methods in Health Science (3)
Prerequisite: graduate status. Statistical theory, data collection procedures, techniques for analysis and interpretation of data.

510 Research Methods in Health Science (3)
Prerequisites: graduate status, Health Sci 508. Fundamental tools of research. Types of research, process of scientific inquiry and critical analysis of research. Topic selection and development of a research.

515 Advanced Environmental Health (3)
Prerequisite: admission to MPH program. Ecological impacts of human activities and the need to control factors that are harmful to human health. A framework is provided for investigation/management of health hazards. Principles of environmental health emphasize the relationships between population, natural resources, disease, toxicology and pollution.

520 Advanced Topics in Community Health (3)
Prerequisite: admission to the MPH program. Theories, principles, planning and intervention strategies and evaluation approaches relevant to current community health promotion programs in the United States.

524 Public Health Administration (3)
Prerequisite: admission to MPH program. Principles, practices and skills essential to successful public health administration. U.S. health care system and factors that shape it. Public health services and administration, patterns of diseases, managed care, ethics and quality of care.

525 Alternative and Complementary Medicine (3)
Prerequisite: graduate standing. Role of alternative medicine in health behavior, disease, treatment, coping and healing. Its history, philosophy, concepts, development and how each of its disciplines fits in the larger scheme of Western medicine.

535 Program Planning and Evaluation (3)
Prerequisite: graduate standing. Provides comprehensive theories and methods for planning and evaluating health promotion programs. Techniques for collecting and analyzing quantitative and qualitative data. Skills for measuring effectiveness of health promotion programs.

540 Advanced Study in Health Promotion and Disease Prevention (3)
Prerequisite: Health Sci 440 or equivalent. Psychological, social, ecological, economic and political theories relevant to the mission and process of health promotion. Application of behavioral change techniques and health education methodology to health promotion targeting individuals and whole communities.

545 Instructional Methodologies for Health Education (3)
Prerequisite: admission to MPH program. Develops ability to select and implement learner-centered instructional strategies designed to facilitate health behavior change for individuals in group settings. Instructional strategies appropriate for sensitive health-related content, the relationship of instructional strategies to behavioral outcomes and adult learning theories.

550 Graduate Internship (3-6)
Prerequisites: graduate status, consent of faculty sponsor, field supervisor, field coordinator and chair. On-the-job training experiences supervised by a fully trained practitioner. Minimum of 120 hours per semester plus conferences with faculty sponsor. Application forms must be completed and approved prior to enrollment. Upon completion of the internship, a written evaluation must be submitted. Not open to students on, or subject to, academic probation.

558 Advanced Study of School Health Education (3)
Prerequisite: enrollment in fifth-year program. Advanced course designed to facilitate delivery of comprehensive school health education. Strategies for personal, classroom and school safety. Application of state/federal laws pertaining to health and safety will be evaluated. One or more sections offered online.

597 Project (3)
Prerequisites: graduate classified status, successful completion of an oral presentation of the project and signature of all committee members on or before the census date of the semester in which the student elects to enroll. Directed independent inquiry. Not open to students on, or subject to, academic probation.

598 Thesis (3)
Prerequisites: graduate classified status, successful completion of an oral presentation of the thesis and signatures of all committee members on or before the census date of the semester in which the student elects to enroll. Student will select and have approved a research proposal, conduct the research and prepare a formal analysis and report. May be repeated. Not open to students on, or subject to, academic probation.

599 Graduate Independent Research (1-3)
Prerequisites: graduate status and consent of the faculty adviser and chair. Student research in a specific area of public health. Application forms must be completed and approved prior to enrollment. Upon completion of the research, a written report must be submitted. Not open to students on, or subject to, academic probation. Maximum of three units in any one semester; may be repeated once.
INTRODUCTION

Historians engage in systematic study of the human past in order to discover meaning for people in the present. The student of history may draw upon the subject matter and methods of many academic disciplines. Thus, social history employs the methods of the social sciences, including quantitative analysis, in examining social movements and issues in the past; psycho-history utilizes the approaches of psychology in the study of the behavior of historically significant individuals and groups; and the development of the various areas of human intellectual and cultural activity, for instance, the arts and sciences, are studied to inform us of how and why people have thought as they did.

Lower-division survey courses are designed to convey the broad sweep of past human events and introduce the student to the study of causation and historical source materials. Aspects of the philosophy and methodology of history and the mechanics of writing historical essays are addressed in History 300A and 300B. The study, in greater depth, of specialized historical topics comprises the bulk of the upper-division offerings of the department. History majors are required to take History 490T, a senior seminar on a special topic in which they are expected to write an original historical essay based chiefly upon the analysis of historical materials that date from the time of the events studied.

The history major is useful for students who: (1) seek a broad liberal arts education with the option to choose more specialized study by geographical region, epoch and focus of inquiry (cultural, social, etc.); (2) plan a career in government service, including positions in United States Government agencies and international organizations overseas; (3) in business where writing, research and people skills are important; (4) pursue a career in private, nonprofit organizations that may involve research and service organizations, i.e., archives, museums and libraries; (5) desire to study law; (6) intend to prepare for primary or secondary school teaching; or (7) intend to work for advanced degrees in history in preparation for college teaching. The department is committed to the university’s missions and goals where learning is preeminent.

Credential Information

The bachelor’s degree in history may be effectively combined with subject matter studies necessary for either the multiple subject teaching credential (K-8) or single subject credential (7-12) in history. Teaching credentials require specific study plans and students are urged to seek advice from an adviser early in their course of study. Majors planning to teach at the secondary level should have a study plan approved by the Undergraduate Coordinator or designee by the first semester of their junior year in residence. Undergraduates are also encouraged to contact the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

DEPARTMENT CHAIR
William W. Haddad

DEPARTMENT OFFICE
Humanities 815F

DEPARTMENT WEBSITE
http://hss.fullerton.edu/history

PROGRAMS OFFERED
Bachelor of Arts in History
Minor in History
Master of Arts in History

FACULTY
Gordon Bakken, Gayle Brunelle, Jochen Burgtorf, Benjamin Cawthra, Kristine Dennehy, Jack Elenbaas, Nancy Fitch, Natalie Fousekis, Cora Granata, William W. Haddad, Volker Janssen, Steven Jobbitt, Jonathan Markley, Robert McLain, Maged S.A. Mikhail, Megan Kate Nelson, Mougo Nyaggah, Raymond Rast, Jasamin Rostam-Kolayi, Lynn Sargeant, Jessica R. Stern, Laichen Sun, Lisa Tran, Allison Varzally, Philippe Zacair

ADVISERS
General Advisement:
Check with departmental office.
Undergraduate Coordinators:
Maged S.A. Mikhail
Jasamin Rostam-Kolayi
Graduate Advisers:
Volker Janssen
Allison Varzally
Credential Adviser:
Kristine Dennehy
Center for Oral and Public History

The Center for Oral and Public History, under the sponsorship of the Department of History, is one of the most comprehensive university-based oral history programs in the nation. In addition to offering coursework in interviewing techniques, technical processing methodology and community fieldwork, the program administers an assortment of ethnic, political and other regional projects.

Pre-Professional Information

Students intending careers in government service or business should seek counsel from an adviser. Those planning to pursue graduate study in history should consult a faculty member of their choice. Those who expect to attend law school should plan their course of study with Professor Bakken.

Prizes and Scholarships

Students should inquire at the department office for information regarding departmental prizes and scholarships.

BACHELOR OF ARTS IN HISTORY

The B.A. in History requires a minimum of 120 units that includes courses for the major, General Education, all University requirements and free electives. A grade of "C" (2.0) or better is required in all history courses applied towards the B.A. in History.

The major requires a total of 45 units distributed as follows:

Introductory Survey Courses (12 units)

World Civilization (6 units)

1. History 110A World Civilizations to the 16th Century (3)
   AND History 110B World Civilizations Since the 16th Century (3)

U.S. History (6 units)

2. History 170A United States to 1877 (3) AND History 170B United States Since 1877 (3)
   OR History 180 Survey of American History (3) AND 170A or 170B
   OR History 190 Survey of American History with Emphasis on Ethnic Minorities AND 170A or 170B

Intermediate Requirements (24 units)

History 300A Historical Thinking (3)

History 300B Historical Writing (3)

At least 6 units in three of the following four fields:

1. World/Comparative History
2. United States History
3. European History
4. Non-Western History

Advanced Requirements (9 units)

Two upper-division history electives (6)

History 490T Senior Research Seminar (3)

MINOR IN HISTORY

The minor in history, undertaken in consultation with a history adviser, should include a concentration in a general field.

1. Lower-division coursework - six or nine units (including general education)

2. Upper-division coursework - 15 or 18 units (including History 300A)

A total of 24 units are required for the minor in history.

To complete 24 units, the student has the option of taking the last three units either in the introductory requirements or the upper-division coursework.

MASTER OF ARTS IN HISTORY

The Master of Arts degree in history is designed to provide a course of study for those whose interests are in teaching, business, government service and the professions, as well as for personal enrichment. It offers all the basic requirements for those who intend to pursue a doctoral degree upon the completion of their study at California State University, Fullerton.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Prerequisites

Applicants to the master’s program must first fulfill all requirements for admission to graduate standing in the University. A student must have a baccalaureate degree from an accredited institution with a grade-point average of at least 3.0 in the last 60 semester units and a 3.0 grade-point average in upper-division history courses.

All graduate program applicants must submit scores from the GRE General Exam. Only those who have at least a 3.5 GPA in upper-division history courses may request an exemption. After fulfilling the university requirements, the applicant’s records are sent to the History Department’s graduate coordinator for additional evaluation. Students with deficiencies will be considered for admission only after they have completed courses approved by the coordinator.

STUDY PLAN

Each student drafts his or her study plan with the graduate coordinator and an adviser in the area of specialization during the first semester of study. A study plan must be filed after nine units of coursework are completed. Three plans are offered for completion of the master’s program. Each requires 30 units of coursework.

Plan I

Student develops one specific field of interest and writes a thesis or project (with an oral examination taken before the final draft).

Required History Courses (9 units)

History 501 Theory and History (3)
History 521T Directed Readings Seminar in Fields of European History (3)
    OR History 551T Directed Readings Seminar – World and Comparative History (3)
    OR History 571T Directed Readings Seminar in Fields of American History (3)
History 522 Seminar in European History (3)
    OR History 552T Seminar in World and Comparative History (3)
    OR History 572 Seminar in American History (3)

Electives (15 units)
May be taken in 400-level or graduate courses related to the study plan, at least one of which must be taken in history and one of which must be a 500-level course.

Culminating Experience (6 units)
History 598 Thesis (6)
    OR History 597 History Project (6)

Plan II
Student develops specializations and takes comprehensive examinations in two of the following fields: 1) American; 2) European; 3) Latin American; Asian, African, Middle Eastern; or 4) World History.

Required History Courses (9 units)
History 501 Theory and History (3)
History 521T Directed Readings Seminar in Fields of European History (3)
    OR History 551T Directed Readings Seminar – World and Comparative History (3)
    OR History 571T Directed Readings Seminar in Fields of American History (3)
History 522 Seminar in European History (3)
    OR History 552T Seminar in World and Comparative History (3)
    OR History 572 Seminar in American History (3)

Electives (21 units)
Nine additional units of 500-level coursework must be taken. The remaining 12 units may be taken in 400-level or graduate courses related to the study plan, at least one of which must be taken in history.

Culminating Experience
Required and elective courses should prepare students for comprehensive exams in two fields.

Plan III
Student develops an emphasis in public history and writes a thesis or project (with an oral examination taken before the final draft).

Required History Courses (9 units)
History 501 Theory and History (3)
History 506 Seminar in Public History (3)
History 521T Directed Readings Seminar in Fields of European History (3)

Electives (15 units)
Electives must include nine units in adviser-approved content courses, three of which must be in history, and six units from the following applied courses:
History 456 Introduction to Public History (3)
History 492 Community History (3)
History 493 Oral History (3)
History 494 History and Editing (3)

Culminating Experience (6 units)
History 596 Graduate Internship in History (3) and History 597 History Project (3)
    OR History 597 History Project (6)
    OR History 598 Thesis (6)

In addition to the 30 units of coursework required of all students, before advancing to candidacy a cultural skills requirement must be met. In consultation with the student's graduate adviser, this may be fulfilled in a variety of ways: 1) an examination on reading ability in a foreign language or a minimum of two courses of appropriate foreign language coursework over and above the required 30 units; 2) completion of six units of comparative studies in other departments appropriate to the student's program over and above the required 30 units; 3) an examination of courses taken in statistics; or 4) students in Plan I and Plan II may also fulfill the cultural skills requirement by taking six units of specialized coursework in public history (HIST 492, 493, 494) over and above the required 30 units.

For further information call the Department of History.

HISTORY COURSES
Courses are designated as HIST in the class schedule.

110A World Civilizations to the 16th Century (3)
Development of Western and non-Western civilizations from their origins to the 16th century.

110B World Civilizations Since the 16th Century (3)
Development of Western and non-Western civilizations from the 16th century to the present.

170A United States to 1877 (3)
Political, social, economic and cultural development of the United States to 1877. Old World background, rise of the new nation, sectional problems, the Civil War and Reconstruction.

170B United States Since 1877 (3)
U.S. history from the late 19th century to the present. Economic transformation, political reform movements, social, cultural and intellectual changes and the role of the United States in world affairs.
180 Survey of American History (3)
American history from prehistoric times (before 1492) to the present according to chronological time periods. Basic themes that pervade the entire sweep of the nation's history. Satisfies state requirement in U.S. History. Not available for credit to students who have completed History 190.

190 Survey of American History with Emphasis on Ethnic Minorities (3)
A survey of American history from prehistoric times (before 1492) to the present with special emphasis on the role of race and ethnicity. (Same as Afro-Ethnic Studies/Asian American Studies/Chicana/o Studies 190). Credit will not be given for both History 180 and 190.

201 The History of Asian Pacific Americans (3)
Prerequisite: completion of General Education (G. E.) Category III. C.1. Origins and evolution of Asian American communities and cultures, with an emphasis upon the southern California region, through selected books, oral histories, films, outside speakers and excursions. (Same as Asian American Studies 201)

230 The Ascent of Man (3)
Science and technology in the development of human culture, especially the development of science in western culture since the 17th century. Scientific concepts, their emergence and the social impact of science.

300A Historical Thinking (3)
Nature of history, history of historical thought, and history's relationship to the humanities and social sciences. Seminar required of all history majors. History majors must earn at least a "C" (2.0) in this course.

300B Historical Writing (3)
Research, writing and library usage (including computer-assisted bibliographic searches) as related to history. Meets the classroom portion of the upper-division writing requirement for history majors. Seminar required of all history majors. History majors must earn at least a "C" (2.0) in this course.

302A Historical Dimension of Liberal Studies (3)
Prerequisites: prior or concurrent completion of Liberal Studies 300 and completion of G. E. Category I. Origins and development of modes of thought and forms of expression in the three core areas of liberal studies, i.e., the natural sciences, social sciences, and arts and humanities. (Same as Liberal Studies 302A)

302B Historical Dimension of Liberal Studies (3)
Prerequisite: completion of History 302A with a grade of "C" (2.0) or better. Origins and development of modes of thought and forms of expression in the three core areas of liberal studies, i.e., the natural sciences, social sciences, and arts and humanities. (Same as Liberal Studies 302B)

310 The California Experience (3)
(Same as Liberal Studies 310)

311 World War II (3)
History of World War II: Films, documentaries, lectures and discussion.

320 Modern European History 1789 - Present (3)
Prerequisite: History 110B or completion of G. E. Category III.C.1. Major political, social, economic and cultural developments in Modern Europe. Topics include the French Revolution, industrial revolution, liberalism, socialism, nationalism, imperialism, urbanization, modernity, the World Wars, Russian Revolution, inter-war period and post-1945 period.

331 History of Science: Copernicus to the Present (3)
Prerequisite: completion of G. E. Category III.A.2. Science from the 16th century to the present especially the scientific revolutions of the 17th and 20th centuries and the interaction between science, technology and culture.

332 Concepts and Approaches in Women's History (3)
Prerequisites: History 110B and either History 170B or 180. Overview of problems, concepts, methodologies and debates that have characterized women's history in recent decades. (Same as Women's Studies 332)

350 History of Latin American Civilization (3)
Prerequisites: completion of G. E. Category II.A and III.C.1. Social, economic, political and cultural evolution of Latin America from the European conquest to the present.

355 History of African Civilization (3)
Social, political, economic and cultural evolution of African civilizations from early times to the present. Credit will not be given for both History 355 and Afro-Ethnic Studies 346.

360 Modern Asia: Nationalism and Revolutionary Change (3)
Prerequisites: History 110B and completion of G. E. Category III.C.1. Modular analysis of nationalism, revolution and modernization as drawn from the experiences of the countries of China, Japan, India and Southeast Asia.

377 Women's Image in American Film (3)
Prerequisite: completion of the G. E. Category II.B.1. Images, symbols, visual metaphors and myths as they relate to the image of women. Change in film images will be contrasted with the changing status of women in America. Not available for graduate degree credit.

382 World War II Japanese American Evacuation (3)
Prerequisites: completion of G. E. Category III.C.1 and History 170B, 180, or 190. World War II eviction and detention of people of Japanese ancestry in the United States, pivoting on the significance of this experience in the areas of civil and human rights, cross-cultural relations and international affairs. Not available for graduate degree credit. (Same as Asian Amer 382)

386A American Social History 1750-1860 (3)
Prerequisite: completion of G. E. Category II.B. Social history of the United States to the Civil War; reform movements, temperance, moral purity, women's rights, anti-slavery, spiritualism and their importance to the formation of a modern society.
be amplified by the use of films and slides.

394 The American Civil War (3)
Prerequisite: History 170A or 180. History of the American Civil War. Both contemporary and current analyses of the war will be amplified by the use of films and slides.

395 A History of the First World War (3)
Prerequisite: History 110B. History of the Great War stressing the military, social, economic and political aspects of the war. Films, documentaries and special lectures.

400A Concepts in World History, Ancient to Early Modern (3)
Prerequisite: History 110A. Designed primarily for students intending to teach world history. Ways in which world history can be conceptualized. Explores such themes as nomadism, syncretism, cross-cultural trade and European diffusionism.

402 Ancient and Medieval Britain (3)
Prerequisite: History 110A. Britain from 5 B.C. to 1485. Constitutional, institutional and cultural aspects of Roman, Celtic, Anglo-Saxon, Norman and Plantagenet Britain.

403 Tudor-Stuart England (3)
Prerequisite: History 110A or 110B. England from the accession of Henry VII to the Glorious Revolution. Political, institutional, ecclesiastical and cultural aspects of the period of the Tudors and Stuarts.

404 History of Modern England and Great Britain (3)
Prerequisite: History 110B. Modern British history (Glorious Revolution to present). Achievement of constitutional monarchy, transition from agrarian to industrial society, establishment of political democracy and the rise and fall of socialism.

405 History of the Jews (3)
Prerequisite: completion of G. E. Category II.A. Jewish people from the biblical period to the present. Literature of each period, as well as the relationships that exist between the Jewish communities and the societies in which they exist. (Same as Comparative Religion 405)

406 The Holocaust (3)
Prerequisite: History 110B or any modern European upper-division course. Traces the history and examines the origins, implementation and results of the European-wide programs of persecution and genocide carried out by Nazi Germany and their collaborators against the Jews during the period 1933-1945. (Same as Comparative Religion 406)

408 History of California (3)
Prerequisite: completion of G. E. requirement II.B. Political, economic and social history of California from the aboriginal inhabitants to the present; the development of contemporary institutions and the historical background of current issues.

409 Cities in European Civilization, 1000-1915 (3)
Prerequisite: History 110A or 110B. Urban history of Western Europe from the revival of urban life in the High Middle Ages through WWI, with a focus on urban social and cultural evolution.

410 The Rise of the Atlantic World (3)
Prerequisite: History 110A. Main themes of the history of the Atlantic Basin, 1450-1700, including the discovery and conquest of the New World, Africans' contributions to the creation of the Atlantic world and the origins of the "plantation complex."

413 Oral History/Guided Autobiography (3)
Prerequisite: completion of G. E. Category I, core competencies or equivalents. Theories and methods of oral history and guided autobiography, and training to become professional practitioners at community and senior centers, educational institutions, historical agencies and other settings. (Same as Gerontology 413.)

415A Classical Greece (3)
Prerequisite: History 110A or equivalent. Civilization of ancient Greece. Rise and flourishing of the classical city-states; literary and philosophic contributions to modern civilization.

417A Roman Republic (3)
Prerequisite: History 110A or equivalent. Roman social and political institutions under the republic.

417B Roman Empire (3)
Prerequisite: History 110A or equivalent. Roman imperial institutions and culture with attention to the rise of Christianity. (Same as Comparative Religion 417B)

420 The Byzantine Empire (3)
Prerequisite: History 110A or equivalent. East Roman Empire from Constantine to the Ottoman conquest of 1453. Institutional aspects of Byzantine society: church, state, the economy, law and culture.

421A History of the Christian Church to the Reformation (1517) (3)
Prerequisite: History 110A or equivalent. Christian Church from its origins in the apostolic preaching through the late Middle Ages and the beginning (1517) of the Reformation in both the East and West. (Same as Comparative Religion 421A)

421B History of the Christian Church from the Reformation to the Present (3)
Prerequisite: History 110B or equivalent. Western church as an institution from the Reformation (1517) to the present. Orthodoxy, Catholicism and Protestantism in historical perspective. (Same as Comparative Religion 421B)

423 Medieval History, 300-1350 (3)
Prerequisite: History 110A or equivalent. Medieval civilizations – East European, West European and Islamic – from the decline of the Roman Empire to the beginning of the Hundred Year's War, with emphasis on cultural, intellectual and social history.
424T Gender and Sexuality in History (3)
Prerequisites: History 110A and 110B, 170A and 170B, or equivalents. Variable topics in gender and sexuality in history. Historical forces that shaped masculinity and/or femininity.

425A The Renaissance (3)
Prerequisite: completion of G. E. Category II.A. Europe in the 14th and 15th centuries: development of humanism and capitalism in Italy and their impact on European culture; rise of Renaissance monarchies; the Renaissance papacy; Christian humanism; and Renaissance science and mysticism.

425B The Reformation (3)
Prerequisite: completion of G. E. Category II.A. Europe in the 16th and 17th centuries: impact of the Protestant and Catholic Reformations on European culture; the religious wars; the price revolution and ; crises of the nobility; rise of absolutism; and the early modern family. (Same as Comparative Religion 425B)

427 Enlightenment and Revolution (3)
Prerequisites: History 110A,B. Impact of slavery in the French Caribbean, rise of nation states, emergence of Enlightenment thought, feminism and popular politics during the 18th century and French Revolution.

428 The Rise and Decline of Liberal Europe in the 19th Century (3)
Prerequisites: History 110A,B. Impact of industrialization, liberal political reform and new forms of consumption and production on the daily lives of men and women who lived in 19th-century Europe. Socialist, nationalist and feminist responses to social change.

429A Europe 1890-1945 (3)
Prerequisite: History 110B. Survey of the cultural, political and economic history of Europe, 1890-1945.

429B Europe Since 1945 (3)
Prerequisite: History 110B. Survey of the cultural, political and economic history of Europe since 1945.

432 From Bismarck to Hitler: Modern Germany, 1870-1945 (3)
Prerequisite: History 110B. Social and political history of Germany from 1871 through World War II, and current historical debates in modern German history.

434A Russia to 1801 (3)
Prerequisite: completion of G. E. Category II.A. Establishment of the Russian state at Kiev through the reign of Catherine the Great. Political, cultural and social history of medieval, early modern and imperial Russia.

434B Modern Russia and the Soviet Regime (3)
Prerequisite: completion of G. E. Category II.A. Political, cultural and social history of Late Imperial Russia and the Soviet Union. The 1905 and 1917 revolutions, their roots in 19th-century political and social changes, and the consolidation of power under the Bolshevik party. Continuity and change of Russian institutions and politics in Tsarist, Soviet and post-Soviet Russia.

449 Race, Ethnicity and Gender in Latin America: A History (3)
Prerequisite: History 110B. Issues of race, ethnicity and gender in Latin America from the 15th century to the present. Emphasizes Latin America’s two largest countries: Brazil and Mexico.

450 African History Since 1935 (3)
Prerequisite: History 110B or equivalent. Issues of European imperialism, settler cultures, racism and African consciousness, ethnic conflict, gender, nationalist and guerrilla liberation movements, Pan-Africanism, international relations and society development policies in Africa since 1935. (Same as Afro 450)

451 Colonial Period of Latin America (3)
Prerequisite: History 110A or equivalent. Latin America from its pre-Columbian origins to the era of the Wars of Independence. Emphasizes ethnic, social and cultural factors that characterized the colonial period.

452 20th-Century Brazil (3)
Prerequisite: History 110B. Social, economic, cultural and political history of Brazil, with particular emphasis on the period since World War II.

453A History of Mexico pre-Columbian (pre 1521) through 1821 (3)
Prerequisite: History 110A or History 110B or equivalent. History of Mexico from prior to the Spanish conquest of 1521 through the wars for Independence ending in 1821.

453B History of Mexico from Independence (1821) to Modern Day (3)
Prerequisite: History 110A or History 110B or equivalent. Pivotal moments in modern Mexican history, including post-colonial nation building, Mexican-American War, Mexican Revolution of 1910, Chiapas Rebellion of the mid-1990s and 2000 elections.

454 19th-Century Latin America: Era of Nation Building (3)
Prerequisite: History 110B or equivalent. Latin America during the 19th century (1810-1910) with emphasis on cultural and socio-political factors that were important in the creation of Latin American nations. Special focus on development of the Rio de la Plata, the Andean nations and Mexico.

455 Latin America Since 1945 (3)
Prerequisites: completion of History 110A,B. Political, economic, cultural and social patterns in key Latin American nations from 1945 to the present.
456 Introduction to Public History (3)
Prerequisite: History 180 or its equivalent. Applications of history to activities outside of teaching and academic research. Archival work, historic preservation, exhibit interpretation and historical research and writing in business, government and individual consulting.

457 West Africa and the African Diaspora (3)
Prerequisite: History 110B or equivalent. West African relationships with the African diaspora in the Americas. Issues of the origins of political conflict, economic exploitation, racism, gender, revolts, emancipation, Pan-Africanism and rights of African descendants since the 15th century. (Same as Afro-Ethnic Studies 457)

458 Southern Africa in the 20th Century (3)
Prerequisite: History 110B or equivalent. Twentieth-century developments in the Union (Republic) of South Africa, Central Africa (the Rhodesias and Nyasaland) and the Portuguese colonies; the political, economic and social ramifications of race relations. (Same as Afro-Ethnic Studies 458)

460 The Chinese Diaspora (3)
Prerequisite: History 110B. History of Chinese migration from the 16th century to the present; focuses on the domestic and international situations that shaped the conditions for Chinese emigration in different parts of the world.

461A Early Vietnam (3)
Prerequisite: History 110A. History of Vietnam from the earliest times to c. 1850. Seeks to identify the main issues in Vietnam's early history and trace the origins of the Vietnamese civilization and its implications on the formation of Vietnamese national identity and nationalism.

461B Modern Vietnam (3)
Prerequisite: History 110B. History of Vietnam since 1802. Special emphasis placed on the French colonial experience, the Vietnamese struggle against the French from 1946 to 1954, and the American involvement in Vietnam.

462A History of China (3)
Prerequisite: History 110A or equivalent. Chinese history from ancient times to the middle of the 17th century; society, thought, economy and political institutions.

462B History of China (3)
Prerequisite: History 110B or equivalent. Chinese history from the middle of the 17th century to the 1950s. China's internal developments and foreign intrusion, the rise of modern Chinese nationalism and intellectual developments in the Republican period, and the attempts at modernization and the triumph of communism.

462C China Since 1949 (3)
Prerequisite: History 110B or equivalent. History of China from 1949 to the present. Communist Party, political institutions, ideology, economic modernization and foreign relations of China.

463A History of Japan (3)
Prerequisite: completion of the G. E. Category II.A. Social, political and economic history of Japan until 1868, stressing the Tokugawa era.

463B History of Japan (3)
Prerequisite: History 110B or equivalent. Rise of the modern Japanese state, Japanese imperialism and the postwar era.

463C Themes in Korean History (3)
Prerequisites: History 110A,B. Chronological overview of Korean history, with an emphasis on the modern period. Thematic approach covers topics such as a state building, Confucianism, nationalism, the colonial period, the Korean War and reunification of the peninsula.

464A History of Southeast Asia to 1800 (3)
Prerequisite: History 110B or equivalent. Development of Southeast Asian civilizations from the earliest times to 1800, including the classical and early modern era.

464B History of Southeast Asia, 1800-present (3)
Prerequisite: History 110B or equivalent. Development of Southeast Asian history from 1800 to the present, including the colonial, post-colonial and contemporary period.

465A History of India (3)
Prerequisite: completion of G. E. Category II.A. History of India from ancient times through the arrival of Islam, to the decline of the Mughul Empire in 18th century. Political developments, social and religious institutions: Hinduism, Buddhism, Jainism, class, caste, early impact of Europeans. Not available for graduate degree credit. (Same as Comparative Religion 465A)

465B History of India (3)
Prerequisite: History 110B or equivalent. India from early activities of British in 18th century through Indian Independence in 1948. Political, economic, religious developments: crystallization of British supremacy in South Asia through the Indian Mutiny of 1857; India's struggle for independence; emergence of Gandhi and Nehru. (Same as Comparative Religion 465B)

466A Islamic Civilization: Arab Era (3)
Prerequisite: History 110A or equivalent. Arab predominance in the Middle East from the rise of Islam to the Mongol invasions of the 13th century. (Same as Comparative Religion 466A).

466B Islamic Civilization: Imperial Age (3)
Prerequisite: completion of G. E. requirement II.A. Mongol invasions of the Middle East and their effects. Ottoman Turkish, Safavid Persian and Moghul Empires to 1800. (Same as Comparative Religion 466B).

467 The Middle East in the 19th Century (3)
Prerequisite: History 110B or equivalent. Western penetration of the Middle East and the reaction to it, modernization, the growth of nationalist movements and revolutionary disturbances ending with World War I.
468 Middle East in the 20th Century (3)
Prerequisite: History 110B or equivalent. Social, political and economic changes in the Middle East since World War I. The period after World War II and recent independence movements.

469 American Military History (3)
Prerequisite: History 180 or equivalent. America’s military experience focusing upon the democratic, industrial, managerial, mechanical, scientific and social revolutions that have molded military institutions and national policies.

470 American Colonial Civilization (3)
Prerequisite: History 170A or 180. Creation and development of societies in English North America from 1492-1754: the emergence of economic, social and political patterns and structures in a maturing Anglo-American culture.

471 The United States from Colony to Nation (3)
Prerequisite: History 170A or 180. Social, economic, political and intellectual developments in late 18th-century America, the coming of the American Revolution, origins of American nationalism, social structure of the new nation and formation and ratification of the Constitution.

472 Jeffersonian Themes in American Society, 1800-1861 (3)
Prerequisite: completion of G. E. Category in American History, Institutions and Values. Jeffersonian values and their impact upon the social, political and cultural life of the nation.

473 Democracy on Trial, 1845-1877 (3)
Prerequisite: completion of G. E. Category in American History, Institutions and Values. America’s “great national crisis” and the impact of slavery, civil war and national reconstruction upon the democratic process of the republic.

474 United States, 1876-1920 (3)
Prerequisites: History 170B or 180 or equivalent. Industrialization, urbanization and immigration. Reconstruction, the New South and the West. Populist and Progressive reform movements. World War I and the Red Scare.

475 United States, 1920-1960 (3)
Prerequisite: History 170B or 180, or equivalent. Major trends and conflicting values in domestic policies, national security policies, the economy, society and culture. Analyses of civil rights, civil liberties, parties and politics. Examination of key historiographic controversies.

476 United States Since 1960 (3)
Prerequisite: History 170B or 180, or equivalent. U.S. History from 1960 to present, interrelating foreign and domestic policy, economic, social and cultural trends, a study of U.S. history as it is being formed.

477 The History of Orange County (3)
Prerequisite: History 170B or 180, or equivalent. History of Orange County. Stresses the process of urbanization.

478 The History of Orange County (3)
Prerequisite: completion of G. E. Category II.B. Urban life in America; the colonial town, the western town and the industrial city.

479 The Urbanization of American Life (3)
Prerequisite: completion of G. E. Category II.B. Urban life in America; the colonial town, the western town and the industrial city.

480 Development of American Law (3)
Prerequisite: History 170A or 170B. American law; contracts, property, commercial law, criminal law, corporations, torts, civil procedure and the legal profession.

481A Westward Movement in the United States (3)
Prerequisite: completion of G. E. Category II.B. Expansion of the United States population and sovereignty from the eastern seaboard to the Pacific, colonial times to 1900; regional development during the frontier period.

482 Themes in American Thought (3)
Prerequisite: History 170A-B, 180, or 190. Intellectual movements and ideas from the colonial period through the 20th century. Examples of topics are: Puritanism; the Enlightenment influence in America; utopian reform; Darwinism; and Freudian thought.

483 American Religious History (3)
Prerequisite: completion of G. E. Category II.B. American religious life and the proliferation of religious organizations as the result of transplanting the European religious heritage in a new environment. (Same as Comparative Religion 483)

484 American Legal and Constitutional History (3)
Prerequisite: completion of G. E. Category II.B. Legal and constitutional issues affecting the development of the U.S. Constitution, American law and government. Developments from English and colonial legal origins to constitutional problems of the post-World War II era.

485 United States Foreign Relations (3)
Prerequisite: History 170B or 180, or equivalent. Relations from 1900 to the present. United States as a world power in the 20th century; the search for world order and the diplomacy of the atomic age.

486 United States Cultural History (3)
Prerequisite: completion of G. E. Category II.B. Cultural values, ideas and beliefs of American communities as expressed through a variety of media, including historical, literary, visual, material and aural sources.

487 History of American Parties and Politics (3)
Prerequisite: completion of G. E. Category II.B. Development of American political parties and issues from 1787 to the present. Evolution and change in American political parties and the recent impact of mass media upon them.

490T Senior Research Seminar (3)
Prerequisites: History 300A and 300B. Directed research seminar with class discussions applied to specific topics and areas as schedule and staff allow. Original research and writing. Required of all history majors. History majors must earn at least a “C” (2.0) in this course. (Multiple enrollment permitted in different sections of the same course.)
491T  Proseminar in Special Topics in History  (3)
Prerequisites: History 110A and 110B for European and non-West courses; History 170A and 170B; or History 170A or 170B and 180; or History 170A or 170B and 190 for U.S. History. Intensive study of selected phases or periods of history.

492 Community History  (3)
Prerequisite: completion of G.E. Category II.B. Historical development of communities in general, including the Orange County area. Techniques of gathering and processing local historical data, including oral interviews and other archival materials.

493 Oral History  (3)
Prerequisite: completion of G.E. Category II.B. Utilization of tape recorded interviews to document significant events in 20th-century history. Training in interviewing techniques, specific background research and equipment use, after which students conduct a number of tape-recorded interviews.

494 History and Editing  (3)
Prerequisite: History 300B. Techniques of editing, book and photo layout and indexing. Focuses on oral history documents, but includes other historical and technical editing.

498 History Internship  (3)
The internship program offers work experience related to the history academic program or to areas of public and private employment where any liberal arts major is appropriate.

499 Independent Study (1-3)
Open to advanced students in history with consent of department chair. May be repeated for credit.

501 Theory and History  (3)
Prerequisite: History 300A or equivalent. Seminar introducing philosophical issues in history as a humanistic social science, to epistemological considerations of the relationship of history to other disciplines and to new subdisciplines in history. Required for the M.A.

506 Seminar in Public History  (3)
Prerequisite: consent of instructor. Seminar in sources, themes, writing and formats used by historians working outside the classroom. Content will vary with instructor and will emphasize application of historical methods to various sectors of community history. Alternative to History 572/522 requirement for M.A. Required for M.A. students pursuing the Public History Emphasis.

521T Directed Readings Seminar in Fields of European History  (3)
Prerequisite: a 3-unit upper-division course in the sub-field of the offering or its equivalent. Critical examination of the literature that has been important in different fields of European history. May be repeated for credit when covering a different subfield.

522 Seminar in European History  (5)
Prerequisite: History 501 or equivalent. Seminar in which students will utilize primary sources in writing research papers in European History. May be repeated once for credit when covering a different sub-field.

551T Directed Readings Seminar in World and Comparative History  (3)
Prerequisite: a 3-unit upper-division course in world history. Variable topics reading seminar designed to offer a comprehensive background in the literature of world and comparative history. May be repeated for credit when covering a different subfield. Topics: “Cross-Cultural Interaction in the Medieval World, (ca. 500-1500),” “The Age of Discovery,” “The Ancient World.”

552T Seminar in World and Comparative History  (3)
Variable topics research seminar designed to explore world and comparative history through a primary source based research paper. May be repeated for credit when covering a different subfield. Topics: “Cross-Cultural Interactions in the Medieval World, (ca. 500-1500),” “The Age of Discovery,” “The Ancient World.”

571T Directed Readings Seminar in Fields of American History  (3)
Prerequisite: a 3-unit upper-division course in the sub-field of the offering. Critical examination of literature that has been important or influential in specific fields of American history. May be repeated for credit when covering a different sub-field.

572 Seminar in American History  (3)
Prerequisite: History 501 or equivalent. Seminar in which students will utilize primary sources in writing research papers in American History. May be repeated once for credit when covering a different sub-field.

596 Graduate Internship in History  (3)
Prerequisite: classified graduate status. Professional-level internship in historical work. Usually precedes History 597, Project and constitutes research phase of main graduate exercise, as well as preparation for post-graduate career. May be repeated for credit.

597 History Project  (3 or 6)
Editing a significant body of primary source materials, including a critical and interpretive introduction, as well as appropriate reference and explanatory notes. Foreign sources will normally be translated into English.

598 Thesis (3 or 6)
Prerequisite: consent of instructor. May be repeated for credit.

599 Independent Graduate Research  (1-3)
Open to graduate students in history with consent of department chair. May be repeated for credit.
INTRODUCTION

The mission of the department is to provide students with an understanding of communication processes in a culturally diverse society. An in-depth understanding of communication processes brings a number of benefits, including the ability to analyze communication barriers and the competency to facilitate effective communication between individuals, within organizations, between organizations and their customers or constituencies, and across cultures. Our vision is to train good men and women speaking well to solve communication problems by studying the ways in which messages link participants during transactions. Understanding communication processes in depth can, with specialized education and training, also be used to diagnose and treat disorders of communication.

The department offers a Bachelor of Arts degree in Speech Communication with emphases in Argumentation and Persuasion, Intercultural Communication, Interpersonal Communication and Organizational Communication. It also offers a Master of Arts degree in Speech Communication. Students who complete the bachelor's or master's degrees are qualified to enter a variety of rewarding careers in education, training and development, sales, community relations, the ministry, law, business, nonprofit organizations and government; and are qualified to pursue advanced degrees in communication studies, as well as other academic and professional fields described under the sections on concentrations. The department offers a Minor in Speech Communication, which is structured to meet individual students' educational needs and career aspirations.

The department also offers a Bachelor of Arts and a Master of Arts degree in Communicative Disorders. These degrees lead to eligibility for a state license in speech-language pathology, national certification in speech-language pathology and a specialized credential for work within the public school system. The Communicative Disorders Program has been accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association for more than 30 years. The Communicative Disorders Program has a number of special features, including an emphasis on clinical services for persons from diverse cultural and linguistic backgrounds, alternative and augmentative forms of communication, and diagnosis and management of disorders of swallowing.

The department provides a strong foundation of theory in its degree programs, and each program gives students the experience they need in applying theory in a variety of contexts. Knowledge and skills are developed in the classroom through the use of case study methodology and other learning strategies, and through internship experiences that allow students to apply their knowledge and skills in their eventual work settings. Some students are encouraged to pursue careers in college and university teaching and research by continuing their education at the doctoral level in the field of communication studies or communicative disorders. Finally, the department provides guidance for students interested in pursuing graduate and professional studies in fields related to communication.
AWARDS IN THE DEPARTMENT OF SPEECH COMMUNICATION

The following awards were established by family, friends and colleagues of the designees in memory of their commitment and contributions to students engaged in the study of human communication.

These awards provide recognition and/or financial assistance to outstanding students majoring in Speech Communication or Communicative Disorders.

The Seth A. Fessenden Award
The Herbert W. Booth Award
The Herbert W. Booth Outstanding Senior Award
The Philip J. Schreiner Award
The Lee E. Granell Award in Forensics
The Wayne Brockriede Award
The John Scott McKay Textbook Award
Ralph Beckett Memorial Award in Communicative Disorders
The Wayne Brockriede Award
The Richard Wiseman Award
The William Gudykunst Memorial Fund Graduate Student Award
Antonia Mari Paula Bapat-Zaat Graduate Award
Antonia Mari Paula Bapat-Zaat Undergraduate Award
The Peggy Hammer Award

GRADUATE ASSISTANTSHIPS AND FELLOWSHIPS

The following appointments are awarded to outstanding graduate students in the form of competitively selected assistantships and lectureships:

Clinical Graduate Assistants
Graduate Assistants in Forensics
Graduate Assistants in Research
Teaching Associates in Human Communication Studies

BACHELOR OF ARTS IN COMMUNICATIVE DISORDERS

The Bachelor of Arts in Communicative Disorders requires 42 units within the major; 39 of which are required and three are elective. All students also complete 51 units of general education, leaving 27 units of free electives to complete the university’s requirements for the Bachelor of Arts degree. Most students who pursue the Bachelor of Arts in Communicative Disorders intend to complete a Master of Arts degree in Communicative Disorders, since this is the entrance-level degree for practice as a speech-language pathologist in both the public school and the health care systems. The Bachelor of Arts degree also provides excellent preparation for pursuit of teaching credentials, and students are encouraged to consider this degree to prepare for careers as teachers, especially if interested in early childhood or elementary education. Students can complete requirements for entrance into most teaching credential programs within the 120-unit minimum required for a Bachelor of Arts degree through careful planning.

Sophomore Level (6 units)
Human Comm 241 Introduction to Phonetics (3)
Human Comm 242 Introduction to Communicative Disorders (3)

Junior Level (15 units)
Human Comm 300 Introduction to Research in Speech Communication (3)
Human Comm 307 Speech and Language Development (3)
Human Comm 344 Anatomy and Physiology of Speech and Hearing (3)
Human Comm 350 Speech and Hearing Science (3)
Human Comm 352 Child Language and Phonological Disorders (3)

Senior Level (18 units)
Human Comm 461 Audiology and Audiometry (3)
Human Comm 465 Aural Rehabilitation (3)
Human Comm 472 Voice and Craniofacial Disorders (3)
Human Comm 474 Neurology and Neurogenic Communicative Disorders (3)
Human Comm 475 Fluency Disorders (3)
Human Comm 476 Clinical Methods and Procedures (3)

Electives (3 units)
Human Comm 302 Introduction to Sign Language (3)
Human Comm 308 Quantitative Research Methods (3)
Human Comm 312 Intermediate Sign Language (3)
Human Comm 345 Communication and Aging (3)
Human Comm 404 Communicative Disorders of the Bilingual/Multicultural Child (3)

BACHELOR OF ARTS IN SPEECH COMMUNICATION

The Bachelor or Arts in Speech Communication is awarded with one of five emphases: Argumentation and Persuasion, Intercultural Communication, Interpersonal Communication, Organizational Communication or Communication Studies. The major requires 42 units consisting of: (1) 15 units of core requirements; (2) nine units of theoretical core; and (3) 12 units within the student’s particular emphasis. In addition to 42 units within the major, students complete 51 units of general education, leaving 27 units of free electives to complete the university’s requirements for the Bachelor of Arts Degree. Some students are encouraged to pursue specific minors, such as a Minor in Advertising, Business Administration, Computer Science, Journalism, Psychology or Public Administration, depending on their career or professional goals. Students can complete these minors as well as one of the department’s majors within the 120-unit minimum required for a Bachelor of Arts degree.

Core Requirements (18 units)
Human Comm 102 Public Speaking (3)
Human Comm 200 Human Communication (3)
Human Comm 235 Essentials of Argumentation (3)
OR Human Comm 236 Essentials of Debate (3)
Human Comm 300 Introduction to Research (3)
Human Comm 308 Quantitative Research Methods (3)
Human Comm 420 Communication Theory (3)

Breadth Experiences (12 units)
Human Comm 313 Interpersonal Communication Theory (3)
OR Human Comm 318 Family Communication (3)
OR Human Comm 413 Communication in Interpersonal Relationships (3)
OR Human Comm 437 Internship – Speech Communication (3)*
Human Comm 324 Communicating in Groups and Teams (3)
OR Human Comm 326 Organizational Communication Dynamics (3)
OR Human Comm 433 Training and Development (3)
OR Human Comm 437 Internship – Speech Communication (3)*
Human Comm 330 Rhetoric of Popular Culture (3)
OR Human Comm 332 Processes of Social Influence (3)
OR Human Comm 335 Advanced Argumentation (3)
OR Human Comm 437 Internship – Speech Communication (3)*
Human Comm 320 Intercultural Communication (3)
OR Human Comm 422 Applications of Intercultural Communication (3)
OR Human Comm 456 Intercultural Conflict: Theory and Practice (3)
OR Human Comm 437 Internship – Speech Communication (3)*

*HCOM 437 must be taken with permission of internship instructor and must be in the specific Breadth Experience category to which it is applied. May be taken only once for credit.

Emphasis in Argumentation and Persuasion (12 units)
An emphasis in Argumentation and Persuasion constitutes one of the strongest liberal arts educations available. Students learn how to think in a clear and logical manner, analyze information critically, formulate persuasive arguments and deliver those arguments effectively, in oral and in written forms. These skills are of great value in almost any career. Students who complete their degree with an emphasis in Argumentation and Persuasion are prepared for a variety of specific careers as well, including a career as a speech/debate coach. They are also prepared for careers in government and politics, such as that of a campaign aide or director, elected official, information officer, legislative assistant, legislative research specialist, lobbyist, negotiator, press secretary or speechwriter. Others have used the emphasis as preparation for a career in the ministry. The emphasis offers particularly strong preparation for law school.

Human Comm 138/338 Intercollegiate Forensics (3)
Human Comm 236 Essentials of Debate (3)
Human Comm 330 Rhetoric of Popular Culture (3)

Emphasis in Intercultural Communication (12 units)
An emphasis in Intercultural Communication provides students with specialized knowledge and skills in identifying, analyzing and meeting the challenges of effective communication in a multicultural society, in the context of organizations and among individuals. These challenges are transformed into career opportunities for those who have mastered the knowledge and skills of effective intercultural communication and are able to translate their knowledge to diverse intercultural applications. Students who complete the Intercultural Communication emphasis successfully are prepared for careers such as that of customer service and sales representative, diplomat, foreign correspondent, foreign relations or foreign service officer, host for foreign dignitaries, intercultural and diversity trainer, international corporate representative, international and study-abroad student advisor, and travel industry representative. The emphasis also provides an excellent background for those interested in careers in primary and secondary education, a variety of human and social service careers, and other careers for which a liberal arts education is required.

Human Comm 220 Interpersonal Conflict Management (3)
Human Comm 320 Intercultural Communication (3)
Human Comm 331 Sex and Gender in Human Communication (3)
Human Comm 360 Nonverbal Communication (3)
Human Comm 422 Applications of Intercultural Communication (3)
Human Comm 435 Communication in Community Building and Civic Engagement (3)
Human Comm 456 Intercultural Conflict: Theory and Practice (3)
Human Comm 479 Mediation: Principles and Practice (3)

Emphasis in Interpersonal Communication (12 units)
An emphasis in Interpersonal Communication provides students with the education needed for entrance into a variety of careers in social and human services. Success in these fields requires competencies in identifying, analyzing and meeting the challenges of effective communication among individuals. Acquiring these competencies is the goal of the emphasis in Interpersonal Communication. The emphasis provides a basis for the pursuit of teaching credentials and provides an exceptional background to prepare for graduate studies in fields, such as social work, counseling and clinical psychology. An emphasis in Interpersonal Communication, combined with selected courses within the psychology minor, meets entrance requirements for most graduate programs in these fields. The selection of an emphasis in Interpersonal Communication
suggests a special aptitude for and interest in human service careers, and the emphasis provides students with a unique and exceptionally strong background of theoretical as well as applied studies for graduate studies in the mental health professions.

Human Comm 220 Interpersonal Conflict Management (3)
Human Comm 313 Interpersonal Communication Theory (3)
Human Comm 318 Family Communication (3)
Human Comm 324 Communicating in Teams and Groups (3)
Human Comm 331 Sex and Gender in Human Communication (3)
Human Comm 360 Nonverbal Communication (3)
Human Comm 413 Communication in Interpersonal Relationships (3)
Human Comm 440 The Dark Side of Interpersonal Communication (3)

Emphasis in Organizational Communication (12 units)

An emphasis in Organizational Communication prepares students for careers in business, nonprofit organizations and government. These organizations depend on effective communication among individuals and units within the organization, as well as with customers or other constituencies on the outside in order to achieve their goals. One of the primary causes of organizational malfunction is a failure to meet communication challenges, and these challenges are especially great in our multicultural society and in a world made small by travel and communication technology. Experts in organizational communication have the competencies needed to identify the barriers to effective communication within organizations and between organizations and their customers or other constituencies, and to remove those barriers through organizational structural changes, policy changes, use of communication technologies and media, and training/development of employees. Students who complete their degree with this emphasis are prepared for careers such as communication trainer, community relations director or representative, conflict manager, customer service representative, director of corporate communications, executive manager, human resource manager, industrial and labor relations representative, mediator, negotiator, public information officer or sales representative. The organizational communication emphasis, combined with a business administration minor, provides an exceptional background for those with an interest in careers that focus on communication in the business environment.

Human Comm 220 Interpersonal Conflict Management (3)
Human Comm 324 Communicating in Teams and Groups (3)
Human Comm 325 Interviewing: Principles and Practices (3)
Human Comm 326 Organizational Communication Dynamics (3)
Human Comm 333 Communication in Business and the Professions (3)
Human Comm 433 Training and Development (3)
Human Comm 437 Internship: Speech Communication (3)
Human Comm 445Leadership: Toxic and Intoxicating (3)
Human Comm 479 Mediation: Principles and Practice (3)

Emphasis in Communication Studies (12 units)

An emphasis in Communication Studies provides students with the opportunity to focus on two of the emphases. Many students, for example, combine courses from the Interpersonal Communication emphasis with either the Organizational Communication or the Interpersonal Communication emphasis. The selection of courses must be adviser-approved and from at least two of the emphases.

MINOR IN SPEECH COMMUNICATION

An understanding of the challenges of effective communication and how communication can be facilitated is of great value in almost any career. Some careers, such as those in human services, require an understanding of communication between individuals. Other careers, such as those in business, nonprofit organizations or government, require an understanding of communication within and between organizations and between organizations and their customers or other constituencies. For example, business majors may benefit from knowledge and skills in organizational and multicultural communication, particularly in our multicultural society. The Minor in Speech Communication is structured to meet the individual student’s aptitudes, interests and career goals. The minor is earned by the successful completion of 18 adviser-approved units.

MASTER OF ARTS IN COMMUNICATIVE DISORDERS AND IN SPEECH COMMUNICATION

The Master of Arts in Communicative Disorders (speech-language pathology and audiology), accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association since 1969, is designed to: (1) provide students with graduate, professional level studies covering the broad field of communicative disorders; (2) provide students with opportunities to observe, learn and serve communicatively impaired clients within a wide range of clinical facilities, both on- and off-campus; and (3) train students to assess, diagnose and formulate therapy plans and to function as therapists for selected types and populations of the communicatively impaired.

The Master of Arts in Speech Communication is designed to give students broad exposure to theory and research and, at the same time, allow them to specialize in one area (i.e., argumentation and persuasion, interpersonal communication, intercultural communication, organization communication, or rhetorical studies). The objectives of the degree include improving the student’s academic and professional competence, preparing the student for advanced graduate work toward the doctoral degree, developing the student’s research capabilities, increasing student’s knowledge in the area of specialization, and for the student planning a teaching career, providing the opportunity to develop teaching skills. The student is expected to demonstrate a high degree of intellectual competence and scholarly discipline, to evaluate critically and to demonstrate mastery of the field of specialization.
Admission to Graduate Standing: Conditionally Classified

Applicants must meet the university requirements for admission to conditionally classified graduate standing: a baccalaureate from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted is preferred. Applicants for the Communicative Disorders Program must have a baccalaureate in communicative disorders or the equivalent. The equivalent consists of a prescribed list of courses which total 36 semester units and which form an appropriate background for graduate studies. Applicants for Speech Communication are required to have a baccalaureate in speech communication or an allied field or complete nine units of approved background studies in speech communication.

In addition, the following factors will be taken into consideration by the Graduate Committee in determining who shall be admitted to the program:
1. Grade-point average
2. Letters of recommendation (preferably on department forms)
3. Professional objectives as presented in a student letter of intent

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and Nov. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified graduate standing upon the development of an approved study plan:
1. Enrollment in Human Comm 501, Seminar in Speech-Language Pathology, is a pre-classification requirement for the M.A. Degree in Communicative Disorders
2. Enrollment in Human Comm 500, Research in Speech Communication is required within the first nine units of graduate work included on the study plan
3. Completion of the study plan with 30 units of studies approved by an adviser and the Department Graduate Committee

GRADUATE STUDY PLAN (GSP)

Requirements for the M.A. Degree in Communicative Disorders consist of a minimum of 30 units of study approved by the Department Graduate Committee. These are:

- Five 500-level academic courses in communicative disorders totaling 15 units, which may include either Human Comm 597, Directed Graduate Research, or Human Comm 599, Independent Study.
- Comprehensive exams are taken in ten areas throughout the course of graduate study when prerequisite coursework has been completed.

Requirements for the M.A. Degree in Speech Communication consist of a minimum of 30 units of 400- and 500-level courses approved by the Department Graduate Committee. These are:

- Courses totaling 15 units, Human Comm 500, Research in Speech Communication, taken in the first nine units of GSP coursework; Human Comm 536, Seminar in Communication and Rhetorical Theory; and three additional 500-level seminars.
- Completion of 30 units of coursework and passing a comprehensive examination, or completion of 27 units of coursework and writing a project (Human Comm 597, Directed Graduate Research) for three units, or completion of 24 units of coursework and writing a thesis (Human Comm 598) for six units.

For further information, consult the Department of Human Communication Studies.

SPEECH-LANGUAGE PATHOLOGY SERVICES CREDENTIAL IN LANGUAGE, SPEECH AND HEARING

Speech pathologists who wish to practice in the public school setting are required to obtain an M.A. Degree in Communicative Disorders and the Speech-Language Pathology Services Credential in Language, Speech and Hearing (SLPSC), which they may declare as an objective when they apply for admission to the graduate program. The credential may also be declared as an objective at a later time as long as the student has maintained continuous enrollment in the graduate program. After the student leaves the graduate program, re-admission is required in order to fulfill requirements for the credential. It is, therefore, strongly recommended that students complete the credential while working on the M.A. Degree unless they are absolutely certain that they will not later wish to work in the public schools.

To obtain the SLPSC, students must earn the M.A. Degree in Communicative Disorders. In addition, they must meet requirements that are somewhat more specific than those for the M.A. Degree alone. These requirements are listed below.

The required courses and clinical practice for the SLPSC must be completed with a grade-point average of 2.50 and at least a “C” (2.0) must be earned for each course and practicum. In the case of credit/no credit grades for certain clinical practicum courses, the student must earn a credit. Students are required to complete clinical clock hours according to the requirements of the American Speech-Language-Hearing Association. Some of the clinical clock hours must be in audiology and aural rehabilitation. In addition, 100 of the 350 supervised clock hours must be completed at a school site or its equivalent. The hours must be supervised in all cases by persons holding

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the ASHA Certificate of Clinical Competence in Speech-Language Pathology and the appropriate state license. The supervisor of the public school practicum must also hold the Clinical Rehabilitative Services Credential on the SLPSC. If equivalences have been granted for a clinical practicum that was completed at another university, appropriate documentation of clinical clock hours completed at the other institution must be provided to the Communicative Disorders Program so that it can be placed in the student’s clinical practicum file.

Finally, the student must demonstrate proficiency in reading and writing through passing the University Examination in Writing Proficiency (EWPI) and through obtaining a “C” (2.0) or better in Human Comm 300 Introduction to Research in Speech Communication.

Alternatively, the student may demonstrate reading and writing proficiency by obtaining a “C” (2.0) or better in Human Comm 500 Research in Speech Communication. Students must also pass the CBEST Exam prior to entering the credential program. The Credential Coordinator should be contacted by the students early in their program to review requirements and give further information on the requirements for the credential.

**Academic and Clinical Practicum Requirements**

**Undergraduate courses from related areas:**
- Psychology 361 Developmental Psychology (3)
- Special Ed 371 Exceptional Individual (3)

**M.A. Degree and Graduate-Level Courses in Communicative Disorders**

Academic courses in the major. The following courses are required for the SLPSC, but some of them may also be used for the partial fulfillment of requirements for the M.A. Degree. Additional graduate study plan coursework is also required for the M.A. degree.

- Human Comm 404 Communicative Disorders of the Bilingual/Multicultural Child (3)
- Human Comm 490 Seminar: Speech and Hearing Services in the Schools (2)
- Human Comm 571 Seminar in Fluency Disorders (3)
- Human Comm 573 Seminar in Voice Disorders (3)
- Human Comm 574 Seminar in Phonological Disorders (3)
- Human Comm 576 Seminar in Augmentative and Alternative Communication (3)

**Clinical Practicum Requirements**

- Human Comm 458 Clinical Practicum: Speech and Language Disorders in Children (3)
- Human Comm 468 Audiology Practicum (1)
- Human Comm 485 Aural Rehabilitation Practicum (1)
- Human Comm 489A Public School Practicum in Communicative Disorders (4)
- Human Comm 558A Clinical Practicum: Speech and Language Disorders in Adults (3)
- Human Comm 558C Clinical Practicum: Communicative Disorders and Differences in Individuals from Diverse Backgrounds (3)
- Human Comm 558D Clinical Practicum: Augmentative Communication and Instrumental Management of Communicative Disorders (2)
- Human Comm 559A Advanced Clinical Practicum: Communicative Disorders (3)

**CERTIFICATION, LICENSURE AND CREDENTIALS IN COMMUNICATIVE DISORDERS**

**Certification**

The Communicative Disorders program is fully accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA). Graduate study in this program leads to certification in speech-language pathology with ASHA (CCC-SLP).

The CCC-SLP is awarded by the American Speech-Language-Hearing Association to persons who (a) complete the M.A. Degree in speech-language pathology, (b) complete the required clinical practicum by taking prescribed combinations of clinical practicum courses, (c) achieve all required knowledge-based and skill-based competencies, (d) pass the National Examination in Speech-Language Pathology, (e) successfully complete a Clinical Fellowship Year and (f) submit the appropriate application materials to the American Speech-Language-Hearing Association. All students should be familiar with the requirements for the CCC-SLP. All students should obtain a copy of the latest ASHA Membership and Certification Handbook during the last year of their graduate studies, and they should read all materials carefully. Their advisers are not responsible for informing students of ASHA requirements that are to be met after graduation. Copies of the Handbook are available from the Graduate Assistant in the CSUF Speech and Hearing Clinic or directly from ASHA at the following address and telephone number:

American Speech-Language-Hearing Association
Membership and Certification Section
2200 Research Blvd.
Rockville, Maryland 20850
Telephone 800-498-2071

**Licensure**

The speech-language pathology license is required to work as a speech-language pathologist in all settings in California except for the public school and in certain exempt federal employment settings. The license is awarded by the Speech-Language Pathology and Audiology Board (SLPAB) of the Medical Board of California to those who (a) complete the M.A. Degree in speech-language pathology, (b) complete the required clinical practicum by taking prescribed practicum courses, (c) pass the National Examination in Speech-Language Pathology, (d) successfully complete a Required Professional Experience (RPE) and (e) submit the appropriate application materials to SLPAB.
Although students will have met or exceeded the academic and clinical practicum requirements for licensure in California by the time they complete their M.A. degree and the last of the clinical practicum courses that are required for the Certificate of Clinical Competence in Speech-Language Pathology (ASHA), they should still become familiar with the specific requirements for licensure during their last year of graduate studies. A copy of the “Student Manual for Licensure in Speech Pathology and Audiology” may be obtained from the Graduate Assistant in the CSUF Speech and Hearing Clinics or directly from SLPAB at the following address and telephone number:

Speech-Language-Pathology and Audiology Board
2005 Evergreen Street, Suite 2100
Sacramento, CA 95815
Telephone 916-263-2666

INTERNATIONAL LEARNING OPPORTUNITIES IN SPEECH COMMUNICATION

The Department of Human Communication Studies integrates issues of ethnicity and culture in all of its courses. This ensures that students understand their own culture in relationship to other cultures and therefore develop a global perspective. Six faculty members are nationally and/or internationally recognized for their expertise in intercultural communication, multiculturalism and bilingual issues.

Courses in intercultural communication are included in the communication theory and process curriculum. These courses emphasize the nature and effects of such communication on multicultural, multinational and domestic relationships. Clinical experiences that are part of the communicative disorders curriculum also provide expertise on multicultural and bilingual issues.

Speech Communication students provide international learning opportunities for other students on campus as well by providing training for CSUF students who will be studying in international universities.

SPEECH COMMUNICATION COURSES

Courses are designated as HCOM in the class schedule.

100 Introduction to Human Communication (3)

Theory and practice of interpersonal communication. Practice in the development of skills for improving the quality of communication is required.

102 Public Speaking (3)

Theory and presentation of public speeches, including an analysis of determinants of comprehension and attitude formation; selection and organization of speech materials, development of delivery skills and evaluation of message effectiveness. Student presentations required. Participation in research projects.

138 Forensics (3)

Prerequisite: consent of instructor. Investigation and practice in the background, format procedures and evaluation criteria of the various forensic events. Students must participate in at least two intercollegiate speech tournaments. May be repeated for credit. (More than 6 hours of class work for each unit of credit)

200 Human Communication (3)

Theories and competencies in interpersonal, small group, public, organizational and intercultural communication. Variations in communication processes across contexts are investigated.

220 Interpersonal Conflict Management (3)

Nature, causes and structure of interpersonal conflict; communication strategies exhibited in conflict and intervention principles for conflict management. Conflict management theory is applied to conflicts within marriages, small groups, organizations and intercultural relationships.

235 Essentials of Argumentation (3)

Methods of critical inquiry and advocacy. Identify fallacies in reasoning, testing evidence and evidence sources; advance a reasoned position; and defend and refute arguments. Analysis and evaluation of oral and written arguments.

236 Essentials of Debate (3)

Theory and practice in activity of debate, emphasizing skill in analysis and reasoning, researching and organizing evidence, evaluating stock issues relating to policy and value propositions and engaging in regulation.

241 Introduction to Phonetics (3)

Analysis and description of speech at the segmental and suprasegmental levels. Practice using the International Phonetic Alphabet for broad and narrow transcription. Overview of speech production.

242 Introduction to Communicative Disorders (3)

Broad overview of disorders of communication, including classification and prevalence. Educational and training requirements for speech-language pathology and audiology, professional settings and opportunities, ethical considerations, clinical observations.

300 Introduction to Research in Speech Communication (3)

Prerequisites: Human Comm 100 or 200, open only to speech communication majors. Understanding and using professional literature in speech communication and using it to generate a formal research paper. A passing grade fulfills the course requirement of the university upper division baccalaureate writing requirement for speech communication majors and communicative disorders majors.

301 Liberal Studies in Communication Processes (3)

Interdisciplinary study and its relationships to communication theory. How communication occurs in various disciplines. Theories about the nature of language and how this influences the pursuit of learning. No credit for speech communication majors.
302 Introduction to Sign Language (3)
Prerequisites: Human Comm 100 or 102; English 101.
Overview of the deaf experience and the options for communication in the deaf community. Use of American Sign Language and finger spelling at the introductory level.

303 Biology of Human Communication (3)
Prerequisite: Biology 101 or Psychology 101. Biology and evolution of speech and language. Speech production, evolution and development; speech perception; language, hemispheric specialization, clinical studies; current methods in neurolinguistics; and plasticity and aging.

307 Speech and Language Development (3)
Prerequisite: completion of General Education Category I.A. or Linguistics 106 or equivalent. Normal acquisition of phonology, morphology, semantics, syntax and pragmatics in children. Biological, cognitive and social bases of language acquisition. Meets the requirements for specialized preparation to serve as a teacher of exceptional children. (Same as Linguistics 307).

308 Quantitative Research Methods (3)
Prerequisite: Human Comm 100 or 200. Current perspectives in empirical research methodology in the discipline of Speech Communication. Experimental designs, common statistical tests and the use of the computer as a research tool.

312 Intermediate Sign Language (3)
Prerequisite: Human Comm 302. Theory, practice and grammatical features of American Sign Language at the intermediate level. Students gain an understanding of the deaf cultural perspective.

313 Interpersonal Communication Theory (3)
Prerequisites: Human Comm 100, 200. Behavioral and humanistic approaches to theories of interpersonal communication. Functions of communication that influence interpersonal relationships, including communicator characteristics, information exchange, situational demands and interpersonal evaluations.

318 Family Communication (3)
Prerequisite: Human Comm 200. Research and theory in family communication. Role of communication in courtship, family satisfaction, family conflict and family dysfunction, with emphasis on marital, parent-child sibling and intergenerational family relationships.

320 Intercultural Communication (3)
Prerequisite: Human Comm 100. Communication problems that result when members of different cultures communicate. How interpersonal communication can overcome differences in cultures’ perceptions of communication’s functionality, value orientations, nonverbal behavior, language, epistemologies and rhetorics.

322 Study Abroad Seminar (1)
Corequisite: enrollment in the CSU International Programs or California State University, Fullerton Exchange Programs. Orientation to living in another culture for students studying abroad. Intercultural adaptation process (e.g., culture shock) and understanding host nationals’ behavior.

324 Communicating in Teams and Groups (3)
Prerequisites: Human Comm 100, 200. Application of communication theories and behavioral research findings as they relate to small groups and teams. Communication facilitation among individuals in task realization, including interpersonal needs, leadership, norms, roles, verbal and nonverbal messages and group systems and procedures.

325 Interviewing: Principles and Practices (3)
Prerequisite: Human Comm 100. Principles and practices of interviewing processes. Consideration of appraisal, counseling, employment, exit, journalistic, persuasive and survey types of interviews. Case analyses, simulations and community fieldwork required.

326 Organizational Communication Dynamics (3)
Prerequisites: Human Comm 100, 200. Interrelationships between management and communication theories. Microsystems and macro-systems within an organization are emphasized in terms of intra-personal, interpersonal, small group and organizational communication theories.

330 Rhetoric of Popular Culture (3)
Corequisite: Human Comm 200. Rhetorical theories as they apply to contemporary communication events. Various perspectives of rhetorical theory are utilized to further understanding of communication in today’s society.

331 Sex and Gender in Human Communication (3)
Prerequisite: Human Comm 100 or 200. Rhetorical dimensions of sex and gender American communication contexts. Explanation and evaluation of the creation and maintenance of masculinity and femininity in American culture from a rhetorical perspective.

332 Processes of Social Influence (3)
Prerequisite: Human Comm 100 or 200. Major theories of communication concerned with influence and persuasion in society. Communication effectiveness through strategic application of theory to effecting change and evaluating appeals for change by others.

333 Communication in Business and the Professions (3)
Prerequisite: Human Comm 100 or 200. Human behavior, structural demands and communication within organizations. Application of theory and behavioral research as a framework for generating managerial communication competencies such as inter-viewing, briefings, conference leadership and intergroup coordination.
334 Persuasive Speaking (3)
Prerequisite: Human Comm 102 or equivalent. Strategies and tactics appropriate to leading social policy persuasive campaigns. Analysis of receiver variables, progressive use of persuasive materials, question and answer techniques and the development of personal influence. Student presentations required.

335 Advanced Argumentation (3)
Prerequisite: Human Comm 236 or equivalent. Argument as applied to advocacy; logic and evidence as related to analysis of significant issues.

337 Communication in the Legal Arena (3)
Prerequisite: an upper-division writing requirement course. Influence of communication behaviors on civil and criminal judicial processes. Review and evaluation of research into communication variables and legal practices, from interviewing to closing arguments. Courtroom observation required.

338 Intercollegiate Forensics (3)
Prerequisite: consent of instructor. Directed activity in debate and other forensic events. Participation in intercollegiate speech competition is required for credit. May be repeated for credit. (More than 6 hours of class work for each unit of credit.)

340 Asian American Communication (3)
(Same as Asian American 340)

342 America Speaks (3)
Prerequisites: Human Comm 100, 102 or Poli Sci 100; History 110A or 110B. America's story told through the speeches that moved her. In addition to critical evaluation of significant messages, emphasis is placed on what it would have been like to be part of the American audience exposed to famous speeches and speakers.

344 The Anatomy and Physiology of Speech and Hearing (3)
Anatomy and physiology of the speech and hearing mechanism. Processes of respiration, phonation, articulation-resonance and hearing are included.

345 Communication and Aging (3)
Prerequisite: Human Comm 100. Communicative changes found in older adults including normal and pathologic changes in the physiological and behavioral aspects. Topics include diagnosis, rehabilitative strategies, social implications and health care systems.

350 Speech and Hearing Science (3)
Prerequisites: Human Comm 241 and 344. Physiology and acoustics of speech production, including voice, resonance and individual speech segments. Instrumentation for the acoustic and perceptual analysis of speech.

352 Child Language and Phonological Disorders (3)

360 Nonverbal Communication (3)
(Same as Linguistics 360)

404 Communicative Disorders of the Bilingual/Multicultural Child (3)
Prerequisites: Human Comm 241, 242, 307, and 352. Comparative analysis of different versus delayed or deviant speech/language development of children from various cultural, ethnic and linguistic backgrounds. Principles of clinical management of children from culturally diverse populations.

407 Speech-Language Development and Disorders for Educators (3)
Prerequisite: Special Ed 371 or 400. Monolingual and bilingual speech-language development and disorders, including characteristics of children with potential speech-language problems and techniques for assisting them in classroom settings.

413 Communication in Interpersonal Relationships (3)
Prerequisite: Human Comm 313. Communication in the interpersonal relationship development setting with particular emphasis on current theoretical and methodological issues.

420 Communication Theory (3)
Prerequisites: Human Comm 200, 300, 308, or graduate standing. Various theories and perspectives on human communication. Understanding basic forms of theories and developing theoretical perspectives on human communication.

422 Applications of Intercultural Communication (3)
Prerequisite: Human Comm 320. Nature and effects of intercultural communication within multicultural/multinational organizations. Intercultural leadership, negotiation, decision-making and communication competence. Analyze and practice a number of intercultural training approaches.

426 Directing Forensics (3)
Prerequisites: Human Comm 138, 338. Philosophies of forensics education, including coaching, judging and tournament administration. Strategies of implementation of these philosophies. May be repeated for credit.

430 Classical Rhetoric (3)
Prerequisites: six units of upper-division coursework in Human Communication Studies including Human Comm 300. Significance of rhetoric and oratory in Greek and Roman intellectual life from the fourth century B.C. to 300 A.D. Contributors include Protagoras, Isocrates, Plato, Aristotle, Cicero, Quintilian and Augustine.
432 Contemporary Rhetoric (3)
Prerequisites: six units of upper-division major courses. Theories of how cultures and individuals manage meaning in public communication, including speeches, campaigns, print and electronic media. Applies classical, modern and contemporary critical frameworks of analysis.

433 Training and Development (3)
Prerequisites: Human Comm 324 or Human Comm 326, and Human Comm 308. Communication in a training and development environment with particular emphasis on learning principles, instructional design, implementation and evaluation of training and needs assessment.

435 Communication in Community Building and Civic Engagement (3)
Prerequisites: Human Comm 100 and junior standing. Human dialogue and “talk” in the development of a democratic society. Barriers to community dialogue/building and civic engagement will be examined. Relevant communication procedures, methods and theories will be examined and applied.

437 Internship: Speech Communication (3)
Prerequisites: any two of the following courses: Human Comm 301, 324, 326, 333, 420 or consent of instructor. On-site involvement with communication frameworks as they function in ongoing organizational settings. Working in an organization and seminar activities. Application for internship must be submitted prior to enrollment.

438 Principles of Rhetorical Criticism (3)
Prerequisites: six units of upper-division communication theory and process courses to include Human Comm 300. Explanation and evaluation of rhetorical experience. Historical modes of criticism, issues in rhetorical criticism, criticism in various contexts and experiences in criticism.

440 The Dark Side of Interpersonal Communication (3)
Prerequisite: Human Comm 200 or 313; or graduate standing. Social scientific literature regarding the “dark side” of communication, which includes aspects of communication that are poorly understood, understudied and/or classified as destructive, dysfunctional, evil, immoral, malicious, criminal or abusive.

445 Leadership: Toxic and Intoxicating (3)
Prerequisite: completion of upper-division writing requirement in a major. Leadership from a communication theory perspective. Leadership dynamics to help gain insight into leadership and the influences.

456 Intercultural Conflict: Theory and Practice (3)
Prerequisite: Human Comm 320. Relationship between intercultural conflict theory and practice. Key cultural patterns that impact conflict. Theoretical and applied perspectives on intercultural conflict across contexts will be emphasized.

458 Clinical Practicum: Speech and Language Disorders in Children (3)
Prerequisites: Human Comm 352 and 476; concurrent enrollment in 574 or 577; admission to the graduate program in communicative disorders; approved Clinical Practicum Plan. Supervised experience in the assessment and treatment of children with speech and language disorders. Weekly individual and group conferences. Approximately 25-40 clinical clock hours. May be repeated for credit.

461 Audiology and Audiometry (3)
Prerequisites: Human Comm 242 and 344. Characteristics of hearing disorders, including etiologies and risk factors. Methods and procedures used in assessing the auditory system including current topics of interest. Partially fulfills the requirements for state audiometrist certificate.

465 Aural Rehabilitation (3)
Prerequisite: Human Comm 461. Effects of hearing loss on speech and language. Treatment of hearing disorders, including amplification and aural rehabilitation. Role of the audiologist and speech-language pathologist in the management of hearing disorders.

468 Audiology Practicum (1)
Prerequisites: Human Comm 461 and approved Clinical Practicum Plan. Audio-metric evaluations, including pure tone testing, hearing aid evaluations, impedance audiometry and report writing. Provides 10-15 clinical clock hours in audiology.

472 Voice and Craniofacial Disorders (3)

474 Neurology and Neurogenic Communicative Disorders (3)
Prerequisites: Human Comm 241, 242, 307 and 344. Anatomy and physiology of the nervous system as they relate to speech, language, hearing and swallowing. Clinical characteristics of neurogenic language disorders, apraxia of speech and dysarthria. Contemporary approaches to assessment and treatment. Lecture, demonstration and clinical observations.

475 Fluency Disorders (3)

476 Clinical Methods and Procedures (3)
Prerequisites: Human Comm 241, 242, 307, 344, 352; and 472, 474 or 475. General principles and procedures for assessment and treatment of individuals with communicative disorders. Lecture, demonstration, clinical observations and supervised clinical experience.
479 Mediation: Principles and Practice (3)
Prerequisite: Human Comm 200. Principles and practices of mediation as dispute intervention. In addition to lectures and class exercises, students become participants in mediated dispute role-play scenarios. Knowledge gained should serve students throughout their personal and professional lives.

485 Aural Rehabilitation Practicum (1)
Prerequisites: Human Comm 461, 465, and 458 or 558A; and approved Clinical Practicum Plan. Supervised rehabilitation of hearing-impaired children and adults in on- and off-campus facilities. Provides 10-15 clinical clock hours in aural rehabilitation. Sign language background recommended. Credit/no credit only.

489A Public School Practicum in Communicative Disorders (4)
Prerequisites: Human Comm 458, 543, 558A, 571, 573, 574 and 577; concurrent enrollment in Human Comm 490; admission to the graduate program in communicative disorders; approved Clinical Practicum Plan; and passing score on CBEST; application approved prior to semester of practicum. Meets the directed teaching requirements for the Speech-Language Pathology Services Credential. Approximately 100-150 clinical clock hours.

489B Advanced Public School Practicum (3)
Prerequisites: Human Comm 489A; admission to the graduate program in communicative disorders; approved Clinical Practicum Plan; application approved prior to semester of practicum. Advanced clinical practice in the public school setting. Meets the directed teaching requirements for the Clinical Rehabilitative Service Credential. Approximately 100 hours of supervised clinical practicum with children.

490 Seminar: Speech and Hearing Service in Schools (2)
Prerequisites: concurrent enrollment in Human Comm 490A and admission to the graduate program in communicative disorders. Problems and challenges unique to the student clinician in the organization and management of the speech and hearing program in the school. Clinician’s role; planning, scheduling, case finding, treatment program reporting and other responsibilities.

492T Proseminar in Speech Communication (3)
Prerequisites: appropriate theoretical coursework and consent of instructor. Current research topics in the concentration areas of persuasion and argumentation, interpersonal communication, intercultural communication and organizational communication will be presented. May be repeated for credit for a different topic.

496 Student-to-Student Tutorials (1-3)
Consult “Student-to-Student Tutorials” in this Catalog for a more complete course description.

499 Independent Study (1-3)
Open to upper-division students in speech communication only with signed consent form from department chair.

500 Research in Speech Communication (3)
Prerequisites: Human Comm 300, 308 or equivalent; admission to M.A. program. Research design and methods used in historical, descriptive and experimental research in speech communication.

501 Seminar in Speech-Language Pathology (1)
Prerequisite: admission to the M.A. program in communicative disorders. Introduction to requirements for M.A. degree in communicative disorders, including requirements for demonstrating knowledge-based and skill-based competencies. Students start a portfolio for documentation of competencies and demonstrate a number of competencies within this course. Credit/no credit only. May be repeated three times for credit.

509 Qualitative Research Methods (3)
Prerequisite: Human Comm 300. Perspectives in qualitative research methodology in Speech Communication (ethnography, naturalistic inquiry, case study, phenomenological research, textual/content analysis, archival analysis). Interpretive design; application of standards; data analysis; reporting conclusions.

510 Seminar in Interpersonal and Relational Communication (3)
Prerequisites: Human Comm 324, 313 and 420. Theoretical and empirical examination of interpersonal and relational communication. Generation of theoretical frameworks and/or heuristic models of concepts and process under investigation.

520 Seminar in Group Communication (3)
Prerequisite: Human Comm 324. Small group communication theory. Small group variables, methods and outcomes and group process as a learning tool.

522 Seminar in Intercultural Communication (3)
Prerequisite: Human Comm 320. Theory and methodology in intercultural communication research. Specific variables examined include attribution, values, communication competence and acculturation/adaptation. Practice in completing original research in intercultural communication.

525 Seminar in Organizational Communication (3)
Prerequisites: Human Comm 324, 326 and 420. Theoretical postulates concerning managerial and organizational communication. Research findings and case studies relating to communication determinants and organizational effectiveness. Communicative relationships among individuals, the work unit and the organization.

535 Seminar in Argumentation and Persuasion (3)
Prerequisites: Human Comm 332, 334 or 335. Leading theories and empirical research on argumentation and persuasion. Strategies of effective advocacy and compliance-gaining. Laboratory research and applied settings. Ethical issues related to argumentation and persuasion.
536 Seminar in Communication and Rhetorical Theory (3)
Prerequisite: admission to the graduate program in speech communication. Analysis of rhetorical and communication theories. Comparisons and contrasts of the epistemological bases of empirical and humanistic inquiry.

542 Neurologic and Clinical Aspects of Speech, Language and Cognition (3)
Prerequisite: admission to the graduate program in communicative disorders. Neuroanatomy as it relates to speech, language and cognition; neuropsychological bases of consciousness, attention, sensation, perception, higher mental functions, language and motor speech; emphasis on assessment, diagnosis, prognosis and management of neurogenic communicative disorders.

543 Seminar in Dysphagia (3)
Prerequisites: Human Comm 542; admission to the graduate program in communicative disorders. Physiology of normal swallow, etiologies of dysphagia, clinical and instrumental assessment, diagnosis and management.

544 Seminar in Neurogenic Speech, Language and Cognitive Disorders (3)
Prerequisites: Human Comm 542; admission to the graduate program in communicative disorders. Theory and clinical aspects of neurogenic speech, language and cognitive disorders. Standardized and informal assessment, differential diagnosis, prognosis and management, including evaluation of the validity of clinical practice guidelines through the analysis of published research.

554 Seminar in Multicultural Issues in Communicative Disorders (3)
Prerequisites: Human Comm 404 and admission to the graduate program in communicative disorders. Critical review of current theory and research on the clinical management of clients from culturally/linguistically diverse populations. Opportunities for practical applications of research through case study review and laboratory activities.

558A Clinical Practicum: Speech and Language Disorders in Adults (3)
Prerequisites: Human Comm 472, 474, 475, 476, 542 and admission to the graduate program in communicative disorders and approved Clinical Practicum Plan. Supervised experience in assessment and treatment of adults with speech and language disorders. Weekly individual and group conferences. Approximately 25-40 clinical clock hours. May be repeated for credit.

558B Clinical Practicum: Diagnosis in Communicative Disorders (2)
Prerequisites: Human Comm 476, admission to the graduate program in communicative disorders and approved Clinical Practicum Plan. Supervised experience in assessment and diagnosis of speech and language disorders. Develop an understanding of procedures and process of clinical supervision. Approximately 10-20 clinical clock hours. May be repeated for credit.

558C Clinical Practicum: Communicative Disorders and Differences in Individuals from Diverse Backgrounds (3)
Prerequisites: Human Comm 404; 458, 558A and admission to the graduate program in communicative disorders and approved Clinical Practicum Plan. Supervised experience in assessment and treatment of clients from culturally/linguistically diverse populations. Between 10 and 20 clinical clock hours, depending on units. May be repeated for credit.

558D Clinical Practicum: Augmentative Communication and Instrumental Management in Communicative Disorders (2)
Prerequisites: Human Comm 458 or 558A, 576, or concurrent enrollment, admission to the graduate program in communicative disorders and approved Clinical Practicum Plan. Practice using software programs and equipment for instrumental assessment and for augmentative and alternative communication. Approximately 5-20 clinical clock hours. May be repeated for credit.

559A Advanced Clinical Practicum: Communicative Disorders (3)
Prerequisites: Human Comm 458, 543, 558A, 571, 573, 574, 576, 577; admission to the graduate program in communicative disorders; and approved Clinical Practicum Plan. Advanced clinical practice under supervision with children and/or adults. Off-campus program in hospitals, clinics and other rehabilitation facilities. Approximately 150 clinical clock hours.

559B Advanced Clinical Practicum: Communicative Disorders (1-3)
Prerequisites: Human Comm 458, 543, 558A, 571, 573, 574, 576, 577; admission to the graduate program in communicative disorders; and approved Clinical Practicum Plan. Advanced clinical practice, under supervision with children and/or adults. Off-campus program in hospitals, clinics and other rehabilitation facilities. Approximately 50 clinical clock hours per unit. May be repeated for credit.

564 Autism Spectrum Disorders in Speech-Language Pathology (3)
Prerequisites: Human Comm 577 and admission to the graduate program in communicative disorders. Communication disorders in children with autism spectrum disorders (current theories, diagnostic process, co-occurring conditions, the role of speech-language pathologists in multi-disciplinary approaches to assessment and intervention planning, critical review of relevant research).

571 Seminar in Fluency Disorders (3)
Prerequisites: Human Comm 308, 475, or equivalent. Reading assignments, seminars, lectures and case reviews to enable students to develop a framework for understanding the etiology and maintenance of stuttering and to develop their own approaches to assessment and treatment.
573 Seminar in Voice Disorders (3)
Prerequisites: Human Comm 472 and admission to the graduate program in communicative disorders. Review classification of voice disorders (perceptually); examine instrumental assessment of such disorders (acoustically); and emphasize a comprehensive physiological, perceptual and acoustic work-up of individual cases.

574 Seminar in Phonological Disorders (3)
Prerequisites: Human Comm 352 and admission to the graduate program in communicative disorders. Developing critical thinking and analytical skills related to current issues in linguistic theories on the assessment and treatment of phonological disorders in children.

576 Seminar in Augmentative and Alternative Communication (3)
Prerequisite: admission to the graduate program in communicative disorders. Historical service delivery approaches; symbol sets and systems; assessment and management strategies for persons with severe physical and speech impairments; advocacy approaches for the disabled.

577 Seminar in Child Language Disorders (3)
Prerequisites: Human Comm 352 and admission to the graduate program in communicative disorders. Principles of language assessment and intervention based on psycho-linguistic theory and current research on language disordered children. Development of critical thinking and analytical skills related to the assessment and treatment of language disorders in children.

595 Pedagogy in Communication Studies (3)
Prerequisite: admission into master’s program in Speech Communication or instructor consent. Pedagogical research, theory and practice in communication studies. Practice in use and evaluation of instructional strategies. Topics covered are relevant to teach associations for Human Comm 100 and Human Comm 102.

597 Directed Graduate Research (3)
Prerequisite: Human Comm 500. Individual research study, under the supervision of the chair of the student’s advisory committee.

598A Thesis (2)
Prerequisite: Human Comm 500. The selection, investigation and written presentation of a selected problem in the field of speech.

598B Thesis (2)
Prerequisite: Human Comm 500. The selection, investigation and written presentation of a selected problem in the field of speech.

598C Thesis (2)
Prerequisite: Human Comm 500. The selection, investigation and written presentation of a selected problem in the field of speech.

599 Independent Graduate Research (1-3)
Open to graduate students only with signed consent form from department chair. May be repeated for credit.
INTRODUCTION

The Bachelor of Science in Human Services is a carefully articulated program providing the academic and experiential background for the student seeking a career working with people in the varied and expanding field of human services. An application-oriented major, it is based on a synthesis of knowledge from several social sciences, together with methodologies of intervention at the individual, group and community levels. Human services graduates are educated to respond in an informed way to identifiable human service needs in a variety of settings. The program’s orientation and its synthesis of knowledge from many background disciplines, as well as its focus on the development of specific methods and practical skills to apply this knowledge, give it a unique perspective.

The Human Services major is structured around four interrelated components: theoretical foundations/intervention strategies; client population/cultural diversity; research/evaluation; and skill development/field experience.

About half of the graduates of the Human Services program go on to graduate programs, typically in social work, counseling, psychology, public administration or education. A human services professional may provide direct services to clients, supervise personnel, administer programs and develop policies, and/or deliver support services to professional staff. Sample career options for Human Services graduates include adoption counselor, AIDS services case manager, child protective service worker, client advocate, community educator, elementary school teacher, geriatric caseworker, human services agency administrator, parent educator, policy analyst, probation officer, social service employee, youth counselor and behavior specialist.

BACHELOR OF SCIENCE IN HUMAN SERVICES

The Bachelor of Science in Human Services requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and some electives. The requirements for the major consist of 54 units. The required core curriculum consists of 36 units (in the above four areas), plus 18 units of adviser-approved courses related to one’s anticipated professional specialization.

Majors must achieve a grade of “C” (2.0) or better in all courses included in the core curriculum and in the advisement track. It is the student’s responsibility to consult an adviser on the human services faculty at least once during each of her/his first two semesters on campus to develop a study plan identifying courses for the advisement track.

Community College Transfer Students

Community college transfer students may apply a maximum of 12 units of coursework in human services and related fields towards the total of 54 units. Transfer of any units must be approved by the student’s adviser and the department adviser. For transfer students with a certificate in Substance Abuse, Domestic Violence or Gerontology, up to 18 units of coursework in human services may be applied to the total of 54 units.
Teaching Credential Students

The Human Services degree may be effectively combined with subject matter studies necessary for the multiple subject teaching credentials (K-8) and education specialist credential. One of the admission requirements for the multiple subject credential program is to establish subject matter competency by passing the Multiple Subject CSET. Students are encouraged to work with the Center for Careers in Teaching (CCT) (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, major and electives. The CCT website (www.fullerton.edu/cct) provides detailed information about the CSET and other credential admission requirements.

Required Core Curriculum (36 Units)

Theoretical Foundation/Intervention (9 units)
Human Services 201 Introduction to Human Services (3)
Human Services/Counseling 380 Theories and Techniques of Counseling (3)
Human Services 310 Case Management (3)

Client Populations/Cultural Diversity (9 units)
Afro/Human Services 311 Intracultural Socialization Patterns (3)
Child/Adolescent Studies 312 Human Growth and Development (3)
OR Psychology 361 Developmental Psychology (3)
Psychology 341 Abnormal Psychology (3)
OR Sociology 351 Sociology of the Family (3)

Research/Evaluation (9 units)
Human Services 315 Research and Data Management in Human Services (3)
Human Services 385 Program Design and Proposal Writing (3)
Human Services 470 Evaluation of Human Services Programs (3)

Skills Development/Field Experience (9 units)
Human Services 396 Practicum Seminar (2) and Human Services 396L Practicum (1)
Human Services 495 Fieldwork Seminar (2) and Human Services 495L Fieldwork (1)
Human Services 496 Internship Seminar (2) and Human Services 496L Internship (1)

Note: The practicum/fieldwork/internship courses (Human Services 396 and 396L, 495 and 495L, and 496 and 496L) must be taken in sequence. Only one fieldwork course may be taken in a given semester. Students may substitute one semester of HUSR 490 Group Leadership for a fieldwork course.

Required Advisement Track (18 units)

In addition to the 36-unit core, the human services degree program requires each student to select, in consultation with an adviser, an 18-unit advisement track in the area of her/his anticipated professional specialization. Advisement tracks include:

1. Mental Health Track (with emphasis in either counseling or social work) – Prepares students for entry-level career options such as adoption counselor, client advocate, social service employee, youth counselor, and parent educator, and for graduate work in counseling, social work, clinical psychology or marriage and family therapy.

2. Administration and Community Practice Track – Designed for students wishing to pursue careers and/or graduate study in human services agency administration, community organization, social policy and planning; prepares students for entry level career options such as outreach worker, fundraiser, grant writer and data manager.

3. Gerontology Track – Developed for students interested in working with the elderly population as a geriatric caseworker or client advocate and graduate work in gerontology.

4. Substance Abuse Treatment and Prevention Track – Designed for students who are interested in careers such as drug and alcohol counselor and rehabilitation case manager. Once complete a Bachelor's Degree in Human Services with this track, they are eligible to take the California Association for Alcohol/Drug Educators Certification Exam.

5. Elementary Education Track – Designed for students who are interested in pursuing an elementary teaching career.

6. Persons with Disabilities Track – Developed for students interested in working with physically and/or developmentally disabled population in human services or educational settings.

7. Individualized Advisement Track – Students may develop their own track in consultation with the Human Services Department Faculty Adviser.

Note: Human Services 300, Character and Conflict, is required in the Mental Health advisement track and should be taken early in the program.

MINOR IN HUMAN SERVICES

The minor in Human Services, consisting of 21 units, may be of interest to students preparing for careers in the helping professions, as well as students with a personal interest in this field. The minor provides a structured selection of courses offered by the program that can complement other majors and minors by providing practical applications of theory, foundations, self-exploration and supervised fieldwork in a human services setting.

Required Foundation Courses (9 units)
Human Services 201 Introduction to Human Services (3)
Human Services 311 Intracultural Socialization Patterns (3)
Human Services 380 Theories and Techniques of Counseling (3)

Electives
Select 3-9 units from the following:
Human Services 300 Character and Conflict (3)
Human Services 310 Case Management (3)
Human Services 315 Research and Data Management in Human Services (3)
Human Services 318 Human Services for Immigrants and Refugees (3)
Human Services 350 Leadership Skills and Personal Development (3)
Human Services 385 Program Design and Proposal Writing (3)
Human Services 400 Ethical and Professional Issues in Human Services (3)
Human Services 410 Crisis Intervention for Para-Professionals (3)
Human Services 411 Human Services Delivery to Communities (3)
Human Services 412 Gerontology in Human Services (3)
Human Services 415 Treatment Issues in Drug Addiction (3)
Human Services 416 Group Process and Membership (1)
Human Services 420 Human Services Management (3)
Human Services 425 Contemporary Issues in the Human Services (3)
Human Services 430 Child Abuse and the Human Services (3)
Human Services 434 Physiological Effects of Alcohol and Other Drugs (3)
Human Services 435 Drug Abuse Prevention and Early Intervention (3)
Human Services 436 Dynamics of Substance Abuse Treatment in Families (3)
Human Services 437 Co-Occurring Disorders: Assessment, Treatment and Referral (3)
Human Services 450 Theory and Practice of Group Counseling (3)
Human Services 470 Evaluation of Human Services Programs (3)
Human Services 475 Human Services Policy and Practice (3)
Human Services 480 Case Analysis and Intervention Techniques (3)

Fieldwork

Select 3-9 units from the following:

Human Services 396/396L Practicum Seminar (2) and Practicum (1)
Human Services 490 Practicum in Group Leadership (3)
Human Services 495/495L Fieldwork Seminar (2) and Fieldwork (1)
Human Services 496/496L Internship Seminar (2) and Internship (1)
Equivalent practicum/internship course from a related University department.

HUMAN SERVICES COURSES

Courses are designated as HUSR in the class schedule.

196 Student-to-Student Tutorial (1-3)
Prerequisite: approval of Department Chair. Students gain tutoring experience with peers needing special assistance on a one-to-one basis or in small group settings. 1-3 units, credit/no credit only, does not count toward the Human Services major/minor or G.E. requirement.

201 Introduction to Human Services (3)
Origin and scope of human services, including theoretical frameworks, the functions and activities of human services organizations, and the roles and related skills of human services workers.

300 Character and Conflict (3)
Prerequisite: consent of instructor at first class meeting. Experiential, theme-oriented class exploring life choices in the struggle for personal autonomy. Themes include body image, sex roles, love, sexuality, intimacy, marriage, loneliness, death, meaning and values. Credit/No Credit only.

310 Case Management (3)
Pre- or corequisite: Human Services 201. Principles and critical issues in case management, along with the various models of service delivery. Special attention given to the diverse populations utilizing case management systems. Collaborative and interagency services will be examined.

311 Intracultural Socialization Patterns (3)
(Same as Afro-Ethnic Studies 311)

315 Research and Data Management in Human Services (3)
Prerequisites: completion of General Education (G. E.) Category III.A.1. and Human Services 201. Overview of basic research and assessment skills appropriate to the delivery of human services. Introductory skills relating to library search techniques, evaluation of research articles, computer based data analysis, tracking of client progress and implications for human services. One or more sections offered online.

318 Human Services for Immigrants and Refugees (3)
Pre- or corequisite, Human Services 201 or equivalent or 311. Overview of U.S. immigration policy for newcomers; examines stressors and cultural influences on coping behaviors and explores culturally sensitive models of human service delivery with an emphasis on Southeast Asian, Latino and Soviet immigrants and refugees.

350 Leadership Skills and Personal Development (3)
Prerequisites: completion of G. E Categories I.A, I.B and III.C.1. Leadership concepts and skills, including psychological process, conflict resolution, counseling and human service skills. Help students become aware of their personal leadership styles; maintaining vitality through physical and mental health will be stressed. (Same as Counseling 350)

380 Theories and Techniques of Counseling (3)
Prerequisites: junior/senior standing and completion of G. E Category III.C.1. Contemporary theories and techniques of counseling. The counseling process, comparison of various theoretical approaches, introduction to professional and ethical issues. Taught partially online. (Same as Counseling 380)
385 Program Design and Proposal Writing (3)
Prerequisites: Human Services 315 or an elementary social science statistics course, Human Services 396 and 396L. Techniques of program design, budgeting and staffing of human service programs; proposal writing and fund development methods; survey of needs assessment procedures. One or more sections offered online.

396 Practicum Seminar (2)
Prerequisites: Human Services 201 or equivalent and Human Services 380 or 310. Corequisite: Human Services 396L. Functions and structure of human services agencies; interrelationships with community services; the role of the human services worker; ethical, legal and professional issues.

396L Practicum (1)
Prerequisites: Human Services 201 or equivalent and Human Services 310 or 380. Corequisite: Human Services 396. Field placement in one or more human service agencies for a minimum of eight hours per week. Credit/No Credit only.

400 Ethical and Professional Issues in Human Services (3)
Prerequisite: Human Services 201 or 380. Ethical, legal and professional issues facing the human services worker. Designed to teach a process of ethical decision-making and to increase awareness of the complexities in practice. (Same as Philosophy 400)

410 Crisis Intervention for Para-Professionals (3)
Prerequisite: Human Services 201 or equivalent. Theories and techniques of short-term intervention and subsequent referral procedures. Topics include suicide, battering, AIDS, rape, death, dying and human-induced disasters in the community.

411 Human Services Delivery to Communities (3)
Prerequisite: Afro/Human Services 311. Provides a framework for identifying the human service needs of varied community groups and focuses on the utilization of this knowledge about those groups in order to develop effective service delivery strategies.

412 Gerontology in Human Services (3)
Prerequisite: Human Services 201 or equivalent. Overview of gerontology and human services practice and policy focusing on historical developments and content of key social, legislative and governmental programs designed for older adults, including the Social Security Act, Older Americans Act and Medicare.

415 Treatment Issues in Drug Addiction (3)
Prerequisite: Human Services 380. Treatment issues and theoretical models involved in the treatment of drug dependencies. Emphasizes specific effects of different drug classifications; understanding drug cultures; women, children and elderly addiction; co-dependency and enabling.

416 Group Process and Membership (1)
Prerequisites: Human Services 300 and 380. Didactic and experiential overview of stages of group development, impact of members on group identity, group member and leader issues. Survey of various counseling groups. May be repeated for credit. Credit/No Credit only.

420 Human Services Management (3)
Prerequisite: advanced standing. Corequisite, Human Services 201. Issues in administration and management of human services in community agencies. Topics include assessing client needs, designing human service delivery systems, program budgeting, marketing strategies, accountability and improving program management.

425T Contemporary Issues in the Human Services (3)
Prerequisite: Human Services 201 or equivalent. Systematic study and theory, research findings and intervention strategies related to contemporary issues faced by paraprofessional human service workers. May be repeated for credit under different topic.

430 Child Abuse and the Human Services (3)
Prerequisite: Human Services 201 or equivalent. Introduction to types and symptoms of abuse, assessment techniques, legal and ethical issues, family dynamics pertaining to children, adolescents and adults abused as children. Special topics include networking and referral, utilizing community resources and prevention. One or more sections offered online.
434 Physiological Effects of Alcohol and Other Drugs (3)
Prerequisite: Health Science 321 or equivalent. Pharmacological actions of drugs of abuse and how these relate to the physiological, psychological and behavioral effects of such drugs. Properties of recreational, "street" drugs and of prescription drugs that lead to abuse and/or dependence are covered. Not available for use on a graduate study plan. One or more sections offered online.

435 Drug Abuse Prevention and Early Intervention (3)
Prerequisite: Human Services 434 or 415 or Health Science 321. History, theories and models in the drug prevention field. Theoretical foundations and conceptual frameworks that have been used in the field will be presented. Major research and evaluation outcomes on the effectiveness of prevention strategies are examined. Not available for use on a graduate study plan. One or more sections offered online.

436 Dynamics of Substance Abuse Treatment in Families (3)
Prerequisite: Health Science 321 or Human Services 415. Explore and apply methods of assisting significant others, organizations and communities to understand, treat and prevent substance abuse and dependence. Students develop practice strategies that will prepare them to deliver services at the micro, meso and macro levels. Not available for use on a graduate study plan.

437 Co-Occurring Disorders: Assessment, Treatment and Referral (3)
Prerequisite: Human Services 201. Concepts, definitions and features of co-occurring mental disorders and substance-related disorders in individuals seen in human services settings; includes screening, assessment, case management and service delivery for such individuals. Not applicable to graduate degree requirements.

450 Theory and Practice of Group Counseling (3)
Prerequisites: Human Services 300, 380 and consent of instructor. Critical evaluation of 10 contemporary theoretical approaches to group counseling, as well as issues in group work. Emphasizes applying theories and techniques to actual group situations.

470 Evaluation of Human Services Programs (3)
Prerequisite: Human Services 385. Making program objectives measurable; determining appropriate methodology and techniques to evaluate effectiveness, efficiency and process variables; practical problems of program evaluation.

475 Human Services Policy and Practice (3)
Prerequisite: advanced standing. Pre- or corequisite, Human Services 201. Relationship between policy and practice. Problem of inequities and inequalities in the distribution of resources through social policies and social welfare programs. Particular attention is paid to how policy impacts service delivery to disenfranchised groups.

480 Case Analysis and Intervention Techniques (3)
Prerequisites: Human Services 380, 396 and 396L. Psychodynamic principles of evaluation, diagnosis and intervention; techniques of counseling appropriate to diverse populations; application of a psychoanalytic perspective to the diagnostic categories of the DSM-IV.

490 Practicum in Group Leadership (3)
Prerequisites: Human Services 300, 380 and consent of instructor. Supervised experience as a group leader. Approaches and techniques of group leadership. May be used as a substitute for 495/495L or 496/496L. Coordinator approval needed for substitution for 495/495L or 496/496L. May be repeated once for credit.

495 Fieldwork Seminar (2)
Prerequisites: Human Services 396 and 396L. Corequisite: Human Services 495L. Classroom analysis of agency experience focusing on skills and techniques of human service workers and organizational analysis.

495L Fieldwork (1)
Prerequisites: Human Services 396 and 396L. Corequisite: Human Services 495. Supervised fieldwork in one or more human service agencies for a minimum of eight hours per week. Credit/No Credit only.

496 Internship Seminar (2)
Prerequisites: Human Services 495 and 495L; or Human Services 490 when taken in lieu of 495 and 495L; and at least two courses in approved specialization. Corequisite: Human Services 496L. Supervised internship in a community service agency in area of specialization. Seminar consists of group supervision and discussion of cases. One or more sections offered online. Credit/No Credit only.

496L Internship (1)
Prerequisites: Human Services 495 and 495L; or Human Services 490 when taken in lieu of 495 and 495L. Corequisite: Human Services 496. Requires 120 hours of supervised internship experience in one or more human service agencies in one semester. One or more sections offered online. Credit/No Credit only.

499 Independent Study (1-3)
Prerequisites: approval of coordinator, consent of instructor, upper-division status. Individual research project, either library or field, under the direction of a faculty member. May be repeated for credit. Only three units per semester.
INTRODUCTION

The Information Systems and Decision Sciences Department offers courses in Information Systems, Management Science, Statistics and Logistics.

Information systems are computer-based systems that aid management in making decisions and assist in implementing and controlling management policies. Information systems are used in business, industry and government operations. Applications include airline reservations, banking transactions, crime prevention networks, election returns, real estate assessment, tax records, newspaper databases, sports statistics and computer assisted learning.

Information systems incorporate the use of data processing equipment, such as computers and their peripherals. Computer software is used to create, maintain and retrieve information. Techniques include mathematical modeling and statistics, integrated with modern computer technology. These methods are applied to systems management, programming design, analysis of information flow, decision support, database organization, small business problems, data communication networking and distributed processing.

Management science (also known as operations research) is the application of the scientific method to decision-making in business and government. In practice, nearly all management science problems involve solutions using computers. Operations research uses mathematical and simulation models to provide decision-makers with quantitative information pertaining to complex business situations. Statistics assists decision-makers by using techniques designed to draw inferences from experimental and sampling data.

Situations that require operations research techniques arise in all areas of business: accounting, finance, production, marketing, and research and development. Among the problems addressed by operations research techniques are the determination of inventory strategies, the allocation of scarce resources and the design of service systems. Others include bidding in competitive environments, selecting equipment replacement strategies and scheduling the completion of large projects.

The statistician is often involved in activities such as sales forecasting, quality control and financial analysis. Statistics is also concerned with model building and the design of experiments dealing with product testing, surveys and sampling.

Logistics is concerned with the movement of materials and finished goods. It encompasses such areas as inventory control, transportation, purchasing, warehouse management and information support systems. Logistical control is an important component of the success of most manufacturing and service enterprises. It is also used extensively in complex organizations such as airline companies and the military.

ADVISERS

The Business Advising Center, Steven G. Mihaylo Hall 1201, provides information on admissions, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters.

In addition, the Information Systems and Decision Sciences Department provides advising about curriculum content and career opportunities:
Graduate Program: Barry Pasternack
Information Systems: Rahul Bhaskar, Pawel Kalczynski, Bhushan Kapoor, Mabel Kung, Sorel Reisman, Sagnika Sen, Joseph Sherif, Ram Singhania, Daniel Soper, Ofir Turel, Samuel Yang, Yi "Jenny" Zhang
Statistics: Nicholas Farnum, Sohan Sihota, Ronald Suich, Dawit Zerom
Logistics Management: Zvi Drezner, Zvi Goldstein, Barry Pasternack, Joseph Sherif

CREDENTIAL INFORMATION

For students interested in a teaching credential, the Department of Information Systems and Decision Sciences offers courses that may be included in the Subject Matter Preparation Program for the Single Subject Teaching Credential.

Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and is also available from the Department of Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Education.

AWARDS IN MANAGEMENT SCIENCE/INFORMATION SYSTEMS

David S. Stoller Outstanding Management Science Undergraduate Award
Dr. Wen Chow Outstanding ISDS Undergraduate Award
Klein Family Excellence Award for ISDS 361B
Outstanding Management Information Systems Undergraduate Award
Outstanding Management Science Graduate Student Award
Russell Utterberg Memorial Scholarship

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION
MINOR IN INFORMATION SYSTEMS

MASTER OF BUSINESS ADMINISTRATION

For information on the minor in Information Systems, as well as the Information Systems and Management Science concentrations within the B.A. and MBA, please refer to the "Business Administration" programs section of this catalog.

MASTER OF SCIENCE IN INFORMATION SYSTEMS

The Master of Science in Information Systems program provides the conceptual understanding and technical competence for careers in information systems, E-commerce, statistics, operations research and logistics. Concentrations include E-commerce and Decision Sciences. These techniques are widely used in both private business and public enterprise. Employment opportunities include positions such as management analyst, data processing manager, statistician, forecaster and logistical support manager.

The M.S. in Information Systems program is scheduled especially for students who are employed full time. Courses are offered during the late afternoon and evening. The curriculum should appeal to students with undergraduate degrees in business administration, computer science, mathematics, engineering or science. For students with an undergraduate degree in business administration with a concentration in information systems, the 10-course (30-unit) curriculum may be completed in 1 1/2 years (full time) or 2 1/2 years (part time). The curriculum includes information systems applications, electives and a capstone course, which includes a terminal project. Students with a bachelor’s degree in a field other than business administration are eligible to apply; however, such students will be required to complete additional courses or demonstrate proficiency as described under the Curriculum requirements.

Cal State Fullerton is the only university in Orange County accredited by the AACSB International at both the undergraduate and graduate level for both accounting and business administration. This assures a rigorous program, a well-qualified faculty, high standards for students and access to an extensive library system. The qualifications of the M.S. in Information Systems faculty include advanced degrees in information systems, operations research, statistics and applied mathematics; extensive computer experience; and practical experience in business, industry and government.

Most graduate courses in the Mihaylo College of Business Administration and Economics require "classified MCBE status" and are open only to students with classified standing in the M.S. in Information Systems, M.S. in Taxation, M.A. in Economics, MBA or M.S. in Accountancy programs.

Admission Requirements

Admission is competitive. Applicants will be evaluated based on the following:

1. Acceptable bachelor’s degree from an appropriately accredited institution.
2. Minimum grade point average of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended.
3. Satisfactory score on the Graduate Management Admission Test (GMAT). Students must score in the top 50 percent on the verbal, quantitative and analytical writing areas.
4. A bachelor’s degree with a major in business administration equivalent to the degree as offered at CSUF with at least an overall cumulative grade point average of 3.0 (B). The degree must include calculus and software applications equivalent to passing Mathematics 135, Business Calculus and ISDS 265, Introduction to Information Systems and Applications, with grades of at least “C” (2.0). Courses in the major that are more than seven years old must be evaluated/validated for currency. Courses with grades lower than "C" (2.0) must be repeated.

INFORMATION SYSTEMS AND DECISION SCIENCES 391
5. For international students, a minimum TOEFL score of 570 on the paper exam, 230 on the computer-based exam or 90 on the internet based (iBT) is required.

6. Recommendation from the ISDS Admission Committee based upon a review of the above requirements, the student’s “Statement of Purpose” and prior work experience. Additional coursework may be required of conditionally admitted students who holistically satisfy the criteria but are weak in one of the above areas.

Application Deadlines
The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (Students may apply online through http://www.csumentor.edu). Mailed applications should be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Curriculum
The M.S. in Information Systems curriculum requires 30 semester units of coursework beyond the baccalaureate degree. At least 21 of the 30 units required for the degree must be at the 500 level. In lieu of the Information Systems study plan, students may choose a concentration in either E-commerce or Decision Sciences.

An overall 3.0 (B) GPA is required in study plan courses and all applicable coursework. Any study plan course with a grade lower than “C” (2.0) must be repeated with at least a “C” (2.0) grade.

Students admitted with a bachelor’s degree in a field other than business administration will be required to complete the following additional course requirements or their equivalent (either prior to or during their residency at CSUF):
Math 135 Business Calculus (3)
ISDS 265 Introduction to Information Systems and Applications (3)
ISDS 309 Introduction to Operating Systems and Programming (3)
ISDS 361A Quantitative Business Analysis: Probability and Statistics (3)
OR ISDS 513 Statistical Analysis (3) with grades of at least “C” (2.0); and the following business foundation courses:
Accounting 510 Financial Accounting (3)
Economics 515 Microeconomic Perspective for Managers (3)
OR Management 339 Principles of Management and Operations (3)
Finance 320 Business Finance (3)
ISDS 514 Decision Models for Business and Economics (3)
Management 518 Legal and Ethical Environment of Business (3)
OR Marketing 351 Principles of Marketing (3)

These courses must be completed with at least a 3.0 (B) overall grade point average and with grades of “C” (2.0) or better in each course.

INFORMATION SYSTEMS STUDY PLAN
ISDS 309 (or equivalent) is a prerequisite to many courses and should be taken prior to the beginning of the program.

Required Core Courses (12 units)
ISDS 550 Business Data Communications (3)
ISDS 551 Information Resources Management (3)
ISDS 552 Systems Analysis, Design and Development (3)
ISDS 555 Business Databases: Design and Processing (3)

Electives (15 units)
Five courses (15 units) to be selected in consultation with and approved by the student’s adviser. Additional electives to those below may be available. Students should contact the department office for a current listing. Note that students who do not have an undergraduate degree in Information Systems must take ISDS 411 as an elective.

No more than nine units of electives may be at the 400 level.
ISDS 411 Business Application Design (3)
ISDS 415 Principles of Business Intelligence (3)
ISDS 418 Privacy and Security (3)
ISDS 431 Enterprise Systems Implementation, Configuration and Use (3)
ISDS 433 Enterprise Systems Administration (3)
ISDS 435 Integrated Enterprise Information Systems (3)
ISDS 437 Enterprise Networks for Information Systems (3)
ISDS 442 Business Modeling Using Spreadsheets (3)
ISDS 474 Data Mining for Managers (3)
ISDS 521 Revenue Management Modeling (3)
ISDS 553 Electronic Commerce: Analysis and Evaluation (3)
ISDS 554 E-Commerce: Technological Perspective (3)
ISDS 556 Data Warehousing and Foundations of Business Intelligence (3)
ISDS 557 Issues in Business Information Systems and Global Telecommunications (3)
ISDS 558 Advanced Software Development with Web Applications (3)
ISDS 563 Geographic Information Systems for Business (3)
ISDS 565 Wireless Information Systems (3)
ISDS 568 Information Systems for Knowledge Management (3)
ISDS 576 Business Modeling and Simulation (3)

Students may use one applied management science course and one applied business course as electives. The applied management science course may be selected from the following:
ISDS 526 Forecasting, Decision Analysis and Experimental Design (3)
ISDS 560 Advanced Deterministic Models (3)
ISDS 561 Advanced Probabilistic Models (3)

The applied business course elected may be selected from the following:
Accounting 511 Seminar in Managerial Accounting (3)
Economics 502 Advanced Microeconomic Analysis (3)
Finance 517 Managerial Finance (3)
Management 444 Project Management (3)
Terminal Evaluation (3 units)
ISDS 577 Seminar in Information Systems Implementation (3)

Students must complete the individual project in ISDS 577 with a grade of “B” (3.0) or better. In exceptional cases, a thesis (Business Admin 598) may serve as an option to the individual written project. See the departmental graduate adviser for details.

E-COMMERCE CONCENTRATION

The E-Commerce concentration is designed to provide students with the technical skills in information technology as applied to the Internet and E-Commerce. Additionally, the program includes courses in small business management/entrepreneurship, marketing and logistics, as this knowledge base is essential for an individual who would like to create an E-commerce operation. Background prerequisites for this concentration are the following courses or equivalent: ISDS 309 and 371.

Required Core courses (12 units)
ISDS 516 Introduction to Logistics Analysis Techniques (3)
ISDS 550 Business Data Communications (3)
ISDS 552 Systems Analysis, Design and Development (3)
ISDS 555 Business Databases: Design and Processing (3)

Required Electives (15 units)
ISDS 553 Electronic Commerce: Analysis and Evaluation (3)
ISDS 554 E-Commerce: Technological Perspective (3)
ISDS 558 Advanced Software Development with Web Applications (3)
Management 540 New Venture Leadership and Management (3)
Marketing 455 Strategic Internet Marketing (3)

Terminal Evaluation (3 units)
ISDS 577 Seminar in Information Systems Implementation (3)

Students must complete the individual project in ISDS 577 with a grade of “B” (3.0) or better. In exceptional cases, a thesis (Business Admin 598) may serve as an option to the individual written project. See the departmental graduate adviser for details.

Learning Goals and Student Learning Outcomes

The following goals and learning outcomes have been established for students pursuing a master's degree in information systems study plan or e-commerce concentration:

Telecommunications
- Assess the telecommunications needs of an organization
- Supervise the development of a local or wide-area data and communications network
- Use the Internet in support of operations
- Select the appropriate telecommunications hardware and software
- Managerial
- Be familiar with the terminology and basic principles of business information systems and the Internet
- Understand ethical, global, political, social, legal, regulatory, environmental and technology issues
- Understand the impact of demographic diversity on organizations

Systems development process
- Analyze the information systems needs of an organization
- Design an information system to serve the needs of an organization
- Data needs
- Design a database system to serve the needs of an organization
- Select appropriate software to operate a database system

Programming concepts
- Select a particular computer language for a programming application
- Write a computer program using the fundamental concepts of programming
- Document a program

Collaboration
- Work productively in a team or collaborative setting to achieve common goals

Research
- Conduct, evaluate and synthesize research and apply theoretical ideas to practical settings

Communications
- Effectively present ideas in a logical framework in a variety of forms with proper language structure and mechanics

DECISION SCIENCES CONCENTRATION

Required Courses (9 units)
ISDS 415 Principles of Business Intelligence (3)
ISDS 526 Forecasting, Decision Analysis and Experimental Design (3)
ISDS 560 Advanced Deterministic Models (3)
OR ISDS 561 Advanced Probabilistic Models (3)

Statistics Course (3 units minimum)
One or more of the following:
ISDS 422 Surveys and Sampling Design and Applications (3)
ISDS 461 Statistical Theory for Management Science (3)
ISDS 467 Statistical Quality Control (3)
ISDS 472 Design of Experiments (3)
ISDS 473 Applied Business Forecasting (3)
ISDS 474 Data Mining for Managers (3)
ISDS 475 Multivariate Analysis (3)

ISDS Electives (15 units maximum)
ISDS Electives
ISDS 465 Linear Programming in Management Science (3)
ISDS 490 Queuing and Stochastic Models in Management Science (3)
ISDS 516 Introduction to Logistics Analysis Techniques (3)
ISDS 551 Information Resources Management (3)
ISDS 552 Systems Analysis, Design and Development (3)
ISDS 553 Electronic Commerce: Analysis and Evaluation (3)
ISDS 555 Business Databases: Design and Processing (3)
ISDS 560 Advanced Deterministic Models (3)
   OR ISDS 561 Advanced Probabilistic Models (3)
ISDS 563 Geographic Information Systems for Business (3)

Electives Outside ISDS (6 units maximum)
Accounting 511 Seminar in Managerial Accounting (3)
Economics 502 Advanced Microeconomic Analysis (3)
Finance 517 Managerial Finance (3)
Management 524 Seminar in Organizational Behavior and Administration (3)
Management 535 Production and Operations Management (3)

Terminal Evaluation (3 units)
ISDS 576 Business Modeling and Simulation (3)

Students must complete the individual project in ISDS 576 with a grade of “B” (3.0) or better. In exceptional cases, a thesis (Business Admin 598) may serve as an option to the individual written project. See department graduate adviser for details.

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY

The Master of Science in Information Technology is designed to afford a quality graduate education in a growing technological field to individuals who may not be able to get to campus to take classes in a traditional format. The objective of the program is to serve the needs of those working in the field of information technology who wish to advance their managerial and technical skills in areas critical for success, as well as for those individuals who have suitable business experience and wish to enter the field of information technology.

Subject areas required by the program are programming, accounting, data communications, management of an IT organization, systems analysis and design, e-commerce and database development. Students who graduate from the program will be able to understand and develop code for computer programs, prepare and analyze financial statements and management reports, have the ability to assess how data is communicated (both in local and wide area networks), implement managerial concepts associated with good leadership, implement the managerial and technical aspects of e-commerce, be able to design an information system and be able to set up a database system.

Admission Requirements

Applicants will be evaluated based on the following:
1. Acceptable bachelor’s degree from an appropriately accredited institution.
2. Minimum grade-point average of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended.
4. Minimum average score of 530 on the GRE or a total scaled score of 530 on the GMAT.
5. Submission of a written self-assessment explaining why they believe they would be a good candidate for the program.
6. Successful passage of a phone or face-to-face interview designed to assess their level of technology knowledge, skills and abilities to be an online learner.
7. Proficiency in office productivity tools using a personal computer and knowledge and experience in utilizing Internet-based systems.
8. For international students, a score of 570 on the paper exam or 230 on the computer based TOEFL is required.

Application Deadlines

The deadline for completing an online application is March 1 for the following fall semester (see: www.csumentor.edu). Mailed applications need to be postmarked by the same deadline. However, the deadline may be changed based upon enrollment projections.

Curriculum

The MS in Information Technology curriculum requires 30 semester units of coursework beyond the baccalaureate degree. Each student is required to attend and successfully complete an on-campus orientation session for new students and maintain a GPA of 3.0. If circumstances force a student to fall out of the original cohort schedule, the student will be permitted to continue in the program, but will default to the next cohort cycle, provided the student remains in good academic standing.

INFORMATION TECHNOLOGY STUDY PLAN

Required Courses (21 units)
Accounting 509 Accounting for Information Technology (3)
ISDS 405 Programming Concepts for Information Technology (3)
ISDS 550 Business Data Communications (3)
ISDS 551 Information Resource Management (3)
ISDS 552 Systems Analysis, Design and Development (3)
ISDS 553 Electronic Commerce: Analysis and Evaluation (3)
ISDS 555 Business Databases: Design and Processing (3)

Elective Courses (6 units)
Accounting 507 Seminar in Accounting Information Systems (3)
ISDS 435 Integrated Enterprise Information Systems (3)
ISDS 518 Quantitative Tools for Information Technology Management (3)
ISDS 521 Revenue Management Modeling (3)
ISDS 554 E-Commerce: Technological Perspectives (3)
ISDS 556 Data Warehousing and Foundations of Business Intelligence (3)
ISDS 558 Advanced Software Development with Web Applications (3)
INFORMATION SYSTEMS AND DECISION SCIENCES COURSES

Courses are designated as ISDS in the class schedule.

102 Introduction to Information and Multimedia Technology (2)
A hands-on course covering information resources and multimedia tools available to students at CSUF. Topics include: e-mail, the World Wide Web, Internet search engines, computerized library resources and developing electronic presentations using software such as Power Point. (Same as Computer Sci 102).

161 Discovering Business through Decision Science (1)
How businesses operate through tours of a number of manufacturing and service facilities. Emphasizes how businesses use quantitative analysis to improve operations.

162 Introduction to Excel Spreadsheets (1)
Introduction to the Excel spreadsheet with emphasis on business applications. Topics include how to enter data, formulas, functions and enhancing the worksheet to create graphs and databases. Students who take ISDS 265 cannot receive credit for ISDS 162.

163 Electronic Research of Business Enterprises (1)
How to utilize electronic and non-electronic resources to research the history of a business. The resulting history will be published on the World Wide Web.

165 Navigating the Information Superhighway (1)
A hands-on course surveying information resources available through the Internet. Topics include e-mail, the World Wide Web, Internet search engines and computerized library resources.

166 Developing Computer Based Presentations (1)
Introduces concepts, principles and techniques for developing computer-based presentations. Create presentation outlines, use masters and templates, work with graphs and organization charts, and develop electronic slides and transparencies.

167 Practical Approach to Database Systems (1)
Hands-on methods to plan, create and maintain databases. Create customized forms and queries, as well as develop professional looking reports. Students who take ISDS 265 cannot receive credit for ISDS 167.

168 Mastering the World Wide Web (1)
How the World Wide Web works and how one can set up a website and author web pages. Topics include: web browsers, design of a website, HTML, multimedia, interactive techniques, CGI, security and site promotion.

262 Visual Basic for Excel (1)
Prerequisite: ISDS 162 or equivalent. Introduction to the Visual Basic programming language that is a subset of the Excel spreadsheet. Students who take ISDS 265 cannot receive credit for ISDS 262.

265 Introduction to Information Systems and Applications (3)
Introduction to information systems, hardware, software, information systems concepts in business; telecommunications; e-commerce; enterprise systems; system development/acquisition; ethics, crime and security; microcomputer applications and hands-on exercises in the business arena.

309 Introduction to Operating Systems and Programming (3)
Prerequisite: ISDS 265. Structured programming principles; operating systems; shell commands and scripts; preparing and maintaining disks; managing files and processes; fundamental programming constructs; conditional processing; arrays; subroutines; parameter passing; file processing.

310 Systems Analysis and Design (3)
Prerequisite: ISDS 265 or equivalent. Systems analysis and design for business information systems; systems development methodologies; managing changes to system parameters; systems process and data models; case tool types and their use; structured vs. object oriented analysis and design.

352 Advanced Data and Information Analysis in Business (3)
Prerequisites: Finance 320 and Marketing 351. Advanced spreadsheet topics for professional business, downloading of databases into spreadsheets and database packages and statistical analyses for decision support; database concepts and design; querying and report writing; applications to financial/ marketing forecasting models.

361A Quantitative Business Analysis: Probability and Statistics (3)
Prerequisites: Math 135 and ISDS 265 or equivalents. Corequisite: Business Admin 301. 2.5 cumulative GPA for online section registration. Probability concepts; expectations; descriptive statistics; discrete and continuous random variables; sampling; estimation; hypothesis testing; simple and multiple regression; nonparametric statistics.

361B Quantitative Business Analysis: Statistics and Management Science (3)
Prerequisites: ISDS 361A; 2.5 cumulative GPA for online section registration. Quantitative methods and their application to business and economic problems. Forecasting, ANOVA, quality control, decision analysis, mathematical modeling, optimization, PERT/CPM, inventory.

371 C++ For Business Applications (3)
Prerequisites: ISDS 309. C++ syntax, structured programming, table handling, design standards, object oriented programming.

372 Java Programming for Business Applications (3)
405 Programming Concepts for Information Technology (3)
Prerequisite: admission to the Master of Science in Information Technology program. Application programming fundamentals for IT systems: structured and object-oriented programming, accessing and management of database tables and external files; layout design and data extraction for advanced output; testing, debugging and analysis tools.

408 Database Management Systems (3)
Prerequisites: Business Admin 301 and ISDS 309. Essential concepts, principles and methods for analysis, design and implementation of database management systems; covers theory and practice; emphasizes the relational model; examines issues and problems associated with developing single and multiple user applications both today and in the future; project required.

409 Business Telecommunications for Information System Design (3)
Prerequisites: Business Admin 301, ISDS 309 and 310. Essential concepts for developing a data communication architecture to support Information Systems for a business enterprise. Requires students to undertake a group project to design a LAN.

411 Business Application Design (3)
Prerequisites: Business Admin 301 and ISDS 309. Contemporary issues in the design and development of integrated, graphical user interface-based business applications.

414 Internet Technologies and Applications (3)
Corequisites: ISDS 408. Contemporary Internet technologies and Web applications: Internet infrastructures, development of Web sites and dynamic Web pages, Web databases, business applications. Not applicable to graduate degree requirements.

415 Principles of Business Intelligence (3)
Prerequisites: Business Admin 301, ISDS 309. Principles and procedures related to the design and use of expert systems and decision support systems principles in management decision making; development of expert systems using shells.

418 Privacy and Security (3)
Corequisites: Business Admin 301 and ISDS 409. Security and privacy problems associated with the use of computer systems; ways to minimize risks and losses.

422 Surveys and Sampling Design and Applications (3)
Prerequisites: Business Admin 301, ISDS 361A. Principles for designing business and economic surveys. Applications in accounting, marketing research, economic statistics and the social sciences. Sampling: simple random, stratified and multistage design; construction of sampling frames; detecting and controlling non-sampling errors.

431 Enterprise Systems Implementation, Configuration and Use (3)
Prerequisite: Mgmt 339. Methodology and tools for configuring an ERP system to support critical business processes. Topics include system modules, implementation tools and data settings. Focuses on configuring the system to support a variety of business scenarios.

433 Enterprise Systems Administration (3)
Prerequisite: ISDS 310 or ISDS 552. Technical administration practices required to manage the day-to-day operations of an Enterprise Resource Planning (ERP) system. Topics include system architecture, security, system performance and installation of upgrades.

435 Integrated Enterprise Information Systems (3)
Prerequisites: Mgmt 339. Application programming fundamentals for ERP systems; accessing and management of ERP database tables and external files; layout design and data extraction for advanced output; testing, debugging and analysis tools; security issues in an ERP system.

437 Enterprise Networks for Information Systems (3)
Prerequisite: ISDS 409 or ISDS 550. Placing the network in perspective within the overall enterprise that it serves, and the issues involved in constructing, updating and managing the networks which make up the infrastructure of those information systems.

440 Integrative Decision Tools for Business Operations (3)
Prerequisites: Business Admin 301, ISDS 361B. Intermediate management science modeling and solution techniques, including topics in linear and non-linear programming, integer programming, dynamic programming, Markov processes, queueing theory and inventory models.

442 Business Modeling Using Spreadsheets (3)
Prerequisite: ISDS 361B or equivalent. Microsoft Excel will be used to implement business models. Excel will be used to effectively organize, analyze and present information. Examples include operations, production, marketing and finance. Macros, goal seek, solver, simulation and data tables are covered.

454 Senior Project: Information Systems Development (3)
Prerequisites: Business Admin 301, ISDS 408 and 409. Integrates information systems development concepts of analysis, design and implementation. Students will develop an information system from concept to completion. Individual and team effort.

461 Statistical Theory for Management Science (3)

465 Linear Programming in Management Science (3)
Prerequisites: Business Admin 301; ISDS 361B or Math 250B. Mathematical and theoretical foundations for linear programming; geometric and linear algebraic approaches and proofs; simplex method, duality, sensitivity and parametric analyses, extensions to specialized algorithms and large-scale models; practical and computer based applications will be discussed.

467 Statistical Quality Control (3)
Prerequisites: Business Admin 301 and ISDS 361A. Control charts for variables, percent defective and defects. Tolerances, process capacity; special control charts, acceptance sampling and batch processing problems. Bayesian aspects of process control.
472 Design of Experiments (3)

473 Applied Business Forecasting (3)
Prerequisites: Business Admin 301 and ISDS 361A. Forecasting methods applied to problems in business and industry; practical multiple regression models with computer solutions; basic techniques in time-series analysis of trend, cyclical and seasonal components; correlation of time-series and forecasting with the computer.

474 Data Mining for Managers (3)
Prerequisite: ISDS 361A or equivalent. Introduction to the fundamentals of data mining. Topics may include association, classification, clustering, decision trees, statistical modeling and visualization. Motivation for the applications of data mining techniques. Use of data mining software suites on data sets.

475 Multivariate Analysis (3)
Prerequisites: Business Admin 301 and ISDS 361A. The least squares principle; estimation and hypothesis testing in linear regression; multiple and curvilinear regression models; discriminant analysis; principle components analysis; application of multivariate analysis in business and industry.

490 Queuing and Stochastic Models in Management Science (3)
Prerequisites: Business Admin 301 and ISDS 361B or Mathematics 335. Probabilistic models in management science; theoretical foundation and model development for Poisson process models, birth-death models, Markovian and general queuing situations and Markov chains; renewal theory and/or reliability models; practical business applications.

495 Internship (1-3)
Prerequisites: Business Admin 301; at least junior standing; 2.5 GPA and one semester in residency at the university; and consent of internship advisor. For Information Systems concentration, ISDS 309; for Management Science concentration, ISDS 361BI; for International Business concentration, ISDS 309 or ISDS 361B. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No credit grading only.

499 Independent Study (1-3)
Prerequisites: Business Admin 301, ISDS 361B, senior standing and approval by the Department Chair. Open to qualified students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

513 Statistical Analysis (3)
Prerequisites: Math 135, ISDS 265 (or equivalents) and classified MCBE status. Basic probability and descriptive statistics; sampling techniques; estimation and hypothesis testing; simple and multiple regression, correlation analysis; computer packages and other optional topics.

514 Decision Models for Business and Economics (3)
Prerequisites: ISDS 513 and classified MCBE status. Linear programming; inventory; PERT-CPM; queuing; computer simulation; time-series forecasting; and other optional topics.

516 Introduction to Logistics Analysis Techniques (3)
Prerequisites: ISDS 514 and classified MCBE status. Scope of logistics; external and internal environment; analysis of demand, analysis of cost, commodity and transportation rates; structure of transport industry, inventory management, merchandise storage and warehousing; framework of regional analysis; methods of location analysis.

518 Quantitative Tools for Information Technology Management (3)
Quantitative tools that are useful in management of an IT organization. Topics include review of probability concepts, linear programming, network modeling, project management, decision analysis, forecasting, queuing theory and simulation. Students may not receive credit for both ISDS 514 and 518.

521 Revenue Management Modeling (3)
Prerequisite: ISDS 514 or equivalent. Corequisite: Economics 515. Revenue management deals with how prices are set in organizations. Provides analytical tools and a conceptual framework to determine optimal price recommendations. Reinforces concepts student may have learned in other business courses such as marketing or economics.

526 Forecasting, Decision Analysis and Experimental Design (3)
Prerequisites: ISDS 514 and classified MCBE status. Time series analysis, Trend, cyclical and seasonal components. Statistical decision theory. Fundamental principles of experimental design; interaction. Software packages.

550 Business Data Communications (3)
Essential concepts for developing a data communication architecture for a business enterprise. Issues of transmission media, speed, efficiency, protocols, security in a variety of network architectures such as LAN, WAN, VPN, leading to "the state of the art" wireless networks. Concludes with a discussion on the technical implications of doing business on the Internet.

551 Information Resources Management (3)
Prerequisite: admission to MCBE graduate program. Expanding role of information systems in the overall strategy and management of organizations. Topics include strategic value of information systems, management of the information systems development and procurement process, E-commerce and integrated enterprise systems.

552 Systems Analysis, Design and Development (3)
Prerequisite: admission to MCBE graduate program. Systems analysis and design concepts, life cycle and prototyping; planning and managing projects; systems evaluation, selection and development. Interface design with controls, object-oriented design concepts and tools, including the use of cases and UML.
553 Electronic Commerce: Analysis and Evaluation (3)
Electronic commerce. Understanding the technical infrastructure, which enables E-commerce. Organizational challenge for developing an appropriate business model for emergence of the electronic business. Social economical impact of electronic commerce.

554 E-Commerce: Technological Perspective (3)
Corequisite: ISDS 555. Expanding role of the Internet in the overall strategy, implementation and management of enterprise-wide information systems. Topics include organizational utilization of electronic information resources, as well as Internet application planning, development, implementation and control.

555 Business Databases: Design & Processing (3)
Internet and multi-user databases; accessing Web servers; data warehouse, structured query language, client-server database systems and programming; object-oriented databases.

556 Data Warehousing and Foundations of Business Intelligence (3)
Prerequisites: ISDS 552 and 555. Introduces basic concepts, architectures and development strategies of data warehousing, issues in managing data as organizational assets and its potentials for competitive advantages in dynamic business environments.

557 Issues in Business Information Systems & Global Telecommunications (3)
Prerequisite: Management 515. Advanced concepts of global networks, advanced communications design and management, global information security and privacy, global communications protocol and applications to industry, government and commercial sectors.

558 Advanced Software Development with Web Applications (3)
Prerequisites: ISDS 552, 555 and 411 or equivalent programming course. Advanced client/server software development techniques with specific emphasis on the Internet. Topics include file structure, managing relational databases with data control and SQL and ActiveX components and objects.

560 Advanced Deterministic Models (3)
Prerequisites: ISDS 514. Advanced linear programming, dynamic programming, integer programming, non-linear programming, business applications. Software packages and computer-utilization.

561 Advanced Probabilistic Models (3)
Prerequisites: ISDS 514 and classified MCBE standing. Stochastic processes, Markov processes, advanced queuing and inventory models; reliability. Software packages and computer utilization.

563 Geographic Information Systems for Business (3)
Prerequisite: ISDS 555. Use of Geographic Information Systems in support of business applications such as site location, scheduling, marketing and real estate. Students will develop GIS applications for local businesses.

565 Wireless Information Systems (3)
Prerequisite: ISDS 550. Contemporary wireless technologies; wide-area and local-area wireless infrastructures; design, planning and operation of wireless communication systems; 3G and next-generation wireless architectures. Wireless spectrum and regulatory issues.

568 Information Systems for Knowledge Management (3)
Knowledge management systems are useful for businesses to leverage their intellectual capital. The course covers how knowledge is created, captured, represented, stored and used to solve business problems. Software demonstrations and case studies will be used for illustrations.

576 Business Modeling and Simulation (3)
Prerequisite: ISDS 514. Theory and application of modeling and simulation methodology. Probabilistic concepts in simulation; arrival pattern and service times; simulation languages and programming techniques; analysis of output; business applications. Requires projects. The individual project will fulfill the terminal degree requirement.

577 Seminar in Information Systems Implementation (3)
Prerequisite: to be taken in the last semester or with completion of at least seven ISDS courses in the program. Integrates the development concepts of project management, analysis, design and implementation with telecommunications, database design, programming, testing and system integration issues. Students will develop information systems from concept to completion through individual and team effort. Requires projects. Individual project will fulfill the terminal degree requirement.

578 Seminar in Logistics Models (3)
Prerequisites: ISDS 516, 526 and Marketing 519. Integrates the concepts of logistics to systematically analyze a distribution system. Students will perform a complete analysis of an existing distribution system to investigate the value added role of logistics in distribution. Includes article analysis, case analysis, a research project, individual and group reports and oral and written presentations. Requires projects. Individual project will fulfill the terminal degree requirement.

597 Project (3)
Prerequisite: classified MCBE status. Directed independent inquiry. Not open to students on academic probation.

599 Independent Graduate Research (1-3)
Prerequisites: classified MCBE status and consent of Department Chair and Associate Dean. May be repeated for credit. Not open to students on academic probation.
INTRODUCTION

The Master of Science in Instructional Design and Technology is an interdisciplinary program housed within the College of Education and draws upon a team of outstanding faculty with expertise, training and experience in instructional technology and design with applications for teaching, learning, training and curriculum development.

Benefits of the program include:

- The degree represents a comprehensive, high quality, affordable program staffed by a team of outstanding and dedicated faculty with expertise and experience in instructional technology and educational practice, backed up with strong program and administrative support.
- The program is completed in 21 months (2 courses per term segment – 15 weeks).
- The coursework in the program is 100 percent online, with 2 required on-campus Saturday meetings (two on-campus trips for a total of 2 days).
- The program promotes collaboration, professional networking and team-building among peers, faculty, staff and other professionals.
- Graduates of the program will gain valuable knowledge and skills in the development, design, evaluation and implementation of a wide variety of instructional technologies applicable to a wide range of training and learning settings (K-12, postsecondary education, military, business/industry). Furthermore, graduates will obtain expertise in the enhancement of teaching and learning based on sound and current educational research, theory and practice and will be well positioned as a professional in a competitive job market in educational or business/corporate settings. An active alumni association provides mentoring opportunities while in the program, and professional networking upon completion (www.msidtaa.org).

ADMISSION AND PROGRAM REQUIREMENTS

New students are admitted once a year for the fall term segment that begins in August. Deadline for completing on-line applications www.csumentor.edu is March 1 as is the postmark deadline for mailed applications. However, this deadline may be changed based upon enrollment projections. Please check the program website for current information at http://msidt.fullerton.edu.

Minimum state and program requirements for admission to conditional classified standing in the program include the following:

1. Hold a baccalaureate from an accredited institution of higher education,
2. Have earned a minimum grade-point average of 3.0 in the last 60 semester units attempted as documented by two official copies of transcripts from all higher education institutions attended
3. Good standing at the last college attended
4. For international students from countries where English is not the official language, have a TOEFL score of 575.

5. Submission of a written self-assessment essay. Students must submit a written essay on issues such as why they would be good candidates for the program, including their experience in online learning environments and curriculum development or training; time management skills; their level and types of technology skills; their technology access; ability to work independently and professionally.

6. Successful passage of a phone or face-to-face interview designed to assess their level of technology knowledge, skills, abilities to be an online learner and professional goals.

7. Technology requirements may be found on the program website, http://msidt.fullerton.edu.

8. Knowledgeable in the use of a personal computer (PC or Macintosh), including the ability to demonstrate the following skills and knowledge, which will be ascertained through a phone or face-to-face interview:
   a. Locate, create, move, copy, delete, name, rename and save file and folders on hard drives and on secondary storage devices such as floppy disks
   b. Use a word-processing program that runs on a PC or Macintosh computer to create, edit, format, store, retrieve and print documents
   c. Use an electronic mail system to receive, create, edit, print, save, and send an e-mail message with and without an attached file
   d. Use an Internet browser to search the World Wide Web, conduct research through CSUF library resources; and
   e. Use databases, spreadsheets and multimedia applications.

Continuation and completion of the program requires:

9. Registration, attendance and successful completion of the on-campus "Boot-Up Camp" and the Midpoint Symposium (program requisites).

If circumstances force a student to fall out of their original cohort schedule, they will be permitted to continue in the program, but will default to the next cohort cycle provided they remain in good academic standing.

Special accommodations for disabled students will be made on an individual student, as-needed basis in compliance with the CSUF online catalog (http://www.fullerton.edu/disabledservices/handbook/SupportiveServices.htm). Please contact the instructor and Program Coordinator if this applies to you.

**STUDY PLAN REQUIREMENTS**

The Master of Science in Instructional Design and Technology requires 30 units of approved graduate courses and takes a total of five term segments, (21 months) to complete. The schedule runs year-round as follows:

**August**

On-Campus Boot-Up Camp (1 day/Saturday)

**Session 1: September through December**

IDT 505 Hardware and Authoring Environments in Instructional Contexts (3)

IDT 510 Research Practices in Instructional Design and Technology (3)

**Session 2: January through early May**

IDT 520 Instructional Design Issues for Technology-based Instruction (3)

IDT 525 Instructional Approaches in Learning and Cognition (3)

**Session 3: May through August**

IDT 530 Planning, Designing and Evaluating Technology-based Instruction (3)

IDT 535 Instructional Strategies for Pre-K through Adulthood (3)

**October**

On-Campus Midpoint Symposium (1 day/Saturday)

**Session 4: September through December**

IDT 540 Web-based Teaching and Learning (3)

IDT 545 Emerging Technology and Issues in Instruction (3)

**Session 5: January through early May**

IDT 550 Practicum in Instructional Design and Technology (3)

IDT 597 Project (3)

**INSTRUCTIONAL DESIGN AND TECHNOLOGY COURSES**

Courses are designated as IDT in the class schedule.

**505 Hardware and Authoring Environments in Instructional Contexts (3)**

Prerequisite: successful completion of summer on-campus orientation (Boot-Up Camp). Necessary understanding of operating systems, hardware and networking environments to develop instructional tools and products using a multimedia authoring tool.

**510 Research Practices in Instructional Design and Technology (3)**

Prerequisite: completion of orientation program for M.S. in Instructional Design and Technology (IDT). Survey course on terms and accepted procedures in qualitative and quantitative inquiry as they apply to instructional design and technology. Students conduct controlled portions of IDT research and prepare preliminary proposals for larger projects.
520 Instructional Design Issues for Technology-based Instruction (3)
Prerequisite: IDT 505. Systematic design of instructional courseware, including analysis, media selection, design, development and evaluation. Topics include learning principles, learner characteristics, instructional strategies, screen design, response analysis, feedback and interactivity.

525 Instructional Approaches in Learning and Cognition (3)
Prerequisites: IDT 510 and concurrent enrollment in IDT 520. Behavioral, cognitive, constructivist learning theories, related concepts and their implications for designing instruction. Develops critical thinking about desirable cognitive outcomes when designing educational experiences.

530 Planning, Designing, Developing and Evaluating Technology-based Instruction (3)
Prerequisite: IDT 520. Application of computer-based instructional design principles to develop new methods and materials for technology-based instruction. Topics include computer-based instruction, project management, planning, assessment, design principles and development tools. Students will design multimedia courseware.

535 Instructional Strategies for Pre-K through Adulthood (3)
Prerequisites: IDT 525 and concurrent enrollment in IDT 530. Training in instructional strategies for Pre-K through adulthood. Emphasizes current research on instructional strategies and assistive technologies in a variety of instructional contexts.

540 Web-based Teaching and Learning (3)
Prerequisites: IDT 530 and successful completion of Midpoint Symposium. Design, development and implementation of Web pages and sites for instructional purposes. Emphasizes issues surrounding using the World Wide Web for instruction.

545 Emerging Technologies and Issues in Instruction (3)
Prerequisites: IDT 530, IDT 535 and concurrent enrollment in IDT 540. Theoretical basis, issues and strategies for improving teaching and learning through the use of emerging technologies.

550 Practicum in Instructional Design and Technology (3)
Prerequisites: concurrent enrollment in IDT 597 and consent of Program Coordinator. Strategies for effectively implementing and evaluating instructional design and technology to improve learning; includes significant field work assignments in work-related settings.

597 Project (3)
Prerequisites: concurrent enrollment in IDT 550 and consent of Program Coordinator. Individual research on an empirical project, with conferences with the instructor, culminating in a project.
INTRODUCTION

The international business curriculum covers the fundamentals of business administration, with an emphasis on international business. Foreign language courses are required and stress the use of the applied language. The program also includes an internship with an international business. This curriculum prepares students for entry level positions. Opportunities exist in contracts, distribution and sales and may lead to general management positions. Since Southern California is a major international business center, there are career opportunities with internationally oriented firms in this area. Other career opportunities may involve international travel or overseas assignments.

Language concentrations are offered in Chinese, French, German, Japanese, Portuguese and Spanish. Other concentrations may be developed in the future. The program is offered jointly by the Mihaylo College of Business Administration and Economics and the Department of Modern Languages and Literatures.

Scholarship In International Business

Friends of International Marketing

Preparation For The Major

Students who expect to complete this program in the usual four-year period should realize that the total requirements, including general education courses and prerequisites, can exceed 120 semester units. Intermediate to advanced competency in a foreign language is a prerequisite to the required concentration courses. Students are strongly encouraged to complete a minimum of three years of foreign language study while in high school. Similarly, algebra and geometry are necessary for many required business courses. The equivalent of three years of high school mathematics, including a second course in algebra, is the prerequisite for the required Math 135, Business Calculus. Students without the necessary background will need to enroll in Math 115, College Algebra.

BACHELOR OF ARTS IN INTERNATIONAL BUSINESS

Admission to the International Business major involves two steps. Students who apply to the major are initially classified as pre-international business. After completing the lower-division core requirements with grades of at least "C" (2.0) and demonstrating satisfactory progress toward intermediate competency in a foreign language, students may apply to the international business major. Pre-international business students may take lower-division business courses, but most upper-division courses are not open to pre-international business students.

All of the following requirements must be met for the degree. Students must earn a grade of at least "C" (2.0) in each course in the major. The International Business degree requires a minimum of 120 units. Students must fulfill all requirements for the major, General Education, all other University requirements and free electives.
Required Lower-Division Core Courses
Accounting 201A  Financial Accounting (3)
Accounting 201B  Managerial Accounting (3)
Business Admin 201  Business Writing (3)
Econ 201  Principles of Microeconomics (3)
Econ 202  Principles of Macroeconomics (3)
Management 246  Business and Its Legal Environment (3)
InfoSys/DecSci 265  Introduction to Information Systems and Applications (3)
Math 135  Business Calculus (3)
OR Math 130A  Short Course in Calculus (4)
OR Math 150A  Analytic Geometry and Calculus (4)

Intermediate foreign language competency is a prerequisite to the concentrations in Chinese, French, German, Japanese, Portuguese and Spanish. Students in international business should consult an adviser in the Department of Modern Languages and Literatures as soon as possible in order to assess individual proficiency levels. Students may be required to take additional prerequisite courses.

Required Upper-Division Core Courses
Business Admin 301  Advanced Business Communication (3)
Econ 335  International Economy (3)
Finance 320  Business Finance (3)
Finance 370  International Business Finance (3)
Management 339  Principles of Management and Operations (3)
Management 340  Organizational Behavior (3)
Marketing 351  Principles of Marketing (3)
Marketing 445  International Marketing Strategies (3)

Required Capstone Core Course
After completing all lower- and upper-division core courses, take Management 480 Global Strategic Management (3).

Required Concentration
Choose one of the following concentrations:

**Concentration in Chinese**
Chinese 310  Chinese in the Business World (3)
Chinese 311  Chinese for International Business (3)
Chinese 315  Introduction to Chinese Civilization (3)
Chinese 325  Contemporary Chinese Culture (3)

**Concentration in French**
French 310  French in the Business World (3)
French 311  French for International Business (3)
French 315  Origins of Modern France (3)
French 325  Contemporary French Civilization (3)

**Concentration in German**
German 310  German in the Business World (3)
German 311  German for International Business (3)
German 315  Introduction to German Civilization (3)
German 325  Current Trends in Culture of German-Speaking Peoples (3)

**Concentration in Japanese**
Japanese 310  Japanese for Business (3)
Japanese 311  Japanese for International Business (3)
Japanese 315  Introduction to Japanese Civilization (3)
Japanese 316  Modern Japan (3)

**Concentration in Portuguese**
Portuguese 310  Portuguese in the Business World (3)
Portuguese 317  Advanced Conversation and Composition (3)
Portuguese 320  Introduction to Luso-Brazilian Culture and Civilization (3)
Portuguese 325  Contemporary Brazilian Civilization (3)

One of the following courses may be substituted for Portuguese 320 or 325:
Spanish 310  Spanish in the Business World (3)
Spanish 311  Spanish for International Business (3)

**Concentration in Spanish**
Spanish 310  Spanish in the Business World (3)
Spanish 311  Spanish for International Business (3)
Spanish 315  Introduction to Spanish Civilization (3)
Spanish 316  Introduction to Spanish-American Civilization (3)

One of the following may substitute one of the following for Spanish 315 or 316:
Spanish 415  Contemporary Spanish Culture (3)
Spanish 416  Contemporary Spanish-American Culture (3)

Collateral Requirement (3 units)
Complete at least one approved collateral elective. It is recommended that students take up to 12 units of electives, if possible. The list of approved courses is available in the Business Advising Center, Steven G. Mihaylo Hall 1201, or the International Business Program Office, Steven G. Mihaylo Hall 5214.

Internship Requirement
Internships outside the United States: Students who successfully arrange an internship in a country where the language of their concentration is used, will enroll for three units in a language internship and three units in a business internship. During this experience, students are expected to spend a minimum of four months in full-time employment with a faculty-approved firm. Simultaneous enrollment in the two internships is expected and students normally will not engage in any other academic activity.
Internships in the United States

Students who complete internships locally must arrange a business internship that involves some aspects of international operations. In addition, these students must complete an additional pre-approved three-unit upper-division foreign language course. The course must increase students’ understanding of the language and culture of their concentration. If students are expected to use their foreign language on a daily basis as part of their business internship work activity, students may complete a foreign language internship rather than the course. Approval for this option must be obtained prior to enrollment in the business internship and written evidence of language use must be provided at the completion of the language internship.

Internship Courses

Accounting 495 Internship (3)
Economics 495 Internship (3)
Finance 495 Internship (3)
InfoSys/DecSci 495 Internship (3)
Management 495 Internship (3)
Marketing 495 Internship (3)
Modern Language 495 Internship (3)

Other Requirements

Grade Point Average (GPA): Attain at least a 2.0 GPA ("C" average) in all university courses and in the concentration courses. Earn at least a “C” (2.0) grade in each course required for the major.

Grade Options: Take all required core and concentration courses for a letter grade (A,B,C,D,F). The credit/no credit grading option may not be used for these courses, and a grade of CR (credit) will not satisfy the requirements of the degree. Exceptions: Calculus (Math 130, 135 or 150A) and Internship may be taken under the credit/no credit option, although courses taken to meet general education requirements must be taken for a letter grade.

Residence: At least 12 units of upper-division core courses, 6 units of upper-division concentration courses and 6 units of internships must be taken in residence at CSUF.
INTRODUCTION

The Department of Kinesiology advances the understanding and practice of human movement principles across the lifespan in response to the needs of a diverse and changing society. The Bachelor and Master of Science degrees in Kinesiology offer students a variety of professional focus areas, including Clinical Exercise Science, Fitness and Health Promotion, Gerokinesiology, Sport Studies, Teacher Education and Pedagogical Studies (MS only). An undergraduate Minor in Kinesiology is also available. The Department also offers a Bachelor of Science Degree in Athletic Training that meets the requirements of the Commission on the Accreditation of Athletic Training Education. Completing the B.S. in Athletic Training as part of the Athletic Training Education Program prepares students to take the national board examination to become certified athletic trainers (ATC).

Degrees in Kinesiology offer advanced study and research opportunities in one or more of the sub-disciplines of Kinesiology: Biomechanics, Exercise Physiology, Motor Control/Learning, Sport and Exercise Psychology, Socio-cultural Perspectives and Philosophical Perspectives.

The intra-disciplinary focus of the Department’s curriculum fosters the development of diverse values and skills important to a liberal arts education: critical thinking, problem solving, leadership, verbal and written communication, and technological competency.

The Department provides general education courses and university-wide opportunities for developing skills and knowledge leading to lifelong enjoyment of physical activity, health and well-being. Internships, independent study and scholarly outreach provide opportunities for collaboration with and service to the community.

Student Awards/Scholarships

Awards and scholarships are presented each year to outstanding undergraduate and graduate students. Additional information is available in the Kinesiology Department office.

Advisement

Entering students interested in Kinesiology should contact the Kinesiology Academic Advising Center in KHS 161A prior to their first semester at Cal State Fullerton to receive appropriate advisement materials. Students transferring coursework from other colleges and universities should provide official transcripts of all prior coursework to the Kinesiology Academic Advising Center.

Transfer students and students seeking advisement related to completion of General Education requirements, should visit the Academic Advisement Center located in University Hall 123.

BACHELOR OF SCIENCE IN ATHLETIC TRAINING

The Department of Kinesiology offers a Bachelor of Science in Athletic Training through its Athletic Training Education Program (ATEP), which is nationally accredited by the Commission on the Accreditation of Athletic Training Education.
(CAATE). Upon successful completion, students earn a B.S. in Athletic Training and are eligible to take the Board of Certification (BOC) exam to become a certified athletic trainer (ATC). Please refer to the program web site (http://hhd.fullerton.edu/at/) for the most current ATEP information.

Certified athletic trainers are healthcare professionals, educated and experienced in the prevention, assessment, management and rehabilitation of active and/or athletic individuals with injuries or illnesses. The certified athletic trainer functions as an integral member of the healthcare team in secondary schools, colleges and universities, professional sports teams, as well as in sports medicine clinics, industrial settings and other healthcare venues.

The ATEP is an arduous, pre-professional experience for future certified athletic trainers. The Athletic Training (AT) major involves a minimum of 123 units, including five semesters of clinical rotations. Competence will be gained in each of the 12 athletic training domains as outlined by the National Athletic Trainers’ Association.

ADMISSIONS POLICIES AND PROCEDURES
CSUF admission does not guarantee admission into the AT major. Competitive admission is based on the applicant’s academic history, athletic training experiences, professional recommendations and communication skills. The AT Selection Committee includes AT-related faculty, staff and students. Minimal academic, clinical, professional and technical standards are required to enter and remain in the ATEP. Ongoing assessments determine appropriateness for dismissal, probation, retention or completion.

Application Packet
ATEP application packets are available online (http://hhd.fullerton.edu/at/). A completed application and required support materials must be submitted to the ATEP director by the stated deadline (see website).

Course Prerequisites
Applicants must pass (C or better) these courses or their equivalent prior to entering the Athletic Training degree program:

- Chemistry or Physics (choose from G.E. category IIIA2a)
- Psychology 101 Introductory Psychology
- Health Science 101 Personal Health
- KNES 200 Introduction to Athletic Training
- BIOL 361 Human Anatomy or KNES 191A Int. Human Anatomy & Physiology

Grade Prerequisites
Applicants MUST have a minimum overall college GPA of 2.5 (4.0 scale).

Clinical Prerequisites
All ATEP applicants must complete and document 100 hours of clinical experience under the supervision of a Certified Athletic Trainer.

Support Materials
Applicants must submit the following:
1. Three Recommendation Forms (ATEP Application Packet) from individuals knowledgeable about the applicant’s ability to succeed in the ATEP (athletic trainers, physicians, coaches, professors, etc.)
2. Personal Statement (<500 words). This document should briefly detail the candidate’s reasons for pursuing athletic training, previous experiences, expectations of the ATEP and future professional goals
3. Transcripts of all college credits
4. Proof of current Professional Rescuer CPR

ATEP STANDARDS
AT students must achieve and maintain Academic, Professional, Clinical and Technical standards. Failure to comply may result in probation or dismissal. Once admitted, all students shall meet or exceed the following ATEP Standards:

Academic Standards
Minimally achieve and maintain:
- Fulltime CSUF student status
- 2.5 overall GPA
- 3.0 Athletic Training Core GPA (no grade below “C”)
- 2.5 Athletic Training Foundation GPA
- 2.0 individual semester GPA

Clinical Standards
Minimally demonstrate:
- Compliance with the clinical site policies and procedures
- Effective and efficient time management skills
- Complete 200-300 clinically supervised hours per semester
- Complete and/or comply with:
  - ATEP First Responder Policy
  - ATEP Student Health Screening
  - ATEP Clinical Practice Policy
  - ATEP Communicable Disease Policy

Professional Standards
Minimally achieve and maintain:
- A valid Professional Rescuer CPR Certification
- A positive and professional attitude
- Patient confidentiality
- Positive leadership
- Professional communication
- Professional appearance
- Respect for the property and rights of all others
Technical Standards
Achieve and maintain ATEP Technical Standards as described in the ATEP Handbook and the website (http://hhd.fullerton.edu/at/).

Additional
All AT students must clearly understand the following:
- Successful completion of the B.S. in Athletic Training does NOT guarantee certification as a Certified Athletic Trainer
- To take the BOC exam as a CSUF graduate, one must successfully complete the AT major as described. CSUF will not sponsor any graduate who does not meet ALL ATEP Standards.
- Failure to meet any of these standards may result in probation or dismissal from the California State University, Fullerton – Athletic Training major

TRANSFER STUDENTS
Transfer students must meet the same admissions requirements as other students, and should enter CSUF as a Kinesiology major. Upon ATEP admission, individuals will then change their major to Athletic Training.

ATEP COSTS
ATEP students provide their own transportation (and any costs incurred) to and from clinical sites. Some clothing requirements will also be the responsibility of the student. The ATEP will provide liability insurance, medical kits and supplies, and most specialized clothing.

REQUIREMENTS FOR THE MAJOR (ADDITIONAL TO G.E. REQUIREMENTS)
Athletic Training Foundation (31–32 units)
KNES 191B Integrated Human Anatomy and Physiology (4)
OR BIOL 310 Human Physiology (3)
ENGL 301 Advanced College Writing (3)
KNES 260 Movement Anatomy (3)
KNES 300 Principles of Human Movement (3)
KNES 348 Physiology of Exercise (3)
KNES 348L Physiology of Exercise Lab (1)
KNES 349 Measurements & Statistics in Kinesiology and Health (3)
KNES 350 Nutrition (3)
KNES 351 Principles of Strength and Conditioning (3)
KNES 371 Human Motor Control and Learning (3)
KNES 383 Psychology of Sport & Physical Activity (3)

Athletic Training Core (40 units)
KNES 200 Introduction to Athletic Training & Sports Medicine (3)
KNES 365 Prevention & Care of Athletic Injuries (3)
KNES 367 Clinical Proficiencies in Athletic Training I (2)

KNES 368 Clinical Proficiencies in Athletic Training II (2)
KNES 369 Clinical Proficiencies in Athletic Training III (2)
KNES 373 Advanced Injury Assessment-Lower Extremity (3)
KNES 374 Advanced Injury Assessment-Upper Extremity (3)
KNES 375 Management of Athletic/Exercise Emergencies (3)
KNES 377 Therapeutic Exercise in Rehabilitation (3)
KNES 378 Therapeutic Modalities in Rehabilitation (3)
KNES 451 Sports Medicine (3)
KNES 463 Biomechanics of Musculoskeletal Injury (3)
KNES 465 Administration & Leadership in Athletic Training (3)
KNES 468 Clinical Proficiencies in Athletic Training IV (2)
KNES 469 Clinical Proficiencies in Athletic Training V (2)

BACHELOR OF SCIENCE IN KINESIOLOGY
The Department of Kinesiology offers the Bachelor of Science in Kinesiology for students preparing for professional careers or for graduate work in fields related to exercise, sport, movement and wellness.

The degree consists of 120 units with 51 units required for the major. Within the major, students must complete nine units of foundation courses, an 18-unit disciplinary core, a three-unit writing course and a 21-unit advising track in one of the following focus areas: Athletic Training, Clinical Exercise Science, Fitness and Health Promotion, Gerokinesiology, Sport Studies or Teacher Education. With adviser approval, students also have the option of developing a “Special Studies” advising track if their interests lie outside these designated areas. The Special Studies plan must include a rationale statement, 21 units of upper-division coursework, and must be approved by a faculty adviser and the Department Chair. Students are required to seek advising from Department faculty in planning careers, selecting advising tracks and choosing elective courses.

Each course counted toward the major, including prerequisites, must be completed with a grade of “C” (2.0) or higher. All courses counted toward the major must be taken on an Option 1 (letter grade) basis.

Prerequisite Requirements
Prerequisite requirements for the major include three units of anatomy/physiology (Biology/Kinesiology 210 or equivalent) and six units of performance classes, representing the following performance areas: Fitness, Martial Arts/Combatives, Aquatics, Individual Sports, Racquet Sports, and Team Sports. Four of the six performance courses must be completed prior to enrollment in Kinesiology 300 Principles of Movement. All performance courses must be completed prior to completion of the Disciplinary Core Courses.

Prerequisite Performance Courses (6 units)
Fitness
KNES 100 Physical Conditioning (1)
KNES 102A Beginning Jogging (1)
KNES 103 Fitness Walking (1)
KNES 106A Cardio Spinning (1)
KNES 143 Dance Aerobics (1)
KNES 144 Aerobic Exercise and Weight Control (1)
KNES 145 Cardio Kick Boxing* (1)
KNES 146 Weight Training (1)

**Aquatics**

KNES 110A Beginning Swimming (1)
KNES 110B Intermediate Swimming (1)
KNES 111 Water Polo* (1)
KNES 112A Beginning Surfing* (1)
KNES 112B Intermediate Surfing* (1)
KNES 214A Basic Scuba* (3)
KNES 214B Intermediate Scuba* (2-3)

**Martial Arts/Combatives**

KNES 145 Cardio Kick Boxing* (1)
KNEX 150 Wrestling (1)
KNES 151A Beginning Aikido (1)
KNES 151B Intermediate Aikido (1)
KNES 152A Beginning Karate (1)
KNES 153 Wushu: Chinese Martial Arts (1)
KNES 154 Self-Defense (1)
KNES 155 Fencing* (1)
KNES 156 Tai Chi* (1)

**Individual Sports**

KNES 112A Beginning Surfing* (1)
KNES 112B Intermediate Surfing* (1)
KNES 114A Beginning Rock Climbing (1)
KNES 117A Beginning Bowling (1)
KNES 117B Intermediate Bowling (1)
KNES 119A Beginning Golf (1)
KNES 119B Intermediate Golf (1)
KNES 119C Advanced Golf (1)
KNES 120A Beginning Gymnastics (1)
KNES 120B Intermediate Gymnastics (1)
KNES 120C Advanced Gymnastics (1)
KNES 155 Fencing* (1)
KNES 156 Tai Chi* (1)
KNES 214A Basic Scuba* (3)
KNES 214B Intermediate Scuba* (3)
KNES 246A Basic Hatha Yoga (2)
KNES 246B Intermediate Hatha Yoga (2)

**Racquet Sports**

KNES 130A Beginning Badminton (1)
KNES 130B Intermediate Badminton (1)
KNES 131A Beginning Tennis (1)
KNES 131B Advanced-Beginning Tennis (1)
KNES 131C Intermediate Tennis (1)
KNES 131D Advanced Tennis (1)
KNES 132A Beginning Racquetball (1)
KNES 132B Intermediate Racquetball (1)

**Team Sports**

KNES 111 Water Polo* (1)
KNES 160 Ultimate Frisbee (1)
KNES 161A Beginning Slow Pitch Softball (1)
KNES 161B Intermediate Slow Pitch Softball (1)
KNES 164A Beginning Volleyball (1)
KNES 164B Intermediate Volleyball (1)
KNES 164C Advanced Volleyball (1)
KNES 165A Beginning Soccer (1)
KNES 165B Intermediate Soccer (1)
KNES 167A Beginning Basketball (1)
KNES 167B Intermediate Basketball (1)
KNES 167C Advanced Basketball (1)

* May only be used in one performance area.

**REQUIREMENTS FOR THE MAJOR**

**Foundation Courses (9 units)**

KNES 202 Introduction to Kinesiology (3)
KNES 260 Movement Anatomy (3)
KNES 349 Measurement and Statistics in Kinesiology (3)

**Disciplinary Core Courses (18 units)**

KNES 300 Principles of Human Movement (3)
KNES 348 Physiology of Exercise (3)
KNES 371 Human Motor Control and Learning (3)
KNES 380 History and Philosophy of Human Movement (3)
KNES 381 Sports, Games and Culture (3)
KNES 383 Psychology of Sport and Physical Activity (3)

**Upper-Division Writing Course (3 units)**

English 301 Advanced College Writing (3)

**Advising Track Requirement (21 units)**

Courses are to be selected from one of the following advising track focus areas: Athletic Training, Clinical Exercise Science, Fitness and Health Promotion, Gerokinesiology, Sport Studies, Teacher
Education or Special Studies. See descriptions and specific course requirements below. With adviser approval, these courses can be modified to better meet student needs/interests.

**CLINICAL EXERCISE SCIENCE (CES) ADVISING TRACK (21 UNITS)**

The Clinical Exercise Science advising track provides students with background knowledge and practical experience in preparing for careers in a variety of settings where exercise is used in conjunction with other therapeutic modalities (such as clinical exercise physiology, geriatric pathokinesiology, and sports healthcare) and/or for further study leading to a variety of healthcare professions (e.g., physical/occupational therapy, medicine, physician assistant, etc.). This advising track also prepares students for advanced study in clinical exercise science.

*Note: Students taking coursework in preparation for admission to a specific professional program, such as physical or occupational therapy, should check the entry requirements for the specific program at the institution to which they intend to apply. These students should also seek advising from the Health Professions Office in UH-223. Through careful planning students can maximize the number of courses that meet CSUF General Education and Kinesiology degree requirements, as well as the entry requirements for other programs of interest.*

**CES Advising Track Recommendations (12 units)**

- Kinesiology 377 Therapeutic Exercise (3)
- Kinesiology 451 Sports Medicine (3)
- Kinesiology 461 Biomechanics (3)
- Kinesiology 495 Internship (3)

**CES Advising Track Electives (9 units)**

Select nine units from:

- Kinesiology 351, 354, 364, 365, 373, 374, 375, 378, 432, 453, 454, 455, 457, 463, 471, Health Science 401, 405

**FITNESS AND HEALTH PROMOTION (FHP) ADVISING TRACK (21 UNITS)**

The Fitness and Health Promotion advising track provides students with background knowledge and experience supporting careers in areas such as personal training, fitness instruction, corporate fitness/worksite health promotion and older adult fitness/wellness. This advising track also prepares students for advanced study in fitness and health promotion, as well as provides opportunities for personal enrichment and growth.

**FHP Advising Track Recommendations (12 units)**

- Kinesiology 350 Nutrition (3)
- Kinesiology 351 Principles of Strength and Conditioning (3)
- Kinesiology 354 Cardiovascular Exercise Testing and Prescription (3)
- OR Kinesiology 352 Principles of Teaching Group Fitness (3)
- Kinesiology 495 Internship in Kinesiology (3)

**FHP Advising Track Electives (9 units)**

Select nine units from:


**GEROKINESIOLOGY (GK) ADVISING TRACK (21 UNITS)**

The Gerokinesiology advising track provides students with the background knowledge and skills necessary to develop and teach a variety of fitness and physical activity classes and/or personalized training programs for older adults. This advising track also prepares students for advanced study in geriatric pathokinesiology, and meets national recommendations for preparing senior fitness instructors.

**GK Advising Track Recommendations (12 units)**

- Kinesiology 352 Principles of Teaching Group Fitness (3)
- Kinesiology 454 Physical Dimensions of Aging (3)
- Kinesiology 455 Functional Perform Assess Program for Older Adults (3)
- Kinesiology 495 Internship in Kinesiology (3)

**GK Advising Track Electives (9 units)**

Select nine units from:


**SPORT STUDIES (SS) ADVISING TRACK (21 UNITS)**

The Sport Studies advising track provides coursework for students interested in careers related to youth sports programs, athletic coaching and/or sports performance enhancement. In consultation with an adviser, students choose electives that allow for further study of various aspects of sports performance, including physiological performance enhancement (biomechanics, exercise physiology, motor control and learning, and strength and conditioning), psychological performance enhancement, athletic coaching, community/youth physical activity and sports program, and the study of sport (history, philosophy and sociology). Students may also choose electives in preparation for advanced study in one or more of the subdisciplines of kinesiology.

**SS Advising Track Recommendations (12 units)**

- Kinesiology 325 Techniques of Coaching (3)
- Kinesiology 351 Principles of Strength and Conditioning (3)
- Kinesiology 365 Prevention/Care of Athletic Injuries (3)
- Kinesiology 385 Instructional Analysis of Human Movement (3)

**SS Advising Track Electives (9 units)**

Select nine units from:

- Kinesiology 350, 384, 386, 387, 410, 414, 430, 432, 461, 463, 480, 495
TEACHER EDUCATION (TE) ADVISING TRACK (21 UNITS)

The Teacher Education advising track is designed for students interested in completing the Bachelor’s Degree in Kinesiology while focusing their elective units on preparation for entering the teaching profession. Students completing the coursework below meet only some of the requirements for the Subject Matter Preparation Program in Physical Education (SMPP-PE) which is designed to prepare students to enter a Single Subject Credential Program in Physical Education. Specifically, students completing this advisement track must complete additional units to fulfill California state-mandated subject matter competencies for pursuit of the single-subject teaching credential. Students interested in the SMPP-PE should see the program description below. Coursework in the Teacher Education advising track may help students qualify for teaching and coaching positions in the public schools, provide background knowledge and experiences for advanced study in pedagogy, and provide personal enrichment in the art and the science of human movement.

TE Advising Track Requirements: (21 units)
Kinesiology 242 Teaching Lifetime Physical Activity (3)
Kinesiology 325 Techniques of Coaching (3)
Kinesiology 363 Developmental Adaptations of the Atypical (3)
Kinesiology 364 Motor Development (3)
Kinesiology 385 Instructional Analysis of Human Movement (3)
Kinesiology 386 Movement and the Child (3)
Kinesiology 387 Movement and the Adolescent (3)

In addition to the 51-unit requirement for the Kinesiology degree and the Teacher Education advising track, students who wish to fulfill California state-mandated subject matter competencies (i.e., the Subject Matter Preparation Program) for pursuit of the single-subject teaching credential in physical education must also complete the requirements described below.

SUBJECT MATTER PREPARATION PROGRAM
(FOR OBTaining SINGLE SUBJECT TEACHING CREDENTIAL IN PHYSICAL EDUCATION)

The Kinesiology Department offers coursework as part of the Subject Matter Preparation Program in Physical Education (SMPP-PE) for obtaining a Single Subject Credential (K-12) in Physical Education. In place of the six-unit performance course requirements within the major, students in the teacher education advising tract must take Kinesiology 240 Teaching Team Sports (3) and Kinesiology 241 Teaching Nontraditional Team Sports (3), in addition to one unit in the Martial Arts/Combatives category and one unit from the racquet Sports category required by the Kinesiology Major. In addition to the requirements for a major in Kinesiology (which includes the Teacher Education advising track described above), all credential candidates must complete the following courses with a minimum grade of “C” (2.0). A grade-point average of 3.0 in the major and 2.75 cumulative is highly recommended for admission to the fifth-year teacher education program.

Additional Requirements: Subject Matter Preparation Program in Physical Education (21 units)
Ed Sec 304 Personal Proficiency in Educational Technology for Secondary Teachers (3)
Ed Sec 310 The Teaching Experience: Participation (3)
Ed Sec 320 Adolescence and Education (3)
(AMay count as a General Education Category IV)
Ed Sec 330 Developing Literacy in Secondary Schools (3)
Ed Sec 340 Diversity in Secondary Schools (3)
Kinesiology 120 Gymnastics (1)
Kinesiology 494 Practicum (2)
Dance 101 Introduction to Dance (3)
Current CPR/First Aid Certificate

Advisement
The department offers guidance for students considering a teaching career. Prospective students should consult with the Teacher Education Coordinator as early as possible in order to plan and acquire needed experiences prior to entry into the Teacher Education Program. The university program for meeting basic requirements for the teaching credential with a specialization in Physical Education can be found elsewhere in this catalogue (see Teaching Credential Programs).

Admission to Teacher Education
In addition to the requirements set forth in the Teaching Credential Programs and in the Department of Secondary Education, the Department of Kinesiology requires candidates to complete the SMPP-PE and submit an application. A screening committee evaluates candidates’ qualifications based on Kinesiology GPA, cumulative GPA, required SMPP-PE coursework, experiences with children and adolescents, and having passed the California Basic Education Skills Test (CBEST). In addition, the candidate must be available for a personal interview by the Kinesiology Teacher Education Committee. Applications to the Teacher Education Program must be submitted by Feb. 28 each year.

Acceptance into the program allows the candidate to enroll in the following Fall-Spring semester sequence:

Fall semester (15 units):
Ed Sec 410, 440S, 440F; Kinesiology 442, 449E

Spring semester (16 units):
Ed Sec 460; Kinesiology 449I and 449S

MINOR IN KINESIOLOGY
A kinesiology minor consists of 24 units of approved coursework. All courses for the minor must be taken for a letter grade and completed with “C” (2.0) or better. Students are required to meet with the Kinesiology General Adviser for assistance in developing a cohesive set of courses that would best support their educational, career, or personal goals.
Performance Courses (3 units)

Three courses (1 unit each) must be taken from any three of the following areas: Fitness, Martial Arts/Combatives, Aquatics, Individual Sports, Team Sports, or Racquet Sports.

Required Courses (9 units)

Kinesiology 202 Introduction to Kinesiology (3)
Kinesiology 210 Human Anatomy and Physiology (3)
Kinesiology 260 Movement Anatomy (3)

Upper-Division Electives (Select 12 units)

Kinesiology 300 Principles of Human Movement (3)
Kinesiology 325 Theories of Coaching (3)
Kinesiology 348 Physiology of Exercise (3)
Kinesiology 351 Principles of Strength and Conditioning (3)
Kinesiology 353 Physical Activity and Lifelong Well-being (3)
Kinesiology 371 Human Motor Control and Learning (3)
Kinesiology 380 History and Philosophy of Human Movement (3)
Kinesiology 381 Sport, Games and Culture (3)
Kinesiology 383 Psychology of Sport and Physical Activity (3)
Kinesiology 386 Movement and the Child (3)
Kinesiology 387 Movement and the Adolescent (3)

MASTER OF SCIENCE IN KINESIOLOGY

The graduate program in Kinesiology provides a broad, comprehensive study of the varied aspects of human movement. Movement across the entire lifespan is observed and studied from mechanical, physiological, psychological, sociocultural, behavioral, instructional, and professional points of view.

The coursework for the degree is designed to: (1) provide students with background knowledge and experience for professional careers in a variety of areas including clinical exercise science, fitness and health promotion, gerokinesiology, pedagogical studies, and sport studies; and/or (2) to prepare students for further graduate study in one or more of the sub-disciplines of kinesiology: biomechanics, exercise physiology, motor control/learning, philosophical perspectives, sport psychology or sociocultural perspectives.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission Requirements

All graduate degree applicants must meet the university requirements for admission, which include a baccalaureate degree from an accredited institution with a grade-point average of at least 2.5 in the last 60 semester units attempted. To be admitted into the graduate program in Kinesiology, a student must further submit to the Kinesiology graduate program: (1) transcripts showing an undergraduate degree in Kinesiology, Exercise Science, or Physical Education with a grade-point average of at least 3.0 in upper-division major coursework; (2) Graduate Record Exam scores general test; (3) a 500-word essay describing the applicant’s academic preparation and goals in the area of intended study within the degree program; and (4) two letters of recommendation. Screening of fall semester applicants begins March 1; screening of spring semester applicants begins Nov. 1.

Students who meet the general university requirements, but do not meet the Kinesiology degree requirements, may apply to the university for postbaccalaureate-unclassified standing. Any student without an undergraduate degree in Kinesiology, Exercise Science, Physical Education, or a related field must complete a prescribed set of undergraduate coursework (usually about 12 units) with a grade-point average of at least 3.0. Any student with a grade-point average deficiency must complete additional undergraduate coursework as specified by the Kinesiology graduate program adviser. Once all admission requirements are subsequently met, a change of program may be requested from postbaccalaureate-unclassified standing to conditionally classified in Kinesiology.

Classified Standing

Classified standing requires the development of a study plan (see below) approved by the faculty adviser, graduate studies committee, kinesiology graduate program adviser, and office of graduate studies. No more than nine units of graduate work taken before classification may be included on the study plan. Any changes to the study plan after classified standing is granted must be approved in advance, in writing, by the Kinesiology graduate program.

Advancement to Candidacy

Advancement to candidacy is attained by requesting a graduation check in the semester prior to graduation (see class schedule for deadlines) and receiving subsequent approval from the graduate studies adviser on the grad check completion review form, mailed by the Graduate Studies Office. Students not completing requirements by the graduation date specified on the original graduation check must contact the Graduate Studies Office.

Graduate Advisement

Students should consult with the Kinesiology graduate studies adviser for general information regarding the program. Upon acceptance to the program, students choose or are assigned a faculty adviser who assists in developing the study plan. Thesis/project advisers are selected in consultation with the student, faculty adviser, and potential thesis/project chair. Students may not register for thesis/project without the consent of the thesis/project chair.

GRADUATE STUDY PLAN

The graduate degree in Kinesiology consists of a total of 30 units, at least 18 units of which must be 500 level. Once accepted into the program, each student must create an adviser-approved
The study plan must include Kinesiology 508 and Kinesiology 510 (which fulfills the graduate level writing requirement), and at least two advanced study courses—one in the students major academic area of interest and one in a minor or supporting academic area. The study plan also must include 15 units of electives selected from one of six advisement tracks: clinical exercise science, fitness and health promotion, gerokinesiology, pedagogical studies, performance enhancement/sport psychology/sport studies, or special studies. Finally, the study plan must include one of three culminating experience options: a thesis, a project, or a comprehensive examination.

Core Course Requirements (9 units)

Kinesiology 508 Statistical Methods in Kinesiology (3)
Kinesiology 510 Research in Kinesiology (3)
Kinesiology 597/598 Project/Thesis (3) or Comprehensive Examination

*Students who select the Comprehensive Examination shall be required to complete an additional adviser-approved 500-level course in Kinesiology (3 units).

Advisement Track Requirements (21 units)

The remaining 21 units of coursework are to be selected from one of the following six advisement tracks: (1) Clinical Exercise Science, (2) Fitness and Health Promotion, (3) Gerokinesiology, (4) Teacher Education/Pedagogical Studies, (5) Sport Studies, or (6) Special Studies. Advanced study courses are required within each track, as well as recommended electives.

KINESIOLOGY COURSES

Courses are designated as KNES in the class schedule.

Students may sign up for only one section of a given performance activity in any semester. This applies to Kinesiology 100 through 167, 214A, 214B, and 246A. Thus a student may take Kinesiology 102A Beginning Jogging and Kinesiology 112B Intermediate Surfing since jogging and surfing are different activities; however, signing up for multiple tennis courses, for example, is not permitted.

100 – 167 Performance Courses (1)

100 Physical Conditioning; 102A Beginning Jogging; 102B Intermediate Jogging (1); 103 Fitness Walking; 106A Cardio Spinning (1); 110A Beginning Swimming; 110B Intermediate Swimming; 110C Advanced Swimming; 111 Water Polo; 112A Beginning Surfing; 112B Intermediate Surfing; 114A Beginning Rock Climbing (1); 117A Beginning Bowling; 117B Intermediate Bowling; 119A Beginning Golf; 119B Intermediate Golf; 119C Advanced Golf; 120A Beginning Gymnastics; 120B Intermediate Gymnastics; 120C Advanced Gymnastics; 130A Beginning Badminton; 130B Intermediate Badminton; 131A Beginning Tennis; 131B Advanced-Beginning Tennis; 131C Intermediate Tennis; 131D Advanced Tennis; 132A Beginning Racquetball; 132B Intermediate Racquetball; 143 Dance Aerobics (1); 144 Aerobic Exercise and Weight Control; 145 Cardio Kick-Boxing; 146 Weight Training; 150 Beginning Wrestling; 151A Beginning Aikido; 152A Beginning Karate; 153 Wushu; Chinese Martial Arts; 154 Self Defense; 155A Beginning Fencing; 156 Tai Chi; 160 Ultimate Frisbee; 161 Slow Pitch Softball; 161B Intermediate Slow Pitch Softball; 164A Beginning Volleyball; 164B Intermediate Volleyball; 164C Advanced Volleyball; 165A Beginning Soccer; 165B Intermediate Soccer; 167B Intermediate Basketball; 167C Advanced Basketball.

Performance courses are instructional. Beginning, intermediate and advanced sections are offered for most performance courses. Students who already possess proficiency in an activity should consider the course chosen from the standpoint of the level of skill development that may be encountered, standards of proficiency expected and their own ability level. Initial assessment and determination will be made by the course instructor. May be taken for credit up to six times.

170 – 189 Intercollegiate Sports (2)

Prerequisite: consent of coach. An intercollegiate activity in individual or team sports in an educational setting under the direction of a coach.

170 Gymnastics – Women Only; 172 Cross Country – Men and Women; 174 Track-Field – Men and Women; 175 Tennis – Women Only; 176 Wrestling – Men Only; 177 Fencing – Men and Women; 178 Basketball – Men and Women; 179 Baseball – Men Only; 180 Soccer – Men and Women; 185 Volleyball - Women Only; 186 Softball – Women Only. May be repeated for credit. Offered Credit/No Credit only.
190 Team Management (2)
Prerequisites: consent of coach and department chair. Field experience in managing an intercollegiate sport. May be repeated for maximum of eight units of credit. (Credit/No Credit only)

191A Integrated Human Anatomy and Physiology (4)
Integrated introduction to human anatomy and physiology. Structure and function of the musculoskeletal, nervous and cardiorespiratory systems. For nursing majors and students interested in allied health professions; no credit toward Biological Science major. (3 hours lecture, 3 hours laboratory) (Same as Biology 191A)

191B Integrated Human Anatomy and Physiology (4)
(Same as Biology 191B)

200 Introduction to Athletic Training (3)
Practical skills acquisition for the treatment, prevention and care of sports-related injuries. Basic required course for all students admitted to the Athletic Training Education Program. (2 hours lecture, 2 hours activity)

202 Introduction to Kinesiology (3)
Prerequisite: declared Kines major or minor. Study of human movement, including its role in daily life, its place in higher education and professional career opportunities in areas related to sport, movement, exercise and fitness. Multiple ways of knowing and studying human movement with a focus on the subdisciplines within kinesiology.

210 Human Anatomy and Physiology (3)
(Same as Biology 210)

214A Basic Scuba (3)
Prerequisites: ability to swim 400 yards, tread water one minute and swim 25 yards underwater. Skin and scuba diving; theory of diving, safety procedures and ocean environment. Open Water Basic Scuba Certification earned with successful completion. (1 hour lecture, 4 hours pool activity/ocean dives)

214B Intermediate Scuba (3)
Prerequisite: Open Water Scuba Certification. Application of scuba diving, including photography, navigation, salvage, game hunting, night diving and others. Advanced Scuba Certification for successful completion. (1 hour lecture, 4 hours pool activity/ocean dives)

240 Teaching Team Sports (3)
Provides knowledge of the team sports of volleyball, basketball, soccer, softball and football, including histories, skills, rules, teach progressions and sport-specific teaching strategies. Appropriate teaching strategies are intended to promote active participation and experiential learning. (2 hours lecture, 2 hours activity)

241 Teaching Nontraditional Team Sports (3)
Prepares pre-service teachers (e.g., future Physical Education teachers) with knowledge of nontraditional team sports, including histories, fundamental skills, teaching progressions, sport-specific teaching strategies, sport rules, and officiating. (2 hours lecture, 2 hours activity)

242 Teaching Lifetime Physical Activity (3)
Provides knowledge, skills and experiences necessary to lead young people in gaining the skills, knowledge, attitudes and behaviors required to lead physically active lifestyles. Appropriate teaching strategies are used to promote active participation and experiential learning. (2 hours lecture, 2 hours activity)

246A Basic Hatha Yoga (2)
Basic Yoga postures, breathing and relaxation techniques, and beginning meditation techniques from theoretical and experiential perspectives. Awareness, concentration and breathing patterns that accompany the movements of Hatha Yoga. (1 hour lecture, 2 hours activity) (Same as Comparative Religion 246A)

246B Intermediate Hatha Yoga (2)
Prerequisites: one year of yoga experience or completion of Kines 246A. Recommended: concurrent enrollment in Kines 246B. Preparation for teaching Hatha Yoga techniques and philosophies to the general public. Instruction on yogic lifestyle and advanced yoga practices. (2 hours lecture, 2 hours activity)

250 Mental Skills for Sport Performance (3)
Understanding of the mental aspects of sport performance and learning mental skills that can be used to enhance sport performance. (Credit/No Credit only)

256 Advanced Tai Chi (2)
Prerequisite: Kines 156. Improving understanding of history and philosophy of Tai Chi and deepening the practice of Tai Chi for greater health benefits. Lectures, discussions. Tai Chi, and related meditative practices. (1 hour lecture, 2 hours activity)

260 Movement Anatomy (3)
Prerequisite: Kines /Bio 210 or equivalent. Pre- or corequisite: Kines 202. Muscular-skeletal system and its function in human movement. Movement in sports skills and the muscles involved.

300 Principles of Human Movement (3)
Prerequisites: Kines 260. Pre- or corequisite: Kines 202 and four of required six units of approved performance courses. General movement patterns as applied to sport and human movement.

325 Techniques of Coaching (3)
Factors related to coaching strategies and techniques: philosophy, ethics, legal issues, gender, multicultural and equity issues, leadership, motivation, team management, budget, recruiting, equipment purchase, skill acquisition, season planning, conditioning, nutrition and drugs.
342 Stress Management (3)
Kinesiology majors may count this course either for the major or for General Education. (Same as Health Science 342)

348 Physiology of Exercise (3)
Prerequisites: Kines 210 or a human physiology course or equivalent. Pre- or corequisite: Kines 202. Physiological processes in physical activities and the effect of training upon performance.

348L Physiology of Exercise Laboratory (1)
Prerequisite: prior completion or concurrent enrollment in Kines 348. Laboratory techniques in physiology of exercise. (3 hours laboratory)

349 Measurement and Statistics in Kinesiology (3)
Pre- or corequisite: Kines 202. Study of measurement theory and statistics used in the evaluation of health and human performance, with special focus on the analysis and interpretation of data in different environments. One or more sections offered online.

350 Nutrition (3)
(Same as Health Science/Nursing 350)

351 Principles of Strength and Conditioning (3)
Prerequisites: Kines 260 and 348; Kines 300 recommended. Conditioning for those who plan to coach or supervise fitness programs. Circuit training, nutrition, motivation, weight control and kinesiology factors.

352 Principles of Teaching Group Fitness (3)
Prerequisites: Kines 210. Provide content knowledge and practical experience concerned with teaching group fitness. Teaching principles, techniques and safety. Variety of exercise formats.

353 Physical Activity and Lifelong Well-Being (3)
Prerequisites: one course from General Education (G.E.) Category III. Integration of physiological, psychological and sociological understandings of the human being in relationship to physical activity as a lifelong pursuit. Topics include physical fitness, nutrition, stress reduction, socialization, and individual differences in human behavior. Kinesiology and Health Science majors may count this course either for the major or for G.E. One or more sections offered online. (Same as Health Science 353)

354 Cardiovascular Exercise Testing and Prescription (formerly 452) (3)

363 Developmental Adaptations of the Atypical (3)
Prerequisites: Kines 300, 348 and 364. Study of the disabled whose unique needs in motor development determine their least restrictive environment in physical activity. Programs of games, sports and exercise in diversified settings; legally mandated regulations.

364 Motor Development (3)
Prerequisites: Kines 260. Life span motor development: age, sex, ethnic, cultural and perceptual components, their implications and the main course of action needed in developmental strategies for optimal motor behavior development.

365 Prevention and Care of Athletic Injuries (3)
Prerequisites: Kines 202. Immediate observation and examination of injuries. Special emphasis on the etiology, pathology, signs, symptoms and complications related to injuries sustained by athletes.

367 Clinical Proficiencies in Athletic Training I (1)
Prerequisites: Kines 202 and admission to Athletic Training Education Program. Develop a cognitive understanding and a practical knowledge of the various clinical skills required in a first-semester athletic training student.

368 Clinical Proficiencies in Athletic Training II (1)
Prerequisites: Kines 367. Knowledge and develop clinical skills related to athletic training, including environmental safety, protective equipment, surface anatomy, palpation skills, special and functional tests, fitness testing techniques, etc.

369 Clinical Proficiencies in Athletic Training III (1)
Prerequisites: Kines 368. Knowledge and develop clinical skills related to athletic training, including environmental safety, protective equipment, surface anatomy, palpation skills, special and functional tests, fitness testing techniques, etc.

371 Human Motor Control and Learning (3)
Prerequisite: Kines 210 or a human anatomy course. Pre- or corequisite: Kines 202. Neural, musculoskeletal and psychological mechanisms underlying the control and learning of movement skills across the lifespan.

373 Advanced Injury Assessment of the Lower Extremity (3)
Prerequisites: Kines 365. Develop knowledge and clinical skills related to the recognition, evaluation and assessment of pathologies to the lower extremity and lumbar spine.

374 Advanced Injury Assessment for the Upper Extremity (3)
Prerequisites: Kines 365. Develop knowledge and clinical skills related to the recognition, evaluation, and assessment of pathologies to the upper extremity and cervical spine.

375 Management of Sport/Exercise Emergencies (3)
Prerequisite: Kines 202. Theoretical, practical and clinical basis for the recognition, treatment and management of medical emergencies and catastrophic situations involving the physically active individuals, including athletes.

377 Therapeutic Exercise in Rehabilitation (3)
Prerequisite: Kines 202. Theoretical and clinical basis for therapeutic exercise in rehabilitation. Therapeutic exercises as they relate to injury rehabilitation will be developed for student syntheses and understanding.
378 Therapeutic Modalities in Rehabilitation (3)
Prerequisite: Kines 202. Theoretical, clinical, and practical basis for the use of therapeutic modalities in rehabilitation. Develop physical agents and biophysics, indications, contraindications, physiological effects, and applications.

380 History and Philosophy of Human Movement (3)
Prerequisites: completion of G.E. Category II.A and III.B.2. Pre- or corequisite: Kines 202. Historical development of thought and practice in athletics, sport, kinesiology, play, dance, and other human movement forms from ancient Greeks to the present. Philosophical theories of human movement relative to personal identity, reality, being, values, and nature of competition.

381 Sports, Games and Culture (3)
Prerequisites: one course from G.E. Category III Pre- or corequisite: Kines 202. Human movement in the cultural milieu. Historical and contemporary interpretations of the role of play, games, sports, dance and recreation in human life.

383 Psychology of Sport and Physical Activity (3)
Pre- or corequisite: Kines 202. Introduction to theory and research of psychological processes that influence human performance in numerous movement settings including sport, exercise, and rehabilitation. Topics include individual difference variables (e.g., personality, arousal/anxiety, and motivation), social psychological variables (e.g., aggression, leadership, and group dynamics), and assessment and intervention (e.g., goal setting, cognitive techniques, and behavioral change strategies).

384 Sport Sociology (3)
Prerequisite: Kines 381. Sport and social institutions and social processes. Understanding sport as a social phenomenon.

385 Instructional Analysis of Human Movement (3)
Prerequisites: completion of six units of kinesiology performance classes in specified areas (i.e., fitness, aquatics, combatives, individual sports, court/racquet sports, team sports) and Kines 300. Variables and principles that contribute to effective observation, analysis and instruction of human movement skills across the life span.

386 Movement and the Child (3)
Prerequisite: completion of G.E. Categories III.A.2 and III.C.1; corequisite. Kines 494 for teacher education kinesiology majors only. Characteristics of the child; physical growth and development; basic mechanical principles related to human movement and motor learning; and concepts related to the design of physical activity programs that are appropriately challenging for children at various developmental levels.

387 Movement and the Adolescent (3)
Corequisite: Kines 494 for teacher education kinesiology majors only. Implement physical education programs at the secondary level. Cognitive, affective and psychomotor development; structure, concepts and principles related to human movement and motor learning; concepts related to the design of secondary school movement programs.

396 Physical Education Tutorial (1)
Prerequisite: consent of instructor and tutorial adviser. Supervised experience in performance or laboratory situations through tutoring or assisting in instruction. May be repeated for six units of credit. A maximum of three units may be applied toward the major.

405 Worksite Injury Prevention and Rehabilitation (3)
(Same as Health Sci 405)

406 Principles of Sport and Exercise Management (3)
Broad overview of sport/exercise management enterprise, including school, facility, professional, commercial, industrial, corporate management and specialists in marketing, print/electronic media. Job descriptions, professional preparation and placement opportunities are detailed. Portfolio development.

410 Issues in Youth Sports (3)
Prerequisite: Kines 381. Recommended prerequisite: Child/Adolescent Studies 312. Interdisciplinary examination of trends and issues in youth sport, focusing on non-school based community programs. Structural characteristics of sport and physical activity programs as they pertain to proper development of children and adolescents.

414 Legal Issues in Kinesiology (3)
Prerequisites: graduate or upper-division standing; and Kines 202 or Communications 346. Introduction to the legal system and the law as applied to sport and exercise settings, which includes the areas of sports, fitness and healthcare, and recreational activities, with an emphasis on understanding the concepts of ethics, negligence and risk management.

430 Applied Sport Psychology (3)
Prerequisites: Kines 383. Application of principles from sport psychology literature to enhance athletes’ and coaches’ performance.

432 Applied Exercise Psychology (3)
Prerequisites: Kines 383. Understanding and applying the principles from exercise psychology to enhance competencies and skills related to preventive and rehabilitative exercise programs.

442 Teaching Physical Education (3)
Prerequisite: admission to Teacher Education. Objectives, methods and materials of teaching Physical Education K-12. Required before student teaching. Part of the 12-unit education block and may not be taken separately. Credit/No Credit only. Requires “B” (3.0) or better for credit.
449E Externship in Secondary Teaching (3)
To be taken concurrently with Kines 442. See description under Secondary Education. (Credit/No Credit only. Requires “B” (3.0) or better for credit.)

449I Internship in Secondary Teaching (10)
See description under Secondary Education. Credit/No Credit only. Requires “B” (3.0) or better for credit.

449S Seminar in Secondary Teaching (2)
See description under Secondary Education. Credit/No Credit only. Requires “B” (3.0) or better for credit.

451 Sports Medicine (3)
Prerequisites: Kines 348 and 348L. Alterations in human movement, anatomy and physiology that are caused by such factors as injury, drugs and environment.

453 Clinical Exercise Physiology (3)
Prerequisites: Kines 348 and 354. Kines 354 recommended. Application of exercise physiology concepts to clinical/pathological situations in order to determine the therapeutic and functional benefits of physical activity.

454 Physical Dimensions of Aging (3)
Prerequisites: minimum of six units of upper-division kinesiology courses completed or six units from the gerontology minor. Scientific evidence concerning the relationship between level of physical activity and one’s physical, mental and psychological well-being during aging.

455 Functional Performance Assessment and Programming for Older Adults (3)
Prerequisites: Kines 349 and Kines 353, 371 or 454. Development of technical and personal skills related to functional performance assessment and to the development and implementation of physical activity programs for healthy and frail older adults.

456 Environment Exercise Physiology (3)
Prerequisite: Kines 348. Interrelationship between the physical environment and the human while exercising under different states of fitness and acclimatization.

457 Practice of Personal Training (3)
Prerequisites: Kines 260, 348, 351, 354 and junior or senior standing; Kines 300 recommended. Physiological responses and adaptations associated with strength and aerobic training to design fitness programs across the lifespan. Scientific foundation, client evaluation, exercise technique, safety and legal issues, program design and special populations.

460 Worksite Health Promotion (3)
(Same as Health Science 460)

461 Biomechanical Analysis of Human Movement (3)
Prerequisites: Kines 300, Physics 211 recommended. Analytical approach to mechanics of human motion. Quantitative video analysis techniques are introduced and applied to select movement analysis projects.

463 Biomechanics of Musculoskeletal Injury (3)
Prerequisites: Kines 300. Biomechanical analysis of bone, joint cartilage and collagenous tissue, and of forces and moments acting at the major joints of the human body with specific interest on how these forces contribute to musculoskeletal injuries.

465 Administration and Leadership in Athletic Training (3)
Prerequisites: Kines 365. Theoretical, legal, moral, ethical, technical and practical aspects of administration and leadership in sports healthcare programs, including those in athletic training.

468 Clinical Proficiencies in Athletic Training IV (1)
Prerequisites: Kines 369. Develop a cognitive understanding and a practical knowledge of various clinical skills required of a fourth-semester athletic training student.

469 Clinical Proficiencies in Athletic Training V (1)
Prerequisites: Kines 468. Develop a cognitive understanding and a practical knowledge of various clinical skills required of a fifth-semester athletic training student.

471 Motor Control and Movement Dysfunction (3)
Prerequisites: Kines 371. Contemporary motor control theories and how they are applied to the development of therapeutic exercise programs for children and adults with balance and movement disorders caused by disease and/or trauma to the neurological system.

480 Gender Issues and Sport (3)
Prerequisites: Kines 381 or completion of G.E. Category III.C. Multidimensional focus of influences impacting women's competitive and non-competitive sport participation with emphasis on access, inclusion, adherence, benefits/liabilities and lifelong well being.

494 Practicum (1-3)
Prerequisites: consent of faculty sponsor, field supervisor, fieldwork coordinator and department chair. Planning, preparing, coaching, teaching in public school, college or community physical education or recreation programs. May be repeated for a maximum of six units of credit. Credits not applicable toward major or fifth year work. (Credit/No Credit only)

495 Internship in Kinesiology (3)
Prerequisites: minimum of 12 units of upper-division kinesiology coursework completed, faculty sponsor, field supervisor, fieldwork coordinator and department chair consent. Seminar for analysis of field experiences, including appropriate theory, skills and techniques, in addition to supervised experience in an approved fieldwork location agency. Internship must be specific to the discipline of kinesiology. Minimum of 120 hours per semester. Application forms must be completed and approved prior to enrollment. May not be repeated for credit toward the major.
499 Independent Study (1-3)
Prerequisite: minimum of 15 upper-division kinesiology courses completed. Topics based on a study plan prepared in cooperation with a faculty supervisor. Culminates in a paper, project, comprehensive examination or performance. Application forms must be completed and approved prior to enrollment. Maximum of three units in any one semester; may be repeated once.

508 Statistical Methods in Kinesiology (3)
Prerequisites: graduate status, Kines 349. Statistical theory, data collection procedures, techniques for analysis and interpretation of data.

510 Research Methods in Kinesiology (3)
Prerequisites: graduate status, Kine 508. Fundamental tools of research. Types of research, process of scientific inquiry and critical analysis of research. Topic selection and development of a research proposal.

516 Advanced Study of the Philosophical Perspective of Human Movement (3)
Prerequisites: graduate status, Kines 380. Methods of the philosophical process of human movement.

550 Graduate Internship (3)
Prerequisites: graduate status, consent of faculty sponsor, field supervisor, field coordinator and chair. On-the-job training experiences supervised by a fully trained practitioner. Minimum of 120 hours per semester plus conferences with faculty sponsor. Application forms must be completed and approved prior to enrollment. Upon completion of the internship, a written evaluation must be submitted. Not open to students on, or subject to, academic probation.

551 Advanced Study in Physiology of Exercise (3)
Prerequisites: graduate status, Kines 348 and 348L. Current issues and research in physiology of exercise with emphasis on physiological control during acute exercise. Includes written, oral and laboratory assignments.

555 Applied Strength and Conditioning (3)
Prerequisites: graduate status, Kines 351 and 551. Anatomical and physiological bases for programs that develop physical fitness and performance.

557 Instructional Strategies in Physical Education and Sport (3)
Prerequisites: graduate status, Kines 371 or 383. Theoretical concepts, models and research on instructional strategies for Physical Education, sport and related professional setting. Highly recommended for graduate students in all concentrations in Physical Education.

558 Advanced Study in Teaching Human Movement (3)
Prerequisites: graduate status, Kines 300 or 371 or consent of the instructor. Historical perspectives and current trends in pedagogical research and the resultant principles that undergird the science of teaching human movement.

561 Advanced Study in Biomechanics (3)
Prerequisites: graduate status, Kines 461. Advanced methods and concepts associated with the quantification of human movement. Biomechanical analysis of force plate and three-dimensional video data.

571 Advanced Study in Human Motor Control and Learning (3)
Prerequisites: graduate status, Kines 371. In-depth study of contemporary trends and issues in motor control/learning research. Application of research to practice.

580 Advanced Study in Sport and Exercise Psychology (3)
Prerequisites: graduate status, Kines 383. Current issues and research in sport and exercise psychology. Topics include motivation, personality, leadership and group dynamics, attention/concentration, exercise adherence/compliance, sport and exercise injury, and behavioral change strategies.

581 Consultation in Applied Sport Psychology (3)
Prerequisites: Kines 383, 430 and graduate standing. Factors related to effective consultation for enhancing athletic performance. Knowledge of consultation issues will be derived from the existing best practices and literature with the purpose of drawing practical applications for the new professional. May be repeated for a maximum of six units credit.

582 Advanced Study in Sociocultural Perspectives of Human Movement (3)
Prerequisites: graduate status and Kines 384. In-depth study of theories and methods of the sociocultural perspective and their application to the study of human movement phenomena.

597 Project (3)
Prerequisites: graduate classified status, Kines 510, successful completion of an oral presentation of the project, and signature of all committee members on or before the census date of the semester in which the student elects to enroll. Directed independent inquiry. Not open to students on, or subject to, academic probation.

598 Thesis (3)
Prerequisites: graduate classified status, Kines 510, successful completion of an oral presentation of the thesis, and signatures of all committee members on or before the census date of the semester in which the student elects to enroll. Student will select and have approved a research proposal, conduct the research, and prepare a formal analysis and report. May be repeated. Not open to students on, or subject to, academic probation.

599 Graduate Independent Research (1-3)
Prerequisites: graduate status, Kines 510, and consent of the faculty adviser and chair. Student research in a specific area of human movement studies. Application forms must be completed and approved prior to enrollment. Upon completion of the research, a written report must be submitted. Not open to students on, or subject to, academic probation. Maximum of three units in any one semester; may be repeated once.
INTRODUCTION

Latin America is our closest neighbor and a developing region with vast potential. Countries range in size from the Dominican Republic to resource-rich Brazil, which is larger than the continental United States.

By pursuing a broad, yet in-depth course of study, Latin American Studies students are well equipped to enter many fields and occupations as teachers in the United States or Latin America, as business people sensitive to Latin American history and culture, or as journalists, lawyers and doctors where contact with Latin America or Latin Americans in the United States is important.

The Latin American Studies major is designed to provide an in-depth, interdisciplinary understanding of Latin America. Majors develop language proficiency in Spanish and Portuguese, and have a broad range of courses from which to choose in anthropology, art, Chicana/o studies, economics, history, geography, political science, and modern languages and literatures. The major is well-suited for: (1) students who wish to pursue careers that require residence in or knowledge of Latin America (e.g., business, journalism, government); (2) those who plan to teach Spanish and/or social sciences in the secondary schools; and (3) students who wish to pursue graduate work in Latin American studies or other disciplines where a Latin American specialization would be helpful (e.g., political science, economics, history).

BACHELOR OF ARTS IN LATIN AMERICAN STUDIES

The Bachelor of Arts in Latin American Studies requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements, and free electives.

Prior to graduation, each student must demonstrate a critical and in-depth understanding of Latin America from an interdisciplinary perspective reflected in the courses that make up the major. The student must complete either a capstone experience through one of the 400-level elective courses offered, or the capstone course (once approved and offered). Students completing the capstone experience will identify and complete a project under the supervision and guidance of the instructor of the 400-level course (e.g., research paper, Power Point presentation, poster, community service project) that must have a writing component. Once the capstone project is completed, the student should submit a copy of the written portion of the project to the Program Coordinator. When offered, students may enroll in the variable topic Latin American Studies Capstone Course as an option in fulfilling the requirement.

Foundation Courses

All majors should develop a language proficiency level equivalent to Spanish 204 and Portuguese 102. Students with no language background should take:

- Spanish 101 Fundamental Spanish - A (5)
- Spanish 102 Fundamental Spanish - B (5)
Spanish 203 Intermediate Spanish - A (3)
Spanish 204 Intermediate Spanish - B (3)
Portuguese 101 Fundamental Portuguese - A (4)
  (usually offered in the Fall)
Portuguese 102 Fundamental Portuguese - B (4)
  (usually offered in the Spring)

A student with knowledge of Spanish and/or Portuguese may be able to meet part or all of the foundation course requirements after evaluation by the Department of Modern Languages and Literatures.

**Required Fields of Study**

*Upper-Division Writing Requirement (3 units)*
English 301 Advanced Composition (3)

*Language (3 units)*
Spanish 301 Advanced Grammar and Composition (3)
  OR Portuguese 317 Advanced Conversation and Composition (3)

*History and Culture (9 units)*
Spanish 316 Introduction to Spanish American Civilization (3)
  OR Portuguese 325 Contemporary Brazilian Civilization (3)
Latin Amer Studies 300 Topics in Latin America (3)
Three units in upper-division Latin American History (3)

*Social Science (6 units) selected from two departments*
Anthropology 325 Peoples of South America (3)
Anthropology 329 Peoples of the Caribbean (3)
Anthropology 423 The Ancient Maya (3)
Anthropology 424 The Aztecs and Their Predecessors (3)
Economics 333 Economic Development: Analyses and Case Studies (3)
Economics 334 Economics of Latin America and the Caribbean (3)
Geography 333 Latin America (3)

Upper-division Latin American Political Science courses when offered.

**Elective Fields of Study**

Twelve units selected from three or more of the following groupings chosen in consultation with the program coordinator:

*Culture*
Anthropology 325 Peoples of South America (3)
Anthropology 329 Peoples of the Caribbean (3)
Anthropology 423 The Ancient Maya (3)
Anthropology 424 The Aztecs and Their Predecessors (3)
Chicana/o 302 Ancient Mexican Culture (3)
Chicana/o 303 Cultural Differences in Mexico and the Southwest (3)
Chicana/o 353 Mexico Since 1906 (3)
Comparative Religion/Chicana/o 367 Latino Spirituality and Religion (3)

*Geography 452 Ecotourism (3)*

Latin Amer Studies/Chicana/o 350 Mexican Life and Culture (3)
  (offered only as part of CSUF La Paz program.)
Portuguese 317 Advanced Conversation and Composition (3)
  OR Spanish 301 Advanced Grammar and Composition (3)
Portuguese 320 Introduction to Luso-Brazilian Culture and Civilization (3)
Portuguese 325 Contemporary Brazilian Civilization (3)
  OR Spanish 316 Introduction to Spanish-American Civilization (3)
Spanish 416 Contemporary Spanish-American Culture (3)

*Fine Arts and Literature*
Art 460 Pre-Columbian Art (3)
Art 462 Latin American Art from 1800 to the 1950s (3)
Art 480T Selected Topics in Art History (3)*
Chicana/o 304 Music of Mexico (3) (Same as Music 304)
Chicana/o 330 Evolution of Mexican Literature (3)
Chicana/o 333 Mexican Literature Since 1940 (3)
Chicana/o 336 Main Trends in Spanish-American Literature (3)
Spanish 440 Spanish-American Literature to Modernismo (3)
Spanish 441 Spanish-American Literature Since Modernismo (3)
Spanish 466 Spanish Phonology and Dialectology (3)
Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

*History and Politics*
History 350 History of Latin American Civilization (3)
History 449 Race, Ethnicity and Gender in Latin America (3)
History 451 Colonial Period of Latin America (3)
History 452 20th-Century Brazil (3)
History 453A History of Mexico Pre-Columbian (pre-1521) through 1821 (3)
History 453B History of Mexico from Independence to Modern Day (3)
History 454 19th Century Latin America: Era of Nation Building (3)
History 455 Latin America Since 1945 (3)
Political Science 437 Latin American Politics (3)

Upper-division Latin American Political Science courses when offered.*

*Geography and Economics*
Economics 333 Economic Development: Analyses and Case Studies (3)
Economics 334 Economics of Latin America and the Caribbean (3)
Geography 333 Latin America (3)

*Latin American Studies*
Latin American Studies 399 Directed Studies (1-3)
MINOR IN LATIN AMERICAN STUDIES

The minor in Latin American studies is designed to complement other majors for which a focus on Latin America can be beneficial (e.g., history, international business, communications, Spanish, economics and political science). Prospective secondary teachers may find this minor particularly attractive. The minor requires proficiency in either Spanish or Portuguese, as defined above for the major; three units of cultural history (Latin Amer Studies 300, History 350 or Spanish 316 or Portuguese 325); and nine units of approved electives from at least two departments listed below; or from the Latin American Studies "Elective Fields of Study" list.

Anthropology 423 The Ancient Maya (3)
Anthropology 424 The Aztecs and Their Predecessors (3)
Anthropology 325 Peoples of South America (3)
Anthropology 329 Peoples of the Caribbean (3)
Art 460 Pre-Columbian Art (3)
Art 462 Latin American Art from 1800 to the 1950s (3)
Art 480T Selected Topics in Art History (3)*
Chicana/o 302 Ancient Mexican Culture (3)
Chicana/o 303 Cultural Differences in Mexico and the Southwest (3)
Chicana/o 304 Music of Mexico (3) (Same as Music 304)
Chicana/o 330 The Evolution of Mexican Literature (3)
Chicana/o 333 Mexican Literature Since 1940 (3)
Chicana/o 336 Main Trends in Spanish-American Literature (3)
Chicana/o 340 Mexican Intellectual Thought (3)
Chicana/o 353 Mexico Since 1906 (3)
Economics 333 Economic Development: Analysis and Case Studies (3)
Economics 334 Economics of Latin America and the Caribbean (3)
Geography 333 Latin America (3)
History 451 Colonial Period of Latin America (3)
History 452 20th-Century Brazil (3)
History 453A History of Mexico Pre-Columbian (pre-1521) through 1821 (3)
History 453B History of Mexico from Independence to Modern Day (3)
History 454 19th Century Latin America: Era of Nation Building (3)
History 455 Latin America Since 1945 (3)
Upper-division Latin American Political Science courses when offered* 
Political Science 437 Latin American Politics (3)
Portuguese 310 Portuguese in the Business World (3)
Portuguese 317 Advanced Conversation and Composition (3)
Portuguese 320 Introduction to Luso-Brazilian Culture and Civilization (3)
Portuguese 325 Contemporary Brazilian Civilization (3)
Spanish 301 Advanced Grammar and Composition (3)
Spanish 310 Spanish in the Business World (3)
Spanish 316 Introduction to Spanish-American Civilization (3)
Spanish 416 Contemporary Spanish-American Culture (3)
Spanish 440 Spanish-American Literature to Modernismo
Spanish 441 Spanish-American Literature Since Modernismo (3)
Spanish 466 Spanish Phonology and Dialectology (3)
Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

*Latin American focus only.

LATIN AMERICAN STUDIES COURSES

Course are designated as LTAM in the class schedule.

300 Topics in Latin America (3)
Prerequisite: completion of General Education Category III.C.1. Interdisciplinary examination and discussion of the history, geography, peoples, and major issues of Latin America from pre-Colonial times to the present.

350 Mexican Life and Culture (3)
Prerequisite: completion of General Education Category III.C.1. Introduction to Mexican culture and civilization. Contemporary Mexican society with focus on social, political, environmental, cultural and historical issues. Requires travel to La Paz, Baja California, Mexico and will only be offered in summer or intersession. Letter grade or credit/no credit. (Same as Chicana/o 350)

399 Directed Study (1-3)
Prerequisite: approval of program coordinator. Supervised individual or small group study as an elective. May be repeated for credit with different content.
INTRODUCTION

Liberal Studies is an interdisciplinary department that integrates concepts from the humanities and arts, the natural sciences and the social sciences. Some core courses trace the historical development of these areas of knowledge in their intellectual and cultural context. The broad framework of these courses will enable students to see the whole range of human knowledge. Other core courses compare and contrast the methods and underlying assumptions of the humanities and arts, the natural sciences and the social sciences, and explore the ways in which these disciplines communicate. The critical thinking and communication skills these courses develop provide students with the self-confidence that comes from being able to express one’s ideas clearly and effectively both orally and in writing. The core courses use a combination of lecture, discussion and seminar to make the student not only a well-rounded, well-educated person, but also a more independent thinker and a more creative human being.

The major in Liberal Studies is designed for students who desire the broadest possible liberal education: (1) as preparation for teaching all subjects in the elementary school classroom; (2) as an alternative approach to careers in business; (3) as preprofessional preparation for entry into professional schools in the health sciences, law, ministry, etc.; (4) as a means of obtaining specific occupational requirements that cannot be met from coursework in a single department; (5) and as a source of personal growth and development.

AWARDS IN LIBERAL STUDIES

The Outstanding Elementary Education Plan Student Award and the Outstanding Thematic Plan Student Award go to the outstanding graduating senior in each plan.

MULTIPLE SUBJECT CREDENTIAL PROGRAM

In addition to completing their B.A. in Liberal Studies, students seeking a Multiple Subject (Elementary) Credential need to enter a state-approved Multiple Subject Credential Program.

The Bachelor’s Degree in Liberal Studies may be effectively combined with subject matter studies necessary for the multiple subject teaching credential (K-8). Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education at 657-278-3352 to obtain information on attending an overview presentation.

STREAMLINED TEACHER EDUCATION PROGRAM

Designed for freshmen planning to be teachers, students in the Streamlined Teacher Education Program (STEP) combine their bachelor’s degree requirements with credential program courses to earn both the degree and the preliminary credential in an
efficient, well-planned program. For a special education credential, one additional semester is required. Students in STEP complete the requirements for the bachelor's degree in Child and Adolescent Development or Liberal Studies, and the requirements for a Professional (preliminary) Multiple Subject Credential (for teaching elementary school) and/or an Education Specialist Credential (for teaching special education).

Students in STEP benefit from early field experience in K-12 classrooms, regular contact with faculty members from their major departments and from the education departments, and regular advisement and support throughout the program. Students in STEP also have multiple opportunities to meet and work with other students in the program, facilitating their social connections with other students with similar career aspirations.

Transfer students may also participate in STEP. To be well-positioned to participate in the program, they must seek advisement from their community college counselors as early in their academic careers as possible. Students in this program must take a particular pattern of courses to satisfy General Education Program requirements. Transfer students should check the Center for Careers in Teaching website for more information.

For further information about STEP, please visit the Center for Careers in Teaching (CCT) website at www.fullerton.edu/cct or visit the CCT directly in H113.

BACHELOR OF ARTS IN LIBERAL STUDIES

The Bachelor of Arts in Liberal Studies requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. The 27 units of core courses are required of all majors. In addition, students must take the 24-unit option under the Elementary Education Plan or the Interdisciplinary Thematic Plan. Each course counted for the major must be completed with a grade of "C" (2.0) or higher.

Core Courses (27 units)
Liberal Studies 300 Introduction to Liberal Studies (3)
Liberal Studies 301 Inquiry and Composition in Liberal Studies (3)*
History/Liberal Studies 302A Historical Dimension of Liberal Studies (3)
History/Liberal Studies 302B Historical Dimension of Liberal Studies (3)
Liberal Studies 303 Liberal Studies in the Humanities and Arts (3)
Liberal Studies 304 Liberal Studies in the Sciences (3)
Liberal Studies 305 Liberal Studies in the Social Sciences (3)
Liberal Studies/Philosophy 401 Knowledge in the Arts and Sciences (3)

*Fulfills the course requirement of the university upper-division baccalaureate writing requirement for Liberal Studies majors.

One of the following Senior Seminars:
Liberal Studies 485 Senior Seminar in Cultural Diversity (3)
Liberal Studies 486 Senior Seminar in Humanities and Arts (3)
Liberal Studies 487 Senior Seminar in Evolution and Creation (3)
Liberal Studies 488 Senior Seminar in Environmental Studies (3)
Liberal Studies 489 Senior Seminar in Gender Issues (3)
Liberal Studies 490 Senior Seminar in Great Books (3)
Liberal Studies 491 Senior Seminar in Literature and Science (3)

Sequence of Core Courses
Because the core curriculum is designed as an integrated whole and builds upon the student's general education, there is an order in which these courses need to be taken and there are certain prerequisites for them. Introduction to Liberal Studies (Liberal Studies 300) and the Historical Dimension of Liberal Studies come first. The only prerequisite for Introduction to Liberal Studies is the completion of General Education Category I. The Historical Dimension of Liberal Studies 302A requires completion of General Education Category I.A. The Historical Dimension of Liberal Studies 302A, with a grade of at least "C" (2.0), is a prerequisite for The Historical Dimension of Liberal Studies 302B.

The Historical Dimension of Liberal Studies 302B and Liberal Studies 301 Inquiry and Composition in Liberal Studies, are prerequisites for Liberal Studies 303, 304 and 305 because Liberal Studies in the Humanities and Arts, Liberal Studies in Science, and Liberal Studies in the Social Sciences pick up the historical developments where Liberal Studies 302B leaves off. Since the courses in these three areas also integrate what the student has learned from general education, completion of General Education Category III.B.1 and 2 is required for Liberal Studies 303; completion of General Education Category III.A.1 and 2 is required for Liberal Studies 304; and completion of III.C.1 is required for Liberal Studies 305.

Knowledge in the Arts and Sciences and the Senior Seminar come last. Liberal Studies 401 or Philosophy 401 requires the completion of Liberal Studies 304 and either Liberal Studies 303 or 305. The Senior Seminar requires senior standing, the completion of 90 units of college work. Some of the senior seminars have additional prerequisites. Students may take whichever senior seminar they prefer.

The Elementary Education Plan (24 units)
The Elementary Education Plan, which is designed for students seeking an elementary or multiple subject teaching credential, provides academic preparation in many of the subject areas taught in the elementary school.

English 303 The Structure of Modern English (3)**
   OR English/Linguistics 206 Language Structure and Language Use (3)

One of the following:**

English 110 Literature of the Western World from Ancient through Medieval Times (3)
English 111 Literature of the Western World from the Renaissance through the 19th Century (3)
English 211 British Literature to 1760 (3)
English 212 British Literature from 1760 (3)
English 221 American Literature to Whitman (3)
English 222 American Literature from Twain to the Moderns (3)
Comparative Literature 324 World Literature to 1650 (3)*
Comparative Literature 325 World Literature from 1650 (3)*
English 341 Children's Literature (3)*
OR Theatre 311 Oral Interpretation of Children's Literature (3)*
Mathematics 303A,B Fundamental Concepts of Elementary Mathematics (3,3)**
Geology 410 Physical Science Concepts (3)
OR Biology 453 Life Science Concepts (3)
One of the following courses in Cultural Diversity in the Social Sciences*: Afro-Ethnic 304, 310, 311; American Studies 301, 320, 395; Anthropology 350, Asian American Studies 300, 340, 342; Chicano 305, 331; Geography 332; Human Comm 320; Sociology 357; Women's Studies 302.
One of the following courses in Visual and Performing Arts: Art 380, Dance 471, Music 433, Theatre 402A.

*These courses will also count toward meeting the upper-division requirement for general education.
**In exceptional cases substitutes may be made with the approval of the department chair.

The Interdisciplinary Thematic Plan (24 units)
The Interdisciplinary Thematic Plan (ITP) is designed for students who have broad interests that expand beyond the confines of a single department. For these students, the ability to construct their own area of interdisciplinary study by taking advanced coursework in several disciplines may be more beneficial than restricting their study to one of the various majors offered by the university. The Interdisciplinary Thematic Plan does not duplicate any existing major, and does not consist of a random collection of courses. It is a well-thought-out, highly individualized group of courses that, even though they come from various departments, have a common subject, focus or interest.

ITP students may center their coursework on an academic interest or may select courses that prepare them for later professional training or for specific careers.

The Personalized Coordinated Program (21 units)
The Personalized Coordinated Program (21 units) for the purpose of pursuing an interdisciplinary problem, theme or issue.

To ensure breadth of knowledge, ITP students are allowed to take: (a) no more than nine units from a single department; and (b) no more than 15 units from a single area of knowledge (humanities and arts, science, social sciences). ITP students should have their study plan approved by a liberal studies adviser prior to taking coursework.

The Senior Project (3 units)
To integrate and synthesize knowledge acquired through their Personalized Coordinated Program, ITP students must complete a senior project (such as a thesis or a creative work relevant to the theme of their Personalized Coordinated Program) by enrolling in three units of Independent Study (499) with a professor of their choice. During the semester prior to their enrollment in Independent Study (499), ITP students must attain the consent of a CSUF faculty member to supervise their Senior Project and must also get written approval of their Senior Project Proposal from a Liberal Studies adviser. Developed in close collaboration with the project supervisor, the proposal shall include a clear statement of the topic, a well-defined approach to the project, a preliminary list of sources and a specific schedule for the completion of the project, including realistic due dates for drafts or other indications of progress. Written approval of the proposal by both the project supervisor and a Liberal Studies adviser must be achieved before the student will be permitted to enroll in Independent Study (499).

As part of the project approval process, all ITP students are required to attend at least one short Senior Project Workshop during the semester prior to their enrollment in Independent Study (499). Senior Project Workshops will feature presentations by ITP students currently completing their projects as well as a faculty-taught module on techniques and procedures for the successful completion of a research paper or similar project. The workshops provide opportunities for ITP students to learn and gain support from their peers and faculty. No Senior Project Proposal will be approved without proof of the student’s attendance at a Senior Project Workshop. In order to graduate, all ITP students are required to present a brief summary of their Senior Project at one of the Senior Project Workshops scheduled during their final semester.

MINOR IN LIBERAL STUDIES
Students who wish to minor in Liberal Studies must complete the following 15 units:
History/Liberal Studies 302A* The Historical Dimension of Liberal Studies (3)
History/Liberal Studies 302B The Historical Dimension of Liberal Studies (3)
Liberal Studies 303 Liberal Studies in the Humanities and Arts (3)
Liberal Studies 304 Liberal Studies in the Sciences (3)
Liberal Studies 305 Liberal Studies in the Social Sciences (3)
A grade of “C” (2.0) or better is required in each course.

*Prior completion or concurrent registration in Liberal Studies 300, although a requirement for Liberal Studies majors, is not a requirement for Liberal Studies minors.
Students who minor in Liberal Studies are expected to attain a general understanding of significant concepts, themes and figures in the three general subject areas covered by the major: the arts and humanities, the social sciences and the natural sciences. Students learn to analyze, evaluate, and apply significant concepts, themes and arguments from the three general subject areas of Liberal Studies. Students should be able to recognize interdisciplinary connections among the three subject areas and synthesize parallel interdisciplinary connections among the three subject areas and synthesize parallel developments within them. They also learn to communicate effectively, in particular by being able to: (1) write clearly and correctly, and (2) analyze and present ideas and subject material coherently.

LIBERAL STUDIES COURSES

Courses are designated as LBST in the class schedule.

100 Introduction to the Humanities (3)
Interdisciplinary introduction to the humanities as a set of related disciplines that apply conceptual, critical, historical and linguistic analyses to advance our understanding of what it means to be human.

101 Introduction to the Social Sciences (3)
Major topics in the social sciences in order to understand their systematic study of human behavior, to realize the connections among particular issues and approaches, and to reflect critically on modern life.

300 Introduction to Liberal Studies (3)
Prerequisite: completion of General Education (G. E.) Category I. The natural world as theme, introductory exploration of values and modes of inquiry and expression in the arts and humanities, natural and social sciences.

301 Inquiry and Composition in Liberal Studies (3)
Prerequisite: completion of G. E. Category I. Selected thematic interconnections between the arts and humanities, sciences and social sciences through reading, discussion and composition. Satisfies the upper-division writing course requirement for majors in Liberal Studies.

302A Historical Dimension of Liberal Studies (3)
(Same as History 302A)

302B Historical Dimension of Liberal Studies (3)
(Same as History 302B)

303 Liberal Studies in the Humanities and Arts (3)
Prerequisites: Music 101 or equivalent, History 302B, Liberal Studies 301, and completion of G. E. Category III.B.2. Interdisciplinary approach to the humanities and arts that examines their purposes, structures and major developments in this century.

304 Liberal Studies in the Sciences (3)
Prerequisites: History 302B, Liberal Studies 301, and completion of G. E. Categories III.A.1. and III.A.2. Interdisciplinary introduction to the character and aims of 20th-century science, current theories and knowledge, and the role of science and technology in contemporary society.

305 Liberal Studies in the Social Sciences (3)
Prerequisites: History 302B, Liberal Studies 301, and completion of G. E. Categories III.C.1. Interdisciplinary introduction to modern social science in which major thinkers, ideas, movements and problems will be approached historically, comparatively and analytically.

310 The California Experience (3)
Prerequisite: completion of G. E. Category III.C.1. Seven themes in California studies. Explores the California experience through readings, films and music, and three writing assignments that ask them to research one topic each in the arts/humanities, social sciences and natural sciences in California. (Same as History 310)

325 Science on the Silver Screen (3)
Prerequisite: completion of G. E. Categories III.A.1. and III.A.2. Representations of science in film. Issues include images of scientists, the nature of science and science as problem solving. Readings and film will emphasize the variety of interactions between science and its depiction on the silver screen.

333 Evolution and Creation (3)
(Same as Philosophy 333)

401 Knowledge in the Arts and Sciences (3)
Prerequisites: Liberal Studies 304 and either Liberal Studies 303 or 305. Philosophical analysis and comparison of how the natural sciences, the social sciences, and the arts and humanities apply epistemological or aesthetic criteria to assess scientific and artistic activities. Discussion of the evolution of these criteria in their social and ideological context. (Same as Philosophy 401)

485 Senior Seminar in Cultural Diversity (3)
Prerequisites: senior standing, Liberal Studies 301 and 305, and completion of G. E. cultural diversity category. Intensive interdisciplinary study of the historical and cultural experiences of racial and ethnic groups in America. Emphasizes student-led discussions.

486 Senior Seminar in Humanities and Arts (3)
Prerequisites: senior standing and Liberal Studies 301 and 303. Intensive interdisciplinary study of selected topics in the humanities and arts. Integrates and builds upon previous classes in Liberal Studies and emphasizes student-led discussions.
**487 Senior Seminar in Evolution and Creation (3)**
Prerequisites: senior standing, Liberal Studies 301 and History 302B. Interdisciplinary examination of the relationship between evolutionary biology and the theology of divine creation. Traces the development of both perspectives from the pre-Darwinian period to the modern era. Emphasizes critical reading of texts and student-led discussions.

**488 Senior Seminar in Environmental Studies (3)**
Prerequisites: senior standing, Liberal Studies 301 and Liberal Studies 304 or 305. Interdisciplinary seminar involving the examination and analysis of environmental problems from the perspectives of the natural sciences and the social sciences. Students participate in class discussions and write papers on environmental topics.

**489 Senior Seminar in Gender Issues (3)**
Prerequisites: senior standing and Liberal Studies 301 and 305. Intensive interdisciplinary study of gender issues in the modern period. Emphasizes student-led discussions.

**490 Senior Seminar in Great Books (3)**
Prerequisites: senior standing, Liberal Studies 301, and History 302B. Intensive study of important books from early civilization to the present. Develops critical reading of texts, clear expression of ideas and integration of knowledge. Emphasizes student-led discussions.

**491 Senior Seminar in Literature and Sciences (3)**
Prerequisites: senior standing, Liberal Studies 301, and History 302B. Interdisciplinary examination of the relationships between literary and scientific communities, and of literature as a forum for the critique, appraisal, and assessment of science in culture.

**499 Independent Study (1-3)**
Prerequisites: consent of instructor and approval by Liberal Studies department chair. Individually supervised studies and/or projects. May be repeated once for credit.
INTRODUCTION

Linguistics is the study of language. Like other rapidly developing fields, linguistics resists simple classification into one of the traditional categories of academic disciplines. As one of the humanities, linguistics is concerned with the historical development of a particular language or language family. As a social science, linguistics may be related to anthropology in describing language as part of culture; it may even be considered a natural science, related to the physical science of acoustics and the biological sciences of anatomy and physiology. As an applied science, linguistics has found many applications in fields as far apart as language pedagogy, speech therapy and computer programming. Finally, linguistics may be considered a formal science in its own right, related to mathematics and logic.

The interdisciplinary aspects of linguistic study are reflected in the organization of the program, which offers a core of general linguistics courses and draws upon linguistically related courses in other departments.

Graduates use the major in linguistics for a liberal arts base in language-related fields. With advanced work, they enter teaching, language research, translation and linguistic field work, as well as such professional fields as law or teaching English as a second language.

The Bachelor of Arts is for students with an exceptional interest in and aptitude for the study of language. The essential relationships between language and thought and language and culture, the structure of modern languages, including English, the historical study of language, and formal techniques and methodologies are the theoretical foundations of linguistic analysis.

The M.A. in Linguistics builds upon a foundation of undergraduate study in linguistics and allied areas, such as foreign languages, English language, anthropology, human communication and related areas in psychology and philosophy. The program emphasizes strong preparation in general linguistics and offers the opportunity to specialize in one of several areas.

The relationship between linguistics and other disciplines and the application of its techniques, findings and insights to such activities as language teaching are treated in interdisciplinary courses and seminars.

Student Awards
Each year the program honors an outstanding undergraduate student with the Award for Excellence in Undergraduate Linguistics. The Patricia Bruner Memorial Award is awarded annually to a student in the M.A. program in recognition of a distinguished graduate project or academic record.

BACHELOR OF ARTS IN LINGUISTICS

The B.A. in Linguistics requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. A grade of “C” (2.0) or better is required in all courses applied to the major.
**Language Requirement**

Linguistics majors are required to take two progressive semesters of any two languages or four progressive semesters of any one language.

**Core Requirements (15 units)**

Linguistics 351 Introduction to Linguistic Phonetics and Phonology (3)
Linguistics 406 Descriptive Linguistics (3)
Linguistics 408 Syntax (3)
Linguistics 412 Sociolinguistics (3)
Linguistics 430 Historical Linguistics (3)

**Electives (18 units)**

Two must be from linguistics upper-division courses other than those listed as required above; and four may be selected from linguistics upper-division courses or from the courses listed below:

Child Development 312 Human Growth and Development (3)
English 303 The Structure of Modern English (3)
Modern Languages, any upper-division course (3)
Philosophy 368 First Course in Symbolic Logic (3)
Psychology 415 Cognitive Processes (3)

Students must consult with an adviser in linguistics before establishing their individual programs of study. Other courses in the university may be taken as electives with the permission of the adviser.

**MINOR IN LINGUISTICS**

The minor in linguistics provides a solid introduction to the scientific study of language for students in a related major field. Students are required to take: Linguistics 106, Linguistics 351 and Linguistics 406. In addition, 12 units in elective courses, selected with the approval of the undergraduate adviser, are required. It is thus possible to tailor the minor to individual needs in rounding out a course of study in the student’s major area of specialization. A grade of “C” (2.0) or better is required in all courses applied to the minor.

**MASTER OF ARTS IN LINGUISTICS**

**Application Deadlines**

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

**Admission to Graduate Standing: Conditionally Classified**

Requirements include a bachelor’s degree from an accredited institution and a minimum grade-point average of 2.5 in the last 60 semester units attempted.

**Graduate Standing: Classified**

Classification graduate standing requires a bachelor’s degree in Linguistics or a related field from an accredited institution with at least 3.0 GPA in the major courses provided that a minimum of 24 units of upper-division coursework is included.

If the student holds a bachelor’s degree in a major other than Linguistics, 24 units of upper-division coursework in Linguistics with a minimum of 3.0 GPA must have been completed.

Included among the 24 units of coursework must be the following courses or their equivalents:

Linguistics 351 Introduction to Linguistic Phonetics and Phonology (3)
Linguistics 406 Descriptive Linguistics (3)
Linguistics 408 Syntax (3)
Linguistics 412 Sociolinguistics (3)
Linguistics 430 Historical Linguistics (3)

A student who has not completed one or more of the preceding four courses may enroll in the required course(s) concurrently with graduate coursework in the program.

If the student lacks the prerequisite number of linguistics courses, they must be made up before commencing the master’s degree program, with at least a 3.0 GPA in such makeup coursework. In the event that the student’s GPA in prerequisite Linguistics courses is less than 3.0, six to nine units of probationary, adviser-approved coursework may be assigned. If the GPA in these probationary courses is 3.0 or better, the student may be classified. Some courses taken to make up qualitative deficiencies may be credited toward the M.A. if completed with a grade of “B” (3.0) or better, and if applicable to the student’s particular study plan. Courses taken to remove quantitative deficiencies may not be applied to the M.A. program.

Knowledge of one foreign language is required (equivalent of Modern Languages 317 course). Students without coursework in a foreign language may demonstrate proficiency by a score of average or better on the MLA-ETS Proficiency Examination for Advanced Students. Work toward fulfillment of this requirement may be taken concurrently with graduate work in linguistics.

Modifications of certain prerequisite requirements may be permitted in exceptional circumstances.

A study plan must be developed and approved for admission to classified graduate standing.

**M.A. STUDY PLAN REQUIREMENTS**

**Descriptive and Historical Linguistics (15 units)**

Linguistics 501 Research Methods and Bibliography (3)
Linguistics 505 Phonological Analysis (3)
Linguistics 507 Grammatical Analysis (3)
Linguistics 508 Theories of Syntax (3)
Linguistics 530 Graduate Seminar: Historical Linguistics (3)

Specialized Electives (9 units)

Coursework selected from any one of the following five areas of specialization, including other courses in the university with the approval of the adviser:

**Applied Linguistics**

English 303 Structure of Modern English (3)
French 466 Introduction to French Linguistics (3)
French 599 Independent Graduate Research (1-3)
German 466 Introduction to German Linguistics (3)
German 599 Independent Graduate Research (1-3)
Linguistics 305 The English Language in America (3)
Linguistics 307 Speech/Language Development (3)
Linguistics 416 Anthropological Linguistics (3)
Linguistics 599 Independent Graduate Research (1-3)
Spanish 466 Spanish Phonology and Dialectology (3)
Spanish 467 Spanish Morphology and Syntax (3)
Spanish 468 Spanish/English Bilingualism and Language Contact (3)
Spanish 599 Independent Graduate Research (1-3)
TESOL 509 Advanced Principles of TESOL: Listening/Speaking (3)
TESOL 510 Advanced Principles of TESOL: Reading and Writing (3)
TESOL 515 Pedagogical Grammar in TESOL (3)
TESOL 527 Second Language Acquisition (3)
TESOL 532 Technology and Second Language Learning (3)
TESOL 560 Second Language Assessment (3)

Anthropological Linguistics
Anthro 599 Independent Graduate Research (1-3)
Linguistics 416 Anthropological Linguistics (3)
Linguistics 599 Independent Graduate Research (1-3)
TESOL 500 Fundamentals in TESOL (3)

Analysis of Specific Language Structures
English 599 Independent Graduate Research (1-3)
French 466 Introduction to French Linguistics (3)
French 500 Graduate Seminar: Advanced Structure and Style (3)
French 530 Graduate Seminar: Historical Linguistics (3)
French 599 Independent Graduate Research (1-3)
German 466 Introduction to German Linguistics (3)
German 500 Graduate Seminar: Advanced Structure and Style (3)
German 530 Graduate Seminar: Historical Linguistics (3)
German 599 Independent Graduate Research (1-3)
Japanese 466 Introduction to Japanese Linguistics (3)
Japanese 468 Japanese-English Contrastive Analysis (3)
Linguistics 599 Independent Graduate Research (1-3)
Spanish 466 Spanish Morphology and Dialectology (3)
Spanish 500 Graduate Seminar: Advanced Structure and Style (3)
Spanish 530 Graduate Seminar: Historical Linguistics (3)
Spanish 599 Independent Graduate Research (1-3)

Communication and Semantics
Anthro 599 Independent Graduate Research (1-3)
Human Comm 599 Independent Graduate Research (1-3)
Linguistics 416 Anthropological Linguistics (3)
Linguistics 417 Psycholinguistics (3)
Linguistics 442 Changing Words: History, Semantics and Translation (3)
Linguistics 599 Independent Graduate Research (1-3)

Disorders of Communication
Human Comm 461 Audiology and Audiometry (3)
Human Comm 472 Voice and Craniofacial Disorders (3)
Human Comm 475 Fluency Disorders (3)
Human Comm 599 Independent Graduate Research (1-3)
Linguistics 307 Speech/Language Development (3)
Linguistics 369 Language, Sex Roles, and the Brain (3)
Linguistics 417 Psycholinguistics (3)
Linguistics 599 Independent Graduate Research (1-3)

Linguistics or a Related Field Elective (3 units)

Linguistics 597 Project (3 units)
A minimum of 15 units in 500-level courses is required. Satisfactory completion of a written comprehensive examination is required at the conclusion of the program. The examination may be repeated only once. A reading list for the examination and specifications for the project are available in the program office.

For further information, consult the graduate adviser.

LINGUISTICS COURSES
Courses are designated as LING in the class schedule.

106 Language and Linguistics (3)
Nature of language, its origin and development; language in culture, the structure of language and its systems of writing and transcription, and its application to other areas of humanistic and scientific knowledge.

108 Linguistics and Minority Dialects (3)
Sounds, meanings and vocabulary of African-American, Chicano and other English dialects and their historical origin. (Same as Chicana/o Studies 108 and Afro-Ethnic Studies 108)

206 Introduction to Language Structure and Language Use (3)
(Same as English 206)

301 Sanskrit (3)
Introduction to the Devanagari script, as well as the phonology, morphology and syntax of the Sanskrit language. A reading knowledge of Sanskrit will be the main goal of the course. (Same as Comp Religion 301)

305 The English Language in America (3)
(Same as English 305)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>307</td>
<td>Speech/Language Development (3)</td>
<td>(Same as Human Comm 307)</td>
</tr>
<tr>
<td>351</td>
<td>Introduction to Linguistic Phonetics and Phonology (3)</td>
<td>Nature and structure of sound systems in language. Thorough investigation of the International Phonetic Alphabet as applied to many different languages, including English. Language Acquisition (L1) and Language Learning (L2); analytic methods and techniques.</td>
</tr>
<tr>
<td>360</td>
<td>Nonverbal Communication (3)</td>
<td>Prerequisite: Ling 106 or Human Comm 100. Physical actions, gestures and changes in the physiognomy that occur together with language and paralanguage in human communication; substitutions for language and modifications of it in varying cultures. (Same as Human Communication 360)</td>
</tr>
<tr>
<td>369</td>
<td>Language, Sex Roles, and the Brain (3)</td>
<td>How gender socialization is reflected in the structure and use of language and whether gender differences in language are biologically based or a consequence of sex roles.</td>
</tr>
<tr>
<td>406</td>
<td>Descriptive Linguistics (3)</td>
<td>Sounds (phonology), forms and meanings (morphology), and syntax of languages. Examples and problem-solving in various languages. (Same as Anthropology 406)</td>
</tr>
<tr>
<td>408</td>
<td>Syntax (3)</td>
<td>Prerequisite: one of the following: Ling 106, 406 or Engl 303. Sentence structure in human language. Practice in syntactic analysis in a variety of languages.</td>
</tr>
<tr>
<td>412</td>
<td>Sociolinguistics (3)</td>
<td>Prerequisite: Ling 406 or equivalent. Social dialects in relation to the surrounding communities. Social stratification, acculturation, language maintenance, standardization, language planning and language change.</td>
</tr>
<tr>
<td>416</td>
<td>Anthropological Linguistics (3)</td>
<td>(Same as Anthropology 416)</td>
</tr>
<tr>
<td>417</td>
<td>Psycholinguistics (3)</td>
<td>(Same as Psychology 417)</td>
</tr>
<tr>
<td>430</td>
<td>Historical Linguistics (3)</td>
<td>Prerequisite: Ling 406 or its equivalent. Comparative method in diachronic linguistic methodology and theory, graphemics, glottochronology, language families, dialect geography and internal reconstruction. Fulfills the course requirement of the university upper-division baccalaureate writing requirement for linguistics majors.</td>
</tr>
<tr>
<td>442</td>
<td>Changing Words: History, Semantics, and Translation (3)</td>
<td>Prerequisite: Ling 351 or 430. Etymology, related problems of lexicography and translation. Recent developments in theory of semantic change as related to cultural shifts. Emphasizes words, collocations, idioms. (Same as English 442)</td>
</tr>
<tr>
<td>492</td>
<td>Linguistic Fieldwork (3)</td>
<td>Prerequisite: Ling 351 or 406. Methodology and practice of linguistic analysis and language description as practiced in the field. Data collection and processing of a non-Indo-European linguistic structure using native informants. May be repeated for credit.</td>
</tr>
<tr>
<td>499</td>
<td>Independent Study (1-3)</td>
<td>Supervised projects with consent of program coordinator. Topic varies with the student. May be repeated for credit.</td>
</tr>
<tr>
<td>501</td>
<td>Research Methods and Bibliography (3)</td>
<td>Prerequisites: graduate standing and Ling 406 or equivalent. Principal books, periodicals and collections in general linguistics, specific languages and related fields; techniques of preparing research papers and field reports in linguistics. Must be taken prior to Linguistics 597.</td>
</tr>
<tr>
<td>505</td>
<td>Phonological Analysis (3)</td>
<td>Prerequisites: Ling 351 and 406. Phonological systems that occur in languages; emphasizes terminology used to describe changes in the system and processes affecting it; problem solving of selected language data.</td>
</tr>
<tr>
<td>507</td>
<td>Grammatical Analysis (3)</td>
<td>Prerequisite: Ling 406. Word formation in a variety of languages with emphasis on the terminology used to describe morphological representation on various levels; problem solving of selected language data. (Same as Anthropology 507)</td>
</tr>
<tr>
<td>508</td>
<td>Theories of Syntax (3)</td>
<td>Prerequisite: Ling 408 or equivalent. Contemporary theories of grammar, such as transformational-generative, with emphasis on theoretical problems in the analysis of language structure.</td>
</tr>
<tr>
<td>530</td>
<td>Graduate Seminar: Historical Linguistics (3)</td>
<td>Prerequisite: Ling 430 or its equivalent. History of language, including principles and techniques for the historical study and classification of individual languages and language families, writing systems, lexicostatistical methods and linguistic geography.</td>
</tr>
<tr>
<td>597</td>
<td>Project (3)</td>
<td>Prerequisite: Ling 501. Preparation and completion of an approved project.</td>
</tr>
<tr>
<td>599</td>
<td>Independent Graduate Research (1-3)</td>
<td>Prerequisites: graduate standing and consent of program coordinator. May be repeated for credit.</td>
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INTRODUCTION

Managers are needed in a wide variety of different types of organizations – business and non-business, large and small, foreign and domestic. In all of these organizations, managers need technical, human and conceptual skills to help achieve organizational goals.

Management courses are designed to teach the fundamental principles underlying organizations, to emphasize education that will improve students’ thought processes, provide familiarity with the analytical tools of management and develop in the student, an ability to use the techniques involved in analyzing and evaluating managerial problems and making sound decisions.

Students may pursue a wide variety of academic and career interests through four different management emphases. These emphases include: (1) general management; (2) human resources management; (3) operations management; and (4) legal studies. The entrepreneurship concentration and entertainment and tourism concentration are also housed in the management department.

Advisers

The Business Advising Center, Steven G. Mihaylo Hall 1201, provides information on admissions, curriculum and graduation requirements; registration and grading procedures; and residence and similar academic matters. In addition, the Management Department provides advising on career opportunities within the Management, Entrepreneurship and Entertainment and Tourism Concentrations:

- Business Law: Richard Parry
- Entrepreneurship: Harold Fraser/Kim Tarantino
- Human Resources: Wayne Jones
- Operations Management: Farouk Abdelwahed/Don Smith
- General Management: Paula Silva/Lori Muse
- Concentration in Entrepreneurship: Wayne Jones
- Concentration in Management: Paula Silva/Lori Muse
- Concentration in Operations Management: Adelina Gnantlet/Don Smith
- Concentration in Human Resources: Paula Silva/Lori Muse
- Concentration in Entrepreneurship: Wayne Jones
- Concentration in Management: Paula Silva/Lori Muse
- Concentration in Operations Management: Adelina Gnantlet/Don Smith
- Concentration in Human Resources: Paula Silva/Lori Muse
- Graduate Program: Ellen Dumond

Credential Information

For students interested in a teaching credential, the Management Department offers courses which may be included in the Subject Matter Preparation and Supplementary Authorization Programs for secondary teaching.

Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and is also available from the Department of Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education (657-278-3352).

Awards in Management

- The Gus Berger Award/Operations Management
- The H. Peter Guertin/APICS Orange County Chapter Scholarship
Outstanding Management Student Award
Human Resource Management Scholarship

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION
See “Business Administration Degrees, Concentrations in Entrepreneurship, Entertainment and Tourism, and Management.”

MASTER OF BUSINESS ADMINISTRATION
See “Business Administration, MBA”

MANAGEMENT COURSES
Courses are designated as MGMT in the class schedule.

246 Business and Its Legal Environment (3)
Laws and regulations affecting the business environment and managerial decisions, including the legal system and methods of dispute resolution. Topics include torts, crimes, contracts, product liability, business organization, employment, antitrust, environmental protection; incorporates ethical considerations and international perspectives. Uses case studies.

335 Family Business Dynamics (3)
Prerequisite: completion of lower-division business core. Unique issues faced by family-owned and operated businesses. Textbooks, lecture and outside real-world projects explore the business, personal and interpersonal issues associated with family-owned businesses.

339 Principles of Management and Operations (3)
Corequisites: Business Admin 301 and InfoSys/DecSci 361A. Integrates selected general management concepts with operations management concepts and techniques. Emphasizes the development of competencies required for effective planning, designing, operating, controlling and improving processes that produce and deliver quality goods and services.

340 Organizational Behavior (3)

343 Human Resource Management (3)
Prerequisites: Business Admin 301 and Mgmt 340 or equivalent. Human resource management functions in organizations. Topics include selection, recruiting, training, compensation and performance appraisal.

346 International Law for Business (3)
Prerequisite: Mgmt 246 or equivalent. International legal environment in which firms operate. Case studies in the areas of treaties and laws, EU, NAFTA, international contracts, regulation of imports, exports and competition, government policies, enforcement of property rights and issues involving ethical responsibilities.

348 Commercial Law (3)
Prerequisite: Mgmt 246 or equivalent. Philosophy, institutions and role of law and ethical considerations in commercial transactions. Case studies in sales, storage and shipment of goods, commercial paper, debtor and creditor rights and remedies, bankruptcy, secured transactions and suretyship.

349 Law for Small Business (3)
Prerequisites: Business Admin 301 and Mgmt 246. Philosophy, institutions and role of law and their practical applications in the areas of interest to the small-business person. Product liability, consumer rights, workers’ compensation and other topics.

350 International Business and Management (3)
Prerequisite: Mgmt 339 or 340. Fundamental course in international business and international management. Overview of international business, and emphasizes a managerial approach that involves examining the various roles of managers in an international setting.

365 Entertainment Business (3)
Prerequisites: Mgmt 246 and Business Admin 301. Examines the management facets of businesses designed to divert and amuse consumers during their leisure time, collectively known as the entertainment industry. Business and economic aspects of the industry and its enterprises. Various professions within entertainment.

421 Operations and Systems Design (3)
Prerequisite: Mgmt 339. Key management methodologies for designing high-performing service and manufacturing organizations. Achieving competitiveness and profitability through excellent management of service and product design, process analysis and reengineering, capacity and facility planning, work systems and technology management.

422 Operations Planning and Control (3)
Prerequisite: Mgmt 339. Concepts and techniques to plan output, schedule product and employees, manage inventory and coordinate activities to better meet customer demand. Discusses use of ERP systems. Uses cases, research projects and/or computer software.

423 Purchasing and Supply Management (3)
Prerequisite: Mgmt 339. Operational and strategic role of purchasing/supply management in organizations. Develops skills and knowledge in supplier selection/evaluation, negotiation, cost/price analysis, contract management, global sourcing, commodity analysis, value analysis. Exercises, cases, guest speakers.

425 Quality Management and Improvement (3)
Prerequisite: Mgmt 339. Measurement and improvement of productivity and quality in organizations. Problem-solving and process management tools. Case analyses and research projects address issues of people and technology. How to improve your organization: manufacturing or service, department or company.
426 Global Operations (3)
Prerequisite: Mgmt 339. Managerial issues related to the "international division of labor" and the resulting operational challenges in the generation and exchange of goods and services across international borders. Issues discussed include outsourcing, benchmarking, facilities and partnerships.

427 Management of Technology and Innovation (3)
Prerequisite: Mgmt 339. Strategic and operational management of technology and innovation decisions, activities, interfaces, policies and programs in contemporary organizations. Discusses issues such as technology development/deployment, innovation dynamics and strategic/economic payoffs.

430 Integrated Supply Chain Management (3)
Prerequisites: Mgmt 339 (or equivalent) and Marketing 351. Studies managing materials, capital and information flows throughout multiple organizations in a supply chain from acquisition of materials to delivery of finished goods and services to the final customers. Presentation and case studies on various issues in supply chain management.

432 Staffing (3)
Prerequisite: Mgmt 343 or equivalent. Theories and techniques related to employee staffing. Topics include planning, legal issues, job analysis, measurement, internal and external recruitment and selection, and decision-making.

433 Current Issues in Human Resource Management (3)
Prerequisite: Mgmt 343. Contemporary concepts and procedures in compensation and staffing. Current topics and controversial issues of critical importance to human resource management.

434 Compensation (3)
Prerequisite: Mgmt 343 or equivalent. Development of equitable compensation and benefit programs in order to retain a productive workforce. Topics include job analysis and evaluation, pay structures, salary survey, individual compensation, incentive systems and benefits.

435 Management of Service Organizations (3)
Prerequisite: Mgmt 339. Presents a highly focused set of concepts required for the successful management of service organizations. Subjects include service concepts, service delivery processes, strategic positioning, service personnel and technologies, global/regulatory issues, work and quality systems, and performance metrics.

436 Training and Development (3)
Prerequisite: Mgmt 343. Theoretical and practical issues involved in designing and implementing training and development programs in work organizations. Topics include planning and assessment, design and delivery of training initiates to meet organizational needs and evaluation of training effectiveness.

440 Emerging Issues in Management (3)
Prerequisites: Mgmt 339 and 340. For upper-division and graduate students. Business and management in America. Interrelationships of technological, economic, political and social forces with the business enterprises and their ethical obligations to owners, employees, consumers and society at large. Open to nonbusiness majors.

441 Labor-Management Relations (3)
Prerequisite: Mgmt 340. Impact of labor-management relations upon labor, management and the public. Proper grievance procedure, collective bargaining and settlement of disputes.

443 Team Leadership Skills (3)
Prerequisites: Mgmt 339 and 340 or equivalent. Managerial skills in group dynamics as they relate to team performance. Cultural diversity, including value differences and perception. Leadership: problem solving, idea generation, communications and conflict management. Organization change and designs that enhance team effectiveness.

444 Project Management (3)
Prerequisite: Mgmt 339. Principles and techniques of effective project management. Managerial, organizational and behavioral concepts, as well as effective tools, techniques and software for planning, communications, coordination and control of the project.

445 Employment Law (3)
Prerequisite: Mgmt 246. Corequisite: Mgmt 343. Legal and ethical issues of the employment relationships and environment. Case studies in the areas of agency, independent contractors, responsibilities of managing offers, the hiring process, discrimination, wages, hours and benefits, termination, OSHA, workers compensation and other regulations affecting employment. International implications of employment.

446 Entertainment Business Law (3)
Prerequisite: Mgmt 246. Legal/business issues of the entertainment industry. Topics include copyright, trademark, publicity and privacy rights, artistic credit, defamation, entertainment contracts, creator control, moral rights, entertainment guilds, business and legal representation of artists, performing rights societies and government regulation.

447 Internet Legal Issues (3)
Prerequisite: Mgmt 246. Legal/business issues relating to the Internet and information technology. Case studies in the areas of intellectual property, e-commerce, online contracting, taxation, securities, privacy, obscenity, defamation, information security, network crimes and global issues.

449 Seminar in Strategic Management (3)
Prerequisites: Business Admin 301; all other Mihaylo College of Business and Economics (MCBE) core courses. Integrative cases from top management viewpoint. Administrative processes, ethical-legal-economic implications of business decisions, international applications; organization theory and policy formulation. Individual and team efforts.
455 Cross-Cultural Management (3)
Prerequisite: Mgmt 339 or 340. Develop a more comprehensive understanding of the ways in which culture affects management decisions. Not available for graduate degree credit.

461 Entrepreneurial Management (3)
Prerequisites: Accounting 201B and Mgmt 339 for MCBE students. Accounting 201A and Business Admin 301 for non-MCBE students. How to plan organize and control new ventures. Setting up business level strategy and corresponding systems to improve venture performance. Casework, research and fieldwork with selected local businesses. Not applicable for graduate degree credit.

464 Entrepreneurial Leadership (3)
Prerequisite: Mgmt 340 for MCBE students. Leadership roles, organizational development and human resource management of new ventures. Setting up systems to improve venture performances that comply with related laws and regulations. Casework, research and fieldwork with selected local businesses. Not applicable for graduate degree credit.

465A New Venture Creation and Funding (3)
Prerequisites: Mgmt 461, Marketing 462, Accounting 463, Mgmt 464. How to develop product and service concepts for new ventures, test the concepts, set business strategy, design operating systems and develop financial forecasts, while complying with related laws and regulations. Venture teams will prepare business plans and make funding presentations.

465B New Venture Launch (3)
Prerequisite: Mgmt 465A. Venture teams will launch new ventures. New ventures may be start up businesses or new profit centers within existing businesses. Final report and oral presentation on venture results.

470 Media Entertainment Business (3)
Prerequisites: Mgmt 339, 340, 365. Apply management theory in the area of entertainment that uses physical media for its delivery, including film, ancillary markets, broadcast television and music. Examines organizations and business operations in these fast paced, high profile industries. Not applicable for graduate degree credit.

471 Live Entertainment Business (3)
Prerequisites: Mgmt 339, 340, 365. Learn to manage in the fast paced segments of live entertainment, e.g., amusement/theme parks, concerts/plays/shows, gaming/wagering and special event management (conferences, conventions, etc.); Organizations, jobs and business operations in these complex, high profile industries. Not applicable for graduate degree credit.

480 Global Strategic Management (3)
Prerequisites: Business Admin 301, completion of all other International Business core courses. Conceptualization, formulation and implementation of successful global business strategies. Other topics include managing cultural differences, strategic alliances and strategies for the Pacific Rim and Europe.

495 Internship (1-3)
Prerequisites: six units of upper-division management courses including Mgmt 339; concentration in management or international business; consent of department internship adviser; at least junior standing, 2.5 GPA and one semester in residence at the university. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.

499 Independent Study (1-3)
Prerequisites: senior standing and approval by the department chair. Open to qualified students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

515 Management of Information in the Corporate Environment (3)
Prerequisite: classified MCBE status. Review and application of management information systems in business. System planning, system design and analysis, use of files, decision support systems, expert systems and implementation of management information systems.

516 Operations Management (3)
Prerequisites: classified MCBE status, InfoSys/DecSci 513 (may be taken concurrently). Role of the operations management function in the modern manufacturing and service organization and its interaction with the other functions. Formulation of operations strategy consistent with organizational strategy, operations planning, organization, directing and control activities. Long term and short term decision areas in operations management and decision-making tools and techniques. Global, environmental and ethical issues.

518 Legal and Ethical Environment of Business (3)
Prerequisite: classified MCBE status. The legal system and case studies in areas of contracts, torts, products liability, employment, business organizations and trade regulation, with consideration of ethical theories and implications as they apply to business practices.
520 International Legal Environment of Business (3)
Prerequisite: classified MCBE status. International legal environment in which firms operate. Case studies in the areas of treaties and laws. World Trade Organization, EU, NAFTA, international contracts, dispute resolutions, regulation of imports, export and competition, government policies, enforcement of property rights and issues involving ethical responsibilities.

524 Seminar in Organizational Behavior and Administration (3)
Prerequisites: classified MCBE status, Management 516 and 518 or equivalent. Human behavior in organizations, studies in organizational theories and administrative action.

525 Seminar in Team Leadership Skills (3)
Prerequisite: Mgmt 524 or equivalent (with instructor’s consent). Graduate seminar and workshop to develop hands-on leadership skills to manage high-performance work teams. Topics include methods for self-awareness, making oral presentations, interviewing, stress management, supportive communication, problem solving, influencing and motivating others, managing conflict, empowering, delegating and team building.

535 Production/Operations Management (3)
Prerequisites: Mgmt 516 and InfoSys/DecSci 514. In-depth study of selected POM topics. Operations function role and its importance, identification of the problem areas and reviewing of the related concepts and techniques, including computer applications. Emphasizing the current POM topics of interest to top management.

539 Supply Chain Management: Making E-Business Happen (3)
Prerequisite: Mgmt 516 or equivalent. Introduces the mechanics and impact of E-business and then focuses on the development of the E-supply chain, a key component of E-business. Strategic design of E-business and the supply chain, methods of integration throughout the supply chain and the means by which to develop differentiation of competitive advantage through the supply chain. Uses articles and cases from both services and manufacturing.

540 New Venture Leadership and Management (3)
Prerequisite: Management 516. Coverage of leadership roles, organizational development and human resource management, planning and control issues for new ventures. Setting up operations, and engaging human resources, to better serve customers and improve venture performance. Casework, research and fieldwork with selected local businesses.

542 Labor and Employment Relations Seminar (3)
Prerequisites: classified MCBE status, Mgmt 516 and 518. Exploration and review of traditional labor relations, as well as the developing issues in employment relations involving non-union employees, with a special focus on the various ways of resolving both labor and employment disputes. Collective bargaining, bargaining by objectives, dispute resolution methods in both interest and rights disputes: arbitration, mediation and fact-finding of both traditional labor disputes involving salaried and professional employees.

543 Seminar in Human Resource Management (3)
Prerequisites: classified MCBE status, Management 516 and 518. Cases, problems and significant personnel administration literature in personnel administration and human relations.

547 Comparative Management (3)
Management practices and processes in five geographical areas; market-structures and management characteristics different from those in the United States. Constraints that vary between countries because of cultural, legal, economic and/or political differences.

582 Organizational Development and Change (3)
(Same as Political Science 582)

599 Independent Graduate Research (1-3)
Prerequisites: classified MCBE status, consent of instructor, consent of the department chair and associate dean. May be repeated for credit. Not open to students on academic probation.
INTRODUCTION
Marketing is a basic business function covering a wide range of activities. It includes studying markets, planning products, pricing them, promoting them, selling them and then delivering these products to customers. People in wholesaling, retailing, advertising agencies, research firms and transportation companies are all working in the marketing area. Any firm that is reviewing its product policies needs marketers to identify the market, choose the products, find where they can be sold and decide on a price for them.

Credential Information
For students interested in a teaching credential, the Department of Marketing offers courses that may be included in the Subject Matter Preparation Program for secondary teaching.

Further information on the requirements for teaching credentials is found in the Teaching Programs section of the catalog and is also available from the Department of Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education.

Scholarships and Awards in Marketing
The Michael T. Ashton Memorial Leadership Award
The Robert M. Olsen Outstanding Marketing Major Award
Honors Networking Program Outstanding Student Award
Anaheim/Orange County Visitor & Convention Bureau Scholarship
Enterprise Rent-A-Car Scholarship

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION
See “Business Administration, Marketing Concentration.”

MASTER OF BUSINESS ADMINISTRATION DEGREE
See “Business Administration, Marketing Concentration.”

MARKETING COURSES
Courses are designated as MKTG in the class schedule.

351 Principles of Marketing (3)
Prerequisite: Econ 202; corequisites: Business Admin 301, InfoSys/DecSci 361A. Application of current theories and concepts in effectively marketing goods and services to define target customers from a domestic and global perspective. Includes market research, identifying target customers, developing product offers, branding, pricing, marketing communications and distribution channels. Marketing is critically examined from the perspective of the consumer, economy, technology, legal/political issues and ethical/social responsibility.
353 Marketing Information Technology (3)
   Prerequisites: Business Admin 301, InfoSys/DecSci 361A, Mktg 351. Information sources, databases and tools applied by marketers to transform data into useful formats for the strategic decision-making process. Includes segmentation, target marketing and positioning, media selection, market share, break-even analysis, pricing, sales forecasting and profit scenario analysis. Extensive use of Excel spreadsheets, the Internet and other technology resources.

370 Consumer Behavior (3)
   Prerequisite: Business Admin 301; corequisite: Mktg 351. Consumer buying patterns, motivation and search behavior. The consumer decision-making process. Inter-disciplinary concepts from economics, sociology, psychology, cultural anthropology and mass communications. Case analyses and research projects.

379 Marketing Research Methods (3)
   Prerequisites: Business Admin 301, Mktg 351 and InfoSys/DecSci 361A. Marketing research process. Problem formulation, identifying data sources, data collection, analysis techniques, preparing research reports and application of these concepts to marketing research projects.

401 Professional Selling (3)
   Prerequisite: Mktg 351. Steps of the sales cycle as an interpersonal influence process. Selling skills and techniques based on communication and buyer behavior concepts. Written sales projects and oral presentations are expected.

405 Advertising and Promotions Strategy (3)
   Prerequisite: Mktg 351. How to develop and implement advertising, sales promotion, public relations, direct marketing, sponsorship marketing and personal selling strategies that convey a single voice to a firm’s customers’ attention with effective and efficient communications program; how to develop and use analytical and creative skills that successfully communicate a firm’s messages in both domestic and international markets.

415 Managing the Sales Force (3)
   Prerequisite: Mktg 351. Sales manager’s role in organizing and deploying a field sales force, developing effective sales training programs, designing complete motivation and compensation plans, asserting strong leadership and evaluating sales people’s performance. Relies heavily on case studies and group discussion.

425 Retail and Marketing Channel Strategies (3)
   Prerequisite: Mktg 351. Evolution of retailing into a global, high technology industry; developing integrated marketing and financial strategies. Strategically positioning the retail offer to establish and maintain relationship with target customers. Evolving market conditions, buying behavior, retail venues, channel relationships, information, communication and decision support systems and merchandise management.

430 Sports Marketing (3)
   Prerequisite: Mktg 351. Develops understanding of Sports Marketing, its role in business and society. Develops understanding of different functional areas. Develops ability to apply theories and knowledge to solve problems faced by Sports Marketers.

445 International Marketing (3)
   Prerequisites: Business Admin 301 and Mktg 351. Theories of international trade and role of marketing decisions across national boundaries and markets. Concepts and principles of marketing strategies in organizations from recognition of environmental differences, market assessments, entry alternatives, positions of global interdependence, marketing problems and critical implications. Integrative cases, individual and team efforts emphasized.

455 Strategic Internet Marketing (3)
   Prerequisite: Mktg 351. Marketing of goods, services and ideas on the Internet. Integrating e-commerce into a total marketing strategy for businesses ranging from entrepreneurial to multinational corporations. History and emergence of e-commerce, utility of the Internet as a tool to increase effectiveness, efficacy and competitiveness. Designing effective Web pages.

462 Marketing for Entrepreneurs (3)
   Prerequisites: Accounting 201B and Mktg 351. Coverage of market analysis for new products and services, competitive analysis, alternatives for entering markets, associated costs and launch feasibility. Casework, research and fieldwork with selected local businesses.

465 Managing Services Marketing (3)
   Prerequisite: Mktg 351. Unique marketing needs and challenges faced by service firms in an increasingly challenging global environment. Specific strategies for marketing services in a variety of industries including entertainment, tourism, hospitality, health care and financial services. Also includes strategies used by manufacturing firms using service as a competitive strategy.

475 Export/Import Marketing Strategies (3)
   Prerequisite: Mktg 351. Export and import strategies, including international logistics. In-depth knowledge of the export and import process for both large companies and small international businesses. Logistics planning and choosing the best incoterms, the export process and the evaluation of alternative export strategies. Understanding import process including outsourcing and other government regulatory requirements and documentation.

489 Developing Marketing Strategies (3)
   Prerequisites: Mktg 351, 353, 370, 379 and senior standing. Development of marketing strategies involving products as well as services. Relies heavily on the case analysis and group interaction. Students will finalize and present portfolio of projects and internships completed over the duration of marketing program.
495 Internship (3)
Prerequisites: six units of upper-division marketing courses, including Mktg 351, concentration in marketing or in international business, consent of department chair, at least junior standing, 2.5 GPA and one semester in residence at Cal State Fullerton. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.

499 Independent Study (1-3)
Prerequisites: senior standing and approval by the department chair. Open to undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

519 Marketing Management (3)
Prerequisites: Accounting 510, Econ 515, InfoSys/DecSci 513, 514, Management 516, 518 (may be taken concurrently) and classified MCBE status. Key marketing concepts and their applications to marketing research, segmentation, selecting target markets, product development, pricing, promotion and distribution. Develops senior-level executive decision-making skills from global, ethical and socially responsible perspectives. Requires understanding and application in a major project.

535 Marketing New Ventures (3)
Prerequisite: Mktg 519. Coverage of market analysis for new products and service, competitive analysis, alternatives for entering markets, associated costs and launch feasibility. Casework, research and fieldwork with selected local businesses.

596T Contemporary Topics in Marketing (3)
Prerequisites: Mktg 519 or equivalent and classified MCBE status. Framework for customer-focused management; how to increase satisfaction and retention through service strategies to measure service quality and calculate customer lifetime value and profitability. May be repeated three times for credit.

599 Independent Graduate Research (1-3)
Prerequisites: classified MCBE status, consent of instructor and approval by the Department Chair and Associate Dean. May be repeated for credit. Not open to students on academic probation.
INTRODUCTION

The Department of Mathematics offers a standard undergraduate major program in mathematics with concentrations in pure mathematics, applied mathematics, probability and statistics and teaching mathematics. Courses are provided to satisfy the needs of:

- Students planning graduate study in mathematics
- Students planning to use mathematics in a career in business, industry or government
- Students planning to teach at the elementary or secondary level
- Students majoring in a discipline using mathematics as an analytic or descriptive tool
- All major programs are designed to give sufficient breadth and depth in the study of mathematics to prepare students for subsequent graduate study in mathematics or related areas.

BACHELOR OF ARTS IN MATHEMATICS

The requirements for the Bachelor of Arts in Mathematics consist of:

- The core mathematics courses for the major (28 units).
- Courses in one of four possible concentrations: Pure Mathematics, Applied Mathematics, Probability and Statistics or Teaching Mathematics (18-20 units). The Pure Mathematics concentration is designed for students planning on graduate study. The Applied and the Probability and Statistics concentrations provide the mathematics needed for certain careers in industry and government. For students interested in teaching in elementary or secondary schools, the Teaching concentration may be combined with programs leading to a teaching credential to meet both university degree requirements and California credential law.
- A computer programming course selected from Mathematics 320 Introduction to Mathematical Computation, Computer Science 120 Introduction to Programming or Comp Sci 121 Programming Concepts (3 units).
- Courses in one of nine cognates selected from the disciplines of Actuarial Science, Chemistry, Civil Engineering, Computer Science, Economics, Information Systems and Decision Sciences, Mathematics, Physics or Research (9-11). Students selecting the Computer Science cognate are required to take Computer Science 120 or 121. Students may not double count Mathematics 320 for the Mathematics cognate and the programming requirement.
- Math 380 the History of Mathematics, which fulfills the University’s upper division writing requirement (3 units).
- Total units needed to complete the B.A. in Mathematics are 120, which include the 61–66 units required for the major, 51 units required for general education and units earned in elective courses (3-8 units). Each course required for the major must be completed with a grade of “C” (2.0) or better, and may not be taken on a credit/no credit basis. Courses required for the major may not be challenged by examination.

During their first year of study, each student will develop an individual study plan in consultation with an academic adviser in the Mathematics Department. Normally,
Core Requirements (28 units)
All students are required to complete the following 28 units:
- Math 150A, B Calculus (8)
- Math 250A Multivariate Calculus (4)
- Math 250B Introduction to Linear Algebra and Differential Equations (4)
- Math 280 Strategies of Proof (3)
- Math 307 Linear Algebra (3)
- Math 335 Mathematical Probability (3)
- Math 350 Advanced Calculus I (3)

Additional Requirements (18-20 units)
Each student is required to complete one of the following concentrations:

Pure Mathematics Concentration (18 units)
- Math 302 Modern Algebra (3)
- Math 414 Topology (3)
- Math 450 Advanced Calculus II (3)
Three of the following:
- Math 407 Abstract Algebra (3)
- Math 412 Complex Analysis (3)
- Math 425 Differential Geometry (3)
- Math 430 Number Theory (3)
- Math 471 Introduction to Combinatorics (3)

Applied Mathematics Concentration (18 units)
- Math 306 Vector and Tensor Analysis (3)
- Math 310 Ordinary Differential Equations (3)
- Math 340 Numerical Analysis (3)
Three from the following list, with at least two at the 400 level:
- Math 370 Mathematical Model Building (3)
- Math 375 Discrete Dynamical Systems and Chaos (3)
- Math 406 Introduction to Partial Differential Equations (3)
- Math 412 Complex Analysis (3)
- Math 425 Differential Geometry (3)
- Math 440 Advanced Numerical Analysis (3)
- Math 470 Advanced Mathematical Model Building (3)

Probability and Statistics Concentration (20 units)
- Math 338 Statistics Applied to Natural Sciences (4)
- Math 435 Mathematical Statistics (3)
- Math 436 Advanced Applied Statistics (4)
- Math 438 Introduction to Stochastic Processes (3)
- Math 439 Intermediate Data Analysis (3)
And one of the following:
- Math 340 Numerical Analysis (3)
- Math 370 Mathematical Model Building (3)
- Math 390 Introduction to Actuarial Science (3)

Teaching Mathematics Concentration (18-19 units)
- Math 302 Modern Algebra (3)
- Math 338 Statistics Applied to Natural Sciences (4)
- Math 414 Topology (3)
- Math 417 Foundations of Geometry (3)
- Math 430 Number Theory (3)
- Math 471 Introduction to Combinatorics (3)

Cognates (9-11 units)
Each student is required to complete one of the following cognates:

Actuarial Cognate (9 units)
- Finance 320 Business Finance (3) and one of the following options:
  Two of the following:
  - Finance 332 Theory of Corporate Finance (3)
  - Finance 340 Introduction to Investments (3)
  - Finance 360 Principles of Insurance (3)
    OR InfoSys/DecSci 361B Quantitative Business Analysis: Statistics and Management Science (3) and
    InfoSys/DecSci 440 Integrative Decision Tools for Business Operations (3)

Computer Science Cognate (10 units)
- Comp Sci 131 Data Structures Concepts (3)
- Any one of the Comp Sci 223 courses (3)
- Comp Sci 240 Computer Organization and Assembly Language (3)
  OR Comp Sci 332 File Structures and Database Systems (3)
- Comp Sci 253U Workshop in UNIX (1)

Economics Cognate (9 units)
- Economics 201 Principles of Microeconomics (3)
- Economics 202 Principles of Macroeconomics (3)
One of the following:
- Economics 310 Intermediate Microeconomic Analysis (3)
- Economics 320 Intermediate Macroeconomic Analysis (3)
- Economics 440 Econometrics (3)
- Economics 441 Mathematical Economics (3)
Information Systems and Decision Sciences Cognate (9 units)
Three from the following:
- InfoSys/DecSci 422 Surveys and Sampling Design and Applications (3)
- InfoSys/DecSci 465 Linear Programming in Management Science (3)
- InfoSys/DecSci 467 Statistical Quality Control (3)
- InfoSys/DecSci 472 Design of Experiments (3)
- InfoSys/DecSci 474 Data Mining (3)
- InfoSys/DecSci 475 Multivariate Analysis (3)
- InfoSys/DecSci 490 Queuing and Stochastic Models in Management Science (3)

Physics Cognate (11 units)
- Physics 225 Fundamental Physics: Mechanics (3)
- Physics 225L Fundamental Physics: Laboratory (1)
- Physics 226 Fundamental Physics: Electricity and Magnetism (3)
- Physics 226L Fundamental Physics: Laboratory (1)
- Physics 227 Fundamental Physics: Waves, Optics and Modern Physics (3)

Chemistry Cognate (10 units)
- Chemistry 120A General Chemistry (5)
- Chemistry 120B General Chemistry (5)

Civil Engineering Cognate (9 units)
- EGCE 201 Statics (3)
- EGCE 301 Mechanics of Materials (3)
One of the following:
- EGCE 302 Dynamics (3)
- EGCE 325 Structural Analysis (3)

Mathematics Cognate (9 units)
Three upper-division courses in Mathematics from one of the four concentrations of the Mathematics major other than the student's own concentration.

Research Cognate (9 units)
The research cognate is intended for students who would benefit more from research and a thesis than a standard cognate; for example, a student intending to enter graduate school in mathematics. The research student/adviser connection must be established by mutual consent, and prior to enrollment in cognate courses, the undergraduate research committee must approve a cognate plan. The student must pass a thesis defense at the end of the term in which the final cognate courses are completed. Although only one unit of seminar is formally required, it is strongly encouraged that the seminar course be taken during the entire research cognate process. Students should begin the cognate no later than their junior year.
- Math 491 Research Seminar (1)
- Math 497 Undergraduate Research (3,3)
- Math 498 Senior Thesis (2)

Writing Requirement
Math 380 will satisfy the University's upper-division writing requirement for mathematics majors.

Internships in Mathematics
Internships in applied mathematics provide work experience in advanced mathematics through positions in business, industry or government. Students should contact the Center for Internships and Cooperative Education, LH-206.

MINOR IN MATHEMATICS
The mathematics minor consists of 25 units of coursework, which must include Math 150A,B, 250A,B and at least nine units of upper-division mathematics. Math 303A,B, 380, 401, 402, 403A,B, 495, 496 or 499 may not be used to fulfill the requirements for the minor in mathematics. All courses must be completed with a grade of "C" (2.0) or better.

MINOR IN MATHEMATICS FOR TEACHER EDUCATION
1. For elementary education, the minor consists of 20 units of coursework selected from the courses offered by the Department of Mathematics. The courses must include Mathematics 150B or 338 and Mathematics 303A.B. All courses must be completed with a grade of "C" (2.0) or better.
2. For secondary education the minor consists of 22 units of coursework selected from the courses offered by the Department of Mathematics. The courses must include Mathematics 250B and six units of upper-division courses in mathematics. All courses must be completed with a grade of "C" (2.0) or better.

SINGLE SUBJECT TEACHING REQUIREMENT IN MATHEMATICS
The Department of Mathematics offers coursework meeting the requirements for California single subject credential in mathematics. For CSUF to recommend this credential, an individual must have completed the department's state-approved Single Subject Matter Preparation Program or equivalent, and have completed the two-semester math education and teacher education program, which includes methodology coursework and the student teaching experience. Students may enter this program in either the fall or spring semester. Students should contact the Department of Secondary Education for information on the application process and orientation meetings.

MASTER OF ARTS IN MATHEMATICS
The M.A. in Mathematics provides advanced study for students with one or more of the following interests: a Ph.D. program in mathematics or mathematics education, teaching in high school or community college, or using mathematical analysis in government, business or industry. Two options are offered under the M.A. program – Teaching and Applied Mathematics – in addition to a Special Topics program.
The Teaching option is designed for those individuals who are presently teaching mathematics at the secondary or community college level. Students must have completed courses in linear algebra, modern algebra and advanced calculus with at least a "B" (3.0) average. In addition, students should have completed a minimum of one year of full-time teaching.

The Applied Mathematics option is designed specifically for individuals who are seeking, or who currently hold, positions that involve mathematics or quantitative applications. Students must have completed one semester of mathematical probability and one semester of advanced calculus with grades of "B" (3.0) or better in each course. Students must also have computer programming experience. This requirement can be satisfied by completing Computer Science 120, 121 or Mathematics 320, or by coursework or work experience approved as equivalent by the graduate committee.

The Special Topics program allows the student under certain circumstances to develop a personalized study plan in order to pursue advanced work in mathematics. The courses must be selected from our regular offerings at the undergraduate and graduate level.

Admission Requirements

Students are admitted in conditionally classified standing when the following requirements have been met:

- A bachelor's degree from an accredited institution
- A grade-point average of at least 2.5 in the last 60 semester units attempted
- Good standing at the last college attended
- An undergraduate major in mathematics with a 3.0 in all upper-division mathematics courses, or a combination of previous coursework and work experience approved as equivalent by the graduate committee of the Mathematics Department

Classified Standing

A student's status is changed to classified standing when the following requirements have been met:

- Completion of all prerequisites and/or deficiencies, including the University Writing Requirement
- Development of a study plan approved by the Mathematics Department and Academic Programs. The study plan should be developed prior to the completion of nine units.

Teaching Option

This option, designed for mathematics teachers, requires 30 units of graduate study approved by the graduate committee. At least 16 of these units must be 500-level mathematics courses. The following coursework must be included:

- Math 581 Studies in Geometry (3)
- Math 582 Studies in Algebra (3)
- Math 584 Studies in Analysis (3)
- Math 586 Studies in Discrete Mathematics (3)
- Math 587 Studies in Mathematical Problem Solving (3)
- Math 599 Independent Graduate Research (3-6)

Each student will be required to take adviser-approved mathematics electives to meet the 30-unit requirement, and pass a set of four comprehensive exams. Comprehensive exams may be taken no more than twice.

Applied Mathematics Option

The courses for this option have been developed in consultation with mathematicians and scientists in the local industrial community and are specifically intended for individuals who are seeking positions, or who currently hold positions, that involve mathematics or quantitative applications. The subject matter emphasizes modern practical applied mathematics, modeling, problem solving and computation. The culminating experience is a project in which students have the opportunity of working in teams on a real world problem, contracted and paid for by a local industrial firm. Students normally begin this program in the fall semester. All classes are scheduled in the evening and can be taken in sequence in two calendar years, summers included.

- Math 489A,B Applicable Analysis and Linear Algebra (3,3)
- Math 501A,B Numerical Analysis and Computation I and II (3,3)
- Math 502A,B Probability and Statistics I and II (3,3)
- Math 503A,B Mathematical Modeling I and II (3,3)
- Math 504A,B Simulation Modeling and Analysis (3,3)
- Math 597 Project (6)

Special Topics Program

The Special Topics program requires a study plan with a minimum of 30 units of coursework, planned by the student and the student's adviser and approved by the graduate committee of the Mathematics Department. At least 16 of these units must be 500-level mathematics courses. Some of the 500-level courses may be accompanied by one unit of Mathematics 599 Independent Graduate Research. Students will also be required to pass a set of comprehensive exams or complete a six-unit project.

Application Deadline

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Additional Information

Part-time teaching opportunities and research assistantships are available for selected graduate students. For more information, contact the Department of Mathematics.
**MATHEMATICS COURSES**

Courses are designated as MATH in the class schedule.

**030A Intermediate Algebra-ILE (3)**
- Prerequisite: A score of 30 or below on the ELM exam. An intermediate algebra course designed specifically for students who have taken but not passed the ELM exam. Equations and inequalities, algebraic expressions, functions and sequences and series. Degree credit is not awarded for these courses. Successful completion of Math 30A and 30B satisfies the ELM requirement.

**030B Intermediate Algebra-ILE (3)**
- Prerequisites: Math 30A and a score of 30 or below on the ELM exam. An intermediate algebra course designed specifically for students who have taken but not passed the ELM exam. Equations and inequalities, algebraic expressions, functions and sequences and series. Degree credit is not awarded for these courses. Successful completion of Math 30A and 30B satisfies the ELM requirement.

**040 Intermediate Algebra (3)**
- Prerequisite: a score of 32-48 on the ELM exam. An intermediate algebra course designed specifically for students who have taken but not passed the ELM exam. Linear equations and inequalities, polynomial, rational and radical expressions, quadratic functions, exponential and logarithmic functions and sequences and series. Degree credit is not awarded for this course. Successful completion satisfies the ELM requirement.

**045 Intermediate Algebra Minicourse (1)**
- Prerequisite: a score between 36 and 48 on the ELM exam. An intermediate algebra course designed specifically for students who have taken but not passed the ELM exam. Linear equations, polynomials, rational expressions, radical expressions, quadratic formulas, exponential functions and logarithmic functions. Degree credit is not awarded for this course. Successful completion satisfies the ELM requirement. Offered via Internet only.

**110 Mathematics for Liberal Arts Students (3)**
- Prerequisites: passing score on the ELM or exemption and three years of high school mathematics, including two years of algebra and one year of geometry. Survey of traditional and contemporary topics in mathematics, such as elementary logic, counting techniques, probability, graph theory, codes and coding and the mathematics of the social sciences. For non-science majors.

**115 College Algebra (4)**
- Prerequisites: passing score on the ELM or exemption and three years of high school mathematics, including two years of algebra and one year of geometry. For students planning to take Math 130 or 135. Equations, inequalities and systems of equations. Properties of functions and their graphs, including polynomial functions, rational functions, exponential and logarithmic functions, with applications. Sequences and series. If both Math 115 and Math 125 are taken, credit is given for second course only.

**120 Introduction to Probability and Statistics (3)**
- Prerequisites: passing score on the ELM or exemption, and three years of high school mathematics, including two years of algebra and one year of geometry. Set algebra, finite probability models, sampling, binomial trials, conditional probability and expectation. Recommended for students of economics, business, and biological, geological and social sciences.

**125 Precalculus (5)**
- Prerequisites: passing score on the ELM or exemption, and three years of high school mathematics, including two years of algebra and one year of geometry. For students planning to take Math 150A. Functions and their use in mathematical models, including linear functions, polynomial and rational functions, exponential and logarithmic functions and trigonometric functions. If both Math 115 and Math 125 are taken, credit is given for second course only.

**125W Precalculus Workshop (1)**
- Corequisites: Math 125 and consent of instructor. Supplementary problem-solving workshop in a collegial setting. (3 hours workshop)

**130 A Short Course in Calculus (4)**
- Prerequisites: three years of high school mathematics, including two years of algebra and one year of geometry; a passing score on the ELM or exemption; and a passing score on the MQE or exemption. Math 115 or Math 125 (with a grade of “C” (2.0) or better) is an MQE exemption. Survey of differential and integral calculus and applications. For students of biological and social sciences, business and economics. If both Math 130 and Math 135 are taken, credit is given for second course only. Six units of credit are given if both Math 130 and Math 150A are taken.

**135 Business Calculus (3)**
- Prerequisites: three years of high school mathematics, including two years of algebra and one year of geometry; a passing score on the ELM or exemption; and a passing score on the MQE or exemption. Math 115 or Math 125 (with a grade of “C” (2.0) or better) is an MQE exemption. Survey of differential and integral calculus with applications, including derivatives, integrals and max-min problems. For students of business and economics. If both Math 130 and Math 135 are taken, credit is given for the second course only. Six units of credit are given if both Math 135 and 150A are taken.

**150A Calculus (4)**
- Prerequisites: four years of high school mathematics, including geometry, two years of algebra and trigonometry; a passing score on the ELM or exemption; and a passing score on the MQE or exemption. Math 125 (with a grade of “C” (2.0) or better) is an MQE exemption. Properties of functions. The limit, derivative and definite integral concepts; applications of the derivative, techniques and applications of integration. Six units of credit are given for both Math 150A and Math 130 or for both Math 150A and Math 135.
150B Calculus (4)
Prerequisite: Math 150A or equivalent. Techniques of integration, improper integrals and applications of integration. Introduction to differential equations. Parametric equations; sequences and series; vectors and the geometry of 3-space.

151A Calculus I Workshop (1)
Corequisite: Math 150A and consent of instructor. Supplementary problem-solving in a collegial setting. (3 hours workshop)

151B Calculus II Workshop (1)
Corequisite: Math 150B and consent of instructor. Supplementary problem-solving in a collegial setting. (3 hours workshop)

196 Student-to-Student Tutorials (1-3)
Consult "Student-to-Student Tutorials" in this catalog for more complete course description. May be taken Credit/No Credit only.

250A Multivariate Calculus (4)
Prerequisites: Math 150A,B or equivalent. Calculus of functions of several variables. Partial derivatives and multiple integrals with applications. Parametric curves, vector-valued functions, vector fields, line integrals, Green’s Theorem, Stokes’ Theorem and the Divergence Theorem.

250B Introduction to Linear Algebra and Differential Equations (4)
Prerequisite: Math 250A. Introduction to the solutions of ordinary differential equations and their relationship to linear algebra. Topics include matrix algebra, systems of linear equations, vector spaces, linear independence, linear transformations and eigenvalues.

270B Mathematical Structures II (3)
Prerequisite: Math 270A. Second of two semesters of fundamental discrete mathematical concepts and techniques needed in computer-related disciplines. Graph theory, algebraic structures and linear algebra.

280 Strategies of Proof (3)
Prerequisite: Math 150B. Logic, set theory and methods for constructing proofs of mathematical statements. A bridge to the rigors of upper-division mathematics courses containing significant abstract content.

302 Modern Algebra (3)
Prerequisites: Math 250B and 280. Integers, rational numbers, real and complex numbers, polynomial domains, introduction to groups, rings, integral domains and fields.

303A Fundamental Concepts of Elementary Mathematics (3)
Prerequisite: completion of a mathematics course that satisfies the General Education (G.E.) requirement. Structure and form of the mathematics that constitutes the core of the K-8 mathematics curriculum, including the real number system, number theory and equations.

303B Fundamental Concepts of Elementary Mathematics (3)
Prerequisites: completion of a mathematics course that satisfies the G. E. requirement and a grade of “C” (2.0) or better in Math 303A. Structure and form of the mathematics that constitutes the core of the K-8 mathematics curriculum, including the real number system, number theory and equations.

306 Vector and Tensor Analysis (3)
Prerequisite: Math 250B. Vector analysis, including coordinate bases, gradient, divergence and curl, Green’s, Gauss’ and Stokes’ theorems. Tensor analysis, including the metric tensor, Christoffel symbols and Riemann curvature tensor. Applications will be drawn from differential geometry, continuum mechanics, electromagnetism, general relativity theory.

307 Linear Algebra (3)
Prerequisite: Math 250B. Corequisite: Math 280. Introduction to the theory of vector spaces. Linear equations and matrices, determinants, linear transformations and eigenvalues, norms and inner products.

310 Ordinary Differential Equations (3)

320 Introduction to Mathematical Computation (3)
335 Mathematical Probability (3)  
Prerequisite: Math 250A. Probability theory; discrete, continuous and multivariate probability distributions, independence, conditional probability distribution, expectation, moment generating functions, functions of random variables and the central limit theorem.

337 Introduction to Experimental Design and Statistics in the Laboratory Sciences (3)  
Prerequisites: passing score on the ELM or exemption; completion of one of the following: Biology 241, 261; Chemistry 120; or Physics 211, 225. Graphical and numerical descriptive statistics; experimental design, randomization, replication, block designs, stratified samples, controlled experiments versus observational studies. Fundamental inference for proportions, means, variances. Analysis of variance, regression. Computer analysis of data from the laboratory sciences, e.g., biology, chemistry, geology.

338 Statistics Applied to Natural Sciences (4)  
Prerequisite: Math 130 or 150B or consent of instructor. Introduction to the theory and application of statistics. Elementary probability, estimation, hypothesis testing, regression, analysis of variance, non-parametric tests. Computer-aided analysis of real data. Graphical techniques, generating and interpreting statistical output, presentation of analysis (3 hours lecture, 2 hours activity).

340 Numerical Analysis (3)  
Prerequisites: Math 250B and one of the following: Math 320, Comp Sci 120, 121 or equivalent. Approximate numerical solutions of systems of linear and nonlinear equations, interpolation theory, numerical differentiation and integration, numerical solution of ordinary differential equations. Computer coding of numerical methods.

350 Advanced Calculus I (3)  
Prerequisite: Math 250B. Development of the theoretical foundations of calculus with an emphasis on mathematical rigor and formal proof. Algebraic and topological properties of the real numbers; limits of sequences and functions; continuity, differentiation and integration of functions of one variable; infinite series.

368 First Course in Symbolic Logic (3)  
(Same as Philosophy 368)

370 Mathematical Model Building (3)  
Prerequisites: Math 250B or consent of instructor, and one of the following: Math 320, Comp Sci 120, 121 or equivalent. Introduction to mathematical models in science and engineering: dimensional analysis, discrete and continuous dynamical systems, flow and diffusion models.

375 Discrete Dynamical Systems and Chaos (3)  
Prerequisite: Math 250B or consent of instructor. Analysis of the evolution of linear and nonlinear deterministic discrete systems with emphasis on long range behavior, stability and instability of stationary states and periodic orbits, chaotic orbits, strange attractors, fractional dimension and Lyapunov exponents; examples from current research literature.

380 History of Mathematics (3)  
Prerequisite: Math 250B. History of mathematics through its methods and concepts. Helps students become proficient in writing and reading mathematical literature. Satisfies the upper-division writing requirement for mathematics majors.

390 Introduction to Actuarial Science (3)  
Prerequisite: Math 150B. Corequisites: Math 335 or 338 or InfoSys/DecSci 361A. Fundamentals of actuarial science, including risk theory, interest theory, rate making, loss reserve and actuarial modeling. Selective corporate finance, investment and insurance topics, such as amortization, bonds, sinking funds, securities, annuities and pensions.

401 Algebra and Probability for the Secondary Teacher (3)  
Prerequisites: 12 units of upper-division mathematics exclusive of Math 303A,B and Math 403A,B. Overview of mathematical topics relevant to the teacher of secondary mathematics. Problem-solving approach to areas, including algebra, number theory, combinatorics and probability while maintaining an historical perspective.

402 Logic and Geometry for the Secondary Teacher (3)  
Prerequisites: 12 units of upper-division mathematics exclusive of Math 303A,B and Math 403A,B. Parallel to Math 401, but with emphasis on geometry, trigonometry and the theory of equations.

403A Fundamental Concepts of Middle School Mathematics I (3)  
Prerequisite: Math 303B. Content background in mathematics to help satisfy credentialing requirements for teaching mathematics at the middle school level. Focuses on gaining a thorough understanding of algebra, including patterns, functions and the use of technology.

403B Fundamental Concepts of Middle School Mathematics II (3)  
Prerequisite: Math 403A. Content background in mathematics to help satisfy credentialing requirements for teaching mathematics at the middle school level. Focuses on gaining a thorough understanding of advanced algebra, geometry, probability and statistics and the use of technology.

406 Introduction to Partial Differential Equations (3)  

407 Abstract Algebra (3)  
Prerequisite: Math 302. Sets, mappings, groups, rings, modules, fields, homomorphisms, advanced topics in vector spaces and theory of linear transformations, matrices, algebras, ideals, field theory, Galois theory.
**412 Complex Analysis (3)**
Prerequisite: Math 350. Complex differentiation and integration, Cauchy's theorem and integral formulas, maximum modulus theorem, harmonic functions, Laurent series, analytic continuation, entire and meromorphic functions, conformal transformations and special functions.

**414 Topology (3)**
Prerequisite: Math 350. Topological spaces and continuous functions, connectedness and compactness, metric spaces and function spaces.

**417 Foundations of Geometry (3)**
Prerequisite: Math 307. Foundations of Euclidean and non-Euclidean geometries through transformations and formal axiomatics.

**425 Differential Geometry (3)**

**430 Number Theory (3)**
Prerequisite: Math 302. Basic concepts of classical number theory with modern applications. Divisibility, congruences. Diophantine approximations and equations, primitive roots, continued fractions. Applications to public key cryptosystem, primality testing, factoring methods and check digits.

**435 Mathematical Statistics (3)**
Prerequisite: Math 335 or equivalent. Statistical theory and its applications, based on the use of calculus.

**436 Advanced Applied Statistics (4)**
(Same as Biology 436)

**438 Introduction to Stochastic Processes (3)**
Prerequisite: Math 335. Stochastic processes, including Markov chains, Poisson Process, Wiener Process. Applications to birth and death processes and queuing theory.

**439 Intermediate Data Analysis (3)**
Prerequisites: Math 250B or 270B, and 338. Simple and multiple linear regression, testing hypotheses, dummy variables, ANOVA, ANCOVA, confounding and interaction, diagnostics, influence and outliers, transformation and weighting and model selection. Introductory nonlinear and logistic regression. SAS statistical software will be used.

**440 Advanced Numerical Analysis (3)**
Prerequisite: Math 340. Advanced topics in numerical analysis selected from iterative methods for linear systems, approximation of eigenvalues and eigenvectors, numerical methods for ordinary and partial differential equations, optimization methods and approximation theory. Error and convergence analysis and computer coding.

**450 Advanced Calculus II (3)**
Prerequisite: Math 350. Sequences and series of functions. Continuity, differentiation and integration of functions of several variables. Advanced topics in analysis, such as Lebesgue integration or the theory of metric spaces.

**470 Advanced Mathematical Model Building (3)**
Prerequisites: Math 307, 335 and 370. A capstone course for students with strong mathematical preparation. Topics may include stochastic models, Monte Carlo integration, simulation of discrete event systems, simulation software and further studies in dynamic systems and flow and diffusion models.

**471 Combinatorics (3)**
Prerequisite: Math 302 or 307. Analysis of discrete structures, including existence, enumeration and optimization. Permutations and combinations, combinatorial identities, the inclusion-exclusion principle, recurrence relations, Polya counting. Basic definitions and properties of graphs, Eulerian and Hamiltonian graphs, trees, graph colorings and chromatic number, planar graphs.

**489A Applicable Linear Algebra (3)**
Prerequisites: linear algebra, advanced calculus and consent of instructor. Corequisite: Math 489B. Topics from linear algebra useful in graduate studies in applied mathematics. Finite and infinite dimensional vector spaces, linear transformations and matrices. Introduction to Hilbert spaces. Projection theorem and some of its applications.

**489B Applicable Analysis (3)**
Prerequisites: undergraduate calculus, linear algebra, advanced calculus and consent of instructor. Corequisite: Math 489A. Topics from analysis useful in graduate studies in applied mathematics. Topics may include initial and boundary value problems, including series solutions, eigenvalues and eigenfunctions, Fourier analysis, generalized functions, an introduction to the calculus of variations, and transform methods.

**491 Research Seminar (1)**
Prerequisite: consent of instructor. Corequisite: Math 497 or 498. Students are required to attend the weekly undergraduate research seminars and give at least one seminar presentation as determined by the faculty adviser. May be repeated for credit.

**495 Internship in Applied Mathematics (1-3)**
Prerequisites: 15 units of upper-division mathematics and consent of instructor. Work experience in advanced mathematics through positions in business, industry or government.

**496 Student-to-Student Tutorials (1-3)**
Consult “Student-to-Student Tutorials” in this catalog for more complete course description. May be taken Credit/No Credit only.
497 Undergraduate Research (1-3)
Prerequisites: nine units of upper-division math and consent of instructor. Methods of research in the mathematical sciences through a research project supervised by a departmental faculty. May be repeated for up to 6 units credit towards major.

498 Senior Thesis (2)
Prerequisites: six units Math 497 (up to 2 units concurrently) and consent of instructor. Preparation, presentation and defense of thesis. Topic approved by the undergraduate research committee. Thesis formatted in accordance with journal in field. May not be repeated for credit.

499 Independent Study (1-3)
Prerequisite: consent of instructor. Special topic in mathematics, selected in consultation with and completed under supervision of instructor.

501A Numerical Analysis and Computation I (3)

501B Numerical Analysis and Computation II (3)

502A Probability and Statistics I (3)
Prerequisites: Math 335, 489A,B. Corequisite: Math 502B. Theory and applications of probability models including univariate and multivariate distributions; expectations and transformations of random variables. Must be taken prior to or concurrently with Math 502B.

502B Probability and Statistics II (3)
Prerequisites: Math 335, 489A,B. Corequisite: Math 502A. Theory and applications of sampling theory, statistical estimation and hypothesis testing. Must be taken after or concurrently with Math 502A.

503A Mathematical Modeling I (3)
Prerequisites: Math 489A,B and 501A,B. Mathematical modeling concepts. Topics may include: dimensional analysis, scaling and sensitivity; system concepts, state space, observability, controllability and feedback; dynamical systems, models and stability analysis; optimization models.

503B Mathematical Modeling II (3)
Prerequisite: Math 503A. Development and analysis of mathematical models in such areas as mechanics, economic planning, operations management, environmental and ecological sciences, biology and medicine.

504A Simulation Modeling and Analysis (3)
Prerequisites: Math 501A,B; 502A,B; 503A,B. Corequisite: Math 504B. Advanced techniques of simulation modeling, including the design of Monte Carlo, discrete event and continuous simulations. Topics may include output data analysis, comparing alternative system configurations, variance-reduction techniques and experimental design and optimization.

504B Applications of Simulation Modeling Techniques (3)
Prerequisites: Math 501A,B; 502A,B; 503A,B. Corequisite: Math 504A. Introduction to a modern simulation language and its application to simulation modeling. Topics will include development of computer models to demonstrate the techniques of simulation modeling, model verification, model validation and methods of error analysis.

581 Studies in Geometry (3)
Prerequisites: Math 307, graduate standing, plus one year of full-time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint, including the axiomatic method and non-Euclidean geometry.

582 Studies in Algebra (3)
Prerequisites: Math 302, graduate standing, plus one year of full-time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint, including algorithms, fields and polynomials.

583 Topics in Statistics (3)
Prerequisites: Math 338, graduate standing, plus one year of full-time teaching in secondary school mathematics. Calculus-based course designed to teach appropriate strategies and tools to effectively address problems in statistics. Includes project design, exploratory data analysis and interpretation, and effective communication of results.

584 Studies in Analysis (3)
Prerequisites: Math 350, graduate standing, plus one year of full-time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint, including limits, continuity, differentiation and integration.

586 Studies in Discrete Mathematics (3)
Prerequisites: Math 335 and one of the following: Math 320, Comp Sci 120, Comp Sci 121 or equivalent; graduate standing and one year of full time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint, including combinatorics, probability, matrices and linear programming.

587 Studies in Mathematical Problem Solving (3)
Prerequisites: Math 302, graduate standing, plus one year of full-time teaching in secondary school mathematics. Problem solving via non-routine and enrichment-type problems from several branches of mathematics.
597 Project (3)
Prerequisite: consent of instructor. May be repeated for credit. Students in the Applied Master’s Program earn a total of 6 units.

599 Independent Graduate Research (1-3)
Prerequisites: graduate standing and consent of instructor. One unit required for each regular graduate course. Also offered without being attached to any course. May be repeated for credit.

MATHEMATICS EDUCATION COURSES
Course are designated as MAED in the class schedule

442 Teaching Mathematics in Secondary School (3)
Prerequisite: admission to Teacher Education Program in Mathematics or consent of instructor. Objectives, methods and materials and technology for teaching mathematics. Required before student teaching, of mathematics majors for the general single subject credential. (2 hours lecture, 2 hours activity)

449E Externship in Secondary Teaching (3)
(Same as Secondary Education 449E)

449I Internship in Secondary Teaching (10)
(Same as Secondary Education 449I)

449S Seminar in Secondary Teaching (3)
(Same as Secondary Education 449S)

499 Independent Study (1-3)
Prerequisite: consent of instructor. Special topic in mathematics education, selected in consultation with and completed under supervision of the instructor. May be repeated for credit.

532 Teaching Problem Solving in Middle School Mathematics (3)
Prerequisite: Math 403B. Seminar to explore techniques of problem solving for mathematics teachers of grades 5-9. Review of research on problem solving at the middle school level. Review of state and national documents on middle school mathematics education. Emphasis on problem solving in algebra, geometry and probability.
MECHANICAL ENGINEERING VISION, MISSION, STRATEGIES AND EDUCATIONAL OBJECTIVES

Mechanical Engineering Vision Statement
The Mechanical Engineering Department’s vision is to be recognized as one of the high quality mechanical engineering programs in Southern California.

Mechanical Engineering Mission Statement
Consistent with the University’s Mission, learning is the first priority in the Mechanical Engineering Department. To implement our mission, we provide the best qualities of teaching, scholarship and professional practice. The Department is committed to facilitating the education of the mechanical engineering undergraduate and graduate students by following the Department’s Program Educational Objectives.

Mechanical Engineering Strategies
The Mechanical Engineering Department is committed to realize its vision, and accomplish its mission by:

- strengthening the Department’s partnerships with its stakeholders and Orange County community
- enhancing the quality of the Mechanical Engineering program through systematic assessments and feedback of its program
- integrating emerging fields within the curriculum

Program Educational Objectives

1. To prepare mechanical engineering students for fulfilling careers that contribute to the success of engineering industries, which include automobile, aerospace, defense, electronics, biomedical engineering and entertainment

2. To educate mechanical engineering students thoroughly in methods of analysis, including the mathematical and computational skills appropriate for engineers to use when solving problems

3. To develop the skills pertinent to the design process, including the students’ ability to formulate problems, to think creatively, to communicate effectively, to synthesize information and to work collaboratively

4. To teach mechanical engineering students to use current experimental and data analysis techniques for mechanical engineering applications such as design, manufacturing, testing and analysis of engineering systems

5. To instill in our students an understanding of their professional, social and ethical responsibilities in order to engage in lifelong learning, and develop their people, management and leadership skills
INTRODUCTION

The mechanical engineering program at CSUF provides a foundation for professional engineering careers in private industry and government. Mechanical engineers are employed in a wide range of industries, such as manufacturing, transportation, energy, food, biomedical and others. In general, mechanical engineers are involved with the design, research, development, manufacture, testing, distribution, support, maintenance and recycling of devices and products. Automobiles, airplanes, home appliances, robots, rockets, space capsules, printers and computer hard disk drives are some of the various products that have been customarily designed and developed by mechanical engineers. Mechanical engineers possess a firm understanding of science, mathematics and engineering needed to carry out these complex tasks which are so important to a modern technological society.

The Bachelor of Science in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700.

The graduate curriculum is designed to provide a specialized education for career advancement or further work towards a doctoral degree.

2 + 2 Articulated Programs with Community Colleges

The Mechanical Engineering Department has developed 2+2 articulation agreements with community colleges to provide students seamless transfer to CSUF’s Mechanical Engineering program. This allows the full-time students taking the courses specified by the department adviser to graduate in two years following transfer to CSUF.

High School Preparation

The entering freshman’s preparation should include two years of algebra, geometry, trigonometry and one year of physics or chemistry. Students deficient in mathematics or chemistry must take special preparatory courses, i.e., Mathematics 125 and Chemistry 115, which will not carry credit for the major. (See Mathematics Section for Entry Level Mathematics test and Math-Science Qualifying Examination requirements.)

Transfer Students

A transfer student shall complete a minimum of 30 units in residence, at least 15 of which shall be taken in upper-division engineering courses. Courses taken at another college or university with a grade of “D” (1.0) will not be accepted as substitute for upper-division courses.

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

The undergraduate program requirements for the degree comprises four major segments: foundation courses in mathematics and physical sciences; basic engineering courses; general education courses in the arts, humanities, social sciences, biological sciences and other related areas; and a sequence of courses to fulfill the requirements of the Mechanical Engineering degree or the emphasis in Manufacturing Engineering.

Undergraduate students are required to meet with their academic adviser every semester during the first year and at least once a year thereafter. Students are strongly encouraged to see their academic advisers frequently to obtain guidance in pursuit of their careers. All courses taken in fulfillment of the requirements for the bachelor’s degree must be taken for a letter grade, i.e., under grade Option 1. All mathematics and physical science courses required for the degree must be completed with at least a “C” (2.0) grade to count as prerequisite courses to engineering courses or as credit towards the degree. Graduate courses are not open to undergraduate students without approval of the program coordinator.

Mathematics and Science Courses (30)

Mathematics 150A  Calculus (4)
Mathematics 150B  Calculus (4)
Mathematics 250A  Multivariate Calculus (4)
Mathematics 250B  Introduction to Linear Algebra and Differential Equations (4)
Chemistry 120A  General Chemistry (5)
Physics 225, 225L  Fundamental Physics: Mechanics and Lab (4)
Physics 226, 226L  Fundamental Physics: Electricity and Magnetism and Lab (4)
Physics 227  Fundamental Physics: Waves, Optics and Modern Physics (1)

Engineering Core Courses (24)

EGME 102  Graphical Communications (3)
EGCE 201 Statics (3)
EGEE 203  Electric Circuits (3)
EGME 205  Digital Computation (3)
EGME 206A  Unified Laboratory (1)
EGME 308  Engineering Analysis (3)
EGME 314  Engineering Economy (2)

General Education Courses

I. Core Competencies (9)

A. Oral Communication (3)
   Honors 101B, Human Comm 100, or Human Comm 102
B. Written Communication (3)
   English 101
C. Critical Thinking (3)
   Honors 101A; Human Comm 235; Philosophy 105, 106;
   Psychology 110; or Reading 290

II. Historical and Cultural Foundations (9)

A. Development of World Civilization (3)
   History 110A or 110B
B. American History, Institutions and Values (6)
   1. American History (3)
      Afro Ethnic Studies 190, American Studies 201, Chicano 190, History 180, 190, or Honors 201A
   2. Government (3)
      Poli Sci 100

III. Disciplinary Learning (31)
   A. Mathematics and Natural Sciences (16)
      1. Mathematics
         Mathematics 150A (4)
      2. Natural Sciences
         a. Physical Science
            Chemistry 120A and Physics 225, 225L
         b. Earth and Astronomical Sciences
            Not applicable for engineering majors
         c. Life Science
            Biology 101 (3)
      3. Implications and Explorations in Mathematics and Natural Sciences
         Not applicable for mechanical engineering majors
   B. Arts and Humanities (9)
      1. Introduction to the Arts (3)
         Art 101, 201A, 201B, 311, 312, Dance 101, Music 100, Theater 100
      2. Introduction to the Humanities (3)
         Any lower-division course in this category listed in the current class schedule
      3. Implications, Explorations and Participatory Experience in the Arts and Humanities (3)
         Any upper-division course in this category in the current class schedule
   C. Social Sciences (6)
      1. Introduction to the Social Sciences (3)
         EGME 314 and EGME 490
      2. Implications, Explorations and Participatory Experience in the Social Sciences (3)
         Any upper-division course in this category listed in the current class schedule

IV. Lifelong Learning
   This category is not applicable to engineering majors

V. Cultural Diversity
   Take at least one star (*) course in Sections III.B.3 or III.C.2

Upper-Division Writing Requirement
   In addition to a passing score on the Examination in Writing Proficiency (EWP), the following courses are required by all mechanical engineering majors: EGME 306A, 306B, 476A and 476B. Written work for these courses must meet professional standards and requires completion with a grade of "C" (2.0) or better.

Required Courses in Mechanical Engineering (39 units)
   EGEE 303 Electronics (3)
   EGEE 303L Electronics Laboratory (1)
   EGME 306B Fluids and Thermal Laboratory (1)
   EGME 322L Introduction to Computer-Aided Design (3)
   EGME 331 Mechanical Behavior of Materials (3)
   EGME 333 Fluid Mechanics & Aerodynamics (3)
   EGME 335 Introduction to Mechanical Design (3)
   EGME 407 Heat Transfer (3)
   EGME 414 Design Project I (3)
   EGME 419 Design Project II (2)
   EGME 421 Mechanical Design (3)
   EGME 426 Design of Thermal and Fluid Systems (3)
   EGME 431 Mechanical Vibrations (3)
   EGME 476A Dynamic Systems and Controls Lab (2)
   EGME 476B Energy and Power Lab (2)
   EGME 490 Seminar in Engineering (1)

Technical Electives in Mechanical Engineering (11 units)
   Before enrolling in any elective course, approval of the adviser must be obtained.

Power and Energy
   EGGN 403 Computer Methods in Numerical Analysis (3)
   EGME 417 Computational Heat Transfer (3)
   EGME 424 Data Acquisition and Instrumentation Using LabVIEW (3)
   EGME 447 Piping Selection and Piping Network Design (3)
   EGME 451 Heating, Ventilating and Air Conditioning Systems (3)
   EGME 452 Fluid Machinery (3)
   EGME 454 Optimization of Engineering Design (3)
   Design and Materials for Manufacturing
   EGGN 403 Computer Methods in Numerical Analysis (3)
   EGME 315 Basic Fabrication Techniques and Manufacturing Practices (3)
   EGME 410 Introduction to the Finite Element Method and Applications (3)
   EGME 411 Mechanical Control Systems (3)
   EGME 418 Space and Rocket Engineering (3)
   EGME 422 Mechanical Design Using Pro/ENGINEER (3)
   EGME 438 Analytical Methods in Engineering (3)
MANUFACTURING ENGINEERING EMPHASIS

See the Bachelor of Science in Mechanical Engineering section of this catalog for requirements in mathematics and science foundation courses (30 units), engineering core courses (24 units) and general education coursework.

Required Courses (43 units)

EGEE 303 Electronics (3)
EGEE 303L Electronics Lab (1)
EGME 306B Fluids and Thermal Laboratory (1)
EGME 322L Introduction to Computer-Aided Design (3)
EGME 331 Mechanical Behavior of Materials (3)
EGME 333 Fluid Mechanics and Aerodynamics (3)
EGME 335 Introduction to Mechanical Design (3)
EGME 476A Dynamic Systems and Controls Lab (2)
EGME 407 Heat Transfer (3)
EGME 414 Design Project I (3)
EGME 419 Design Project II (2)
EGME 421 Mechanical Design (3)
EGME 426 Design of Thermal and Fluid Systems (3)
EGME 461 Fabrication Methods (3)
EGME 463 Introduction to Robotics (3)
EGME 483 Computer-Aided Manufacturing (3)
EGME 490 Seminar in Engineering (1)

Technical Electives (9 units)

Approval of the adviser must be obtained before enrolling in any elective course.

EGME 315 Basic Fabrication Techniques and Manufacturing Practices (3)
EGME 410 Introduction to the Finite Element Method and Applications (3)
EGME 411 Mechanical Control Systems (3)
EGME 422 Mechanical Design Using Pro/ENGINEER (3)
EGME 454 Optimization of Engineering Design (3)
EGME 459 Plastics and Other Non-Metallics (3)
EGME 460 Failure of Engineering Materials (3)
EGME 462 Composite Materials (3)
EGME 480 Human Factors in Engineering (3)
EGEE 323 Engineering Probability and Statistics (3)
EGEE 404 Introduction to Microprocessors and Microcomputers (3)
EGEE 404L Microprocessor Lab (1)
EGEE 445 Digital Electronics (3)
EGEE 445L Digital Electronics Lab (1)

MANUFACTURING ENGINEERING EMPHASIS

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EGME 333 Fluid Mechanics and Aerodynamics (3)
EGME 335 Introduction to Mechanical Design (3)
EGME 476A Dynamic Systems and Controls Lab (2)
EGME 407 Heat Transfer (3)
EGME 414 Design Project I (3)
EGME 419 Design Project II (2)
EGME 421 Mechanical Design (3)
EGME 426 Design of Thermal and Fluid Systems (3)
EGME 461 Fabrication Methods (3)
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EGME 483 Computer-Aided Manufacturing (3)
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EGME 459 Plastics and Other Non-Metallics (3)
EGME 460 Failure of Engineering Materials (3)
EGME 462 Composite Materials (3)
EGME 480 Human Factors in Engineering (3)
EGEE 323 Engineering Probability and Statistics (3)
EGEE 404 Introduction to Microprocessors and Microcomputers (3)
EGEE 404L Microprocessor Lab (1)
EGEE 445 Digital Electronics (3)
EGEE 445L Digital Electronics Lab (1)
MASTER OF SCIENCE IN MECHANICAL ENGINEERING

To qualify for admission to a conditionally classified standing, applicants must meet the following university and departmental requirements:

1. Bachelor's degree from a regionally accredited institution, e.g., Western Association of Schools and Colleges (WASC)
2. Bachelor's degree in mechanical engineering from an institution accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone (410) 347-7700
3. Minimum GPA of 2.5 in the last 60 semester units
4. Good standing at the last institution attended

Students not meeting the above requirements may be admitted at the discretion of the department head and will be required to take an additional six or more units of adviser-approved prerequisite coursework. The student must demonstrate potential for graduate study by earning a grade point average of 3.0 or higher in these courses.

Any student entering the Master of Science degree program without a B.S. in Mechanical Engineering will also be required to complete one or more courses in the areas where the student is deemed to be deficient, prior to beginning coursework for the Master's degree.

Application Deadlines

Reference www.fullerton.edu/ecs for application information.

Classified Standing

Students meeting the following additional requirements will be advanced to classified standing and are eligible to take graduate courses for which they are qualified:

1. Completion of all deficiency work specified by the graduate adviser with a grade of “B” (3.0) or better.
2. Development of an approved study plan. Before completing nine units at CSUF toward the M.S. degree, the student must meet with an adviser for preparation of a study plan which must also be approved by the department chairman and the Office of Graduate Studies.
3. Fulfillment of the university writing requirement prior to completing nine units at CSUF toward the M.S. degree. Students must demonstrate writing ability commensurate with the baccalaureate degree. Please refer to the "Graduate Regulations" section of this catalog and also the class schedule for further information on how this requirement can be met.

Study Plan

The study plan consists of a minimum of 30 units of adviser-approved upper-division or graduate-level coursework that must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

Required Courses (3 units)

Adviser-approved math-oriented course (3)

Concentration Courses (15 units)

A student is required to select a minimum of 15 units in mechanical engineering. These units may be 400- and 500-level courses and are selected according to the student’s area of special interest. Coursework is designed to meet the student's professional career goals and may focus on the following areas: Power and Energy, Design and Materials for Manufacturing, Thermal and Fluids Engineering, Robotics, Controls and Automated Manufacturing.

Other Courses (9 units)

Elective units should be taken in mechanical engineering or a related engineering field and are subject to adviser approval.

Exam/Thesis/Project Option (3-6 units)

Subject to approval by the adviser, students may select one of the following three options for final review by a department committee:

1. Comprehensive oral examination over selected coursework
2. EGME 597 Project (3-6 units)
3. EGME 598 Thesis (3-6 units)

Students enrolling in less than six units of Thesis/Project will be required to take a comprehensive oral exam. Students enrolling in six units of thesis or project may defend their thesis or project work with an oral exam instead of taking a comprehensive oral exam.

MECHANICAL ENGINEERING COURSES

Courses are designated as EGME in the class schedule.

102 Graphical Communications (3)

Graphics as a fundamental means of communication in design. Development of spatial visualization. Freehand sketching and use of instruments, orthogonal projection, pictorials. Dimensioning, tolerances, descriptive geometry, CAD principles and applications, AutoCAD, design procedure, cost analysis and freshman design project. (1 hour lecture, 6 hours laboratory)

205 Digital Computation (3)

Prerequisites: college algebra or three years of high school math, including a second course in algebra. Computers and their numerical applications. Programming languages, MathCAD spreadsheet, digital computation methods in statistics and solving algebraic equations. Applications of general purpose software for engineering analysis.

214 Basic Machine Shop Practice and Safety (2)

Prerequisites: Math 115, 125 or equivalents. Introduction to machine shop practices and drill press, grinding wheel, lathe, vertical mill and band saw. Thorough safety procedures instruction on each machine. Demonstrate safe practices on each machine. Introduction to measurement and tolerancing. Discussion and laboratory practice. (1 hour lecture, 3 hours laboratory.) Does not count toward fulfilling degree requirements. Credit/No Credit only.
3286 Technology-Based Graphical Communication (3)  
Prerequisite: Math 130 or 150A. Introduction to techniques used in three-dimensional graphics, design and visualization to conceptualize, apply, analyze, synthesize, evaluate and communicate information concepts using available technology. No credit for Engineering/Computer Science majors. (2 hours lecture, 2 hours laboratory)

304 Thermodynamics (3)  
Prerequisites: Chem 120A, Math 150B, Physics 225. Energy and its transformation; heat and work; conservation of mass and energy, system properties, irreversibility and availability. Ideal gases, heat engines and refrigeration (both ideal and actual), equipment selection and sizing.

306A Unified Laboratory (1)  
Prerequisites: Physics 225 and EGME 102. Corequisite: EGME 205. Static and dynamic measurements (tension and strain test tension beams, columns, charpy, gyroscopes) using mechanical and electrical transducers. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of reports and pass with a "C" (2.0) or better. (3 hours laboratory)

306B Fluids and Thermal Laboratory (1)  
Prerequisites: EGME 306A and 333. Corequisite: EGME 407. Continuation of EGME 306A. Flow, temperature and pressure measurement. Experimental studies of fluid friction and heat exchanger performance. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of technical reports and pass with a "C" (2.0) or better. (3 hours laboratory)

308 Engineering Analysis and Statistics (3)  
(Same as Civil Engineering 308, Electric Engineering 308 and Engineering 308)

314 Engineering Economy (2)  
Prerequisite: junior or senior standing in engineering. Development, evaluation and presentation of alternatives for engineering systems and projects using principles of engineering economy and cost benefit analysis. (Same as EGGN 314)

315 Basic Fabrication Techniques and Manufacturing Practices (3)  
Prerequisite: EGME 102. Conventional fabrication techniques, measuring, referencing and tolerances applied to manufacturing such as tooling, computer numerical control machining and process indices. Safety instruction for use of campus machine shop equipment. (2 hours discussion and 2 hours laboratory)

322L Introduction to Computer-Aided Design (3)  
Prerequisites: EGME 331, EGCE 302. Introduction to modeling, assembly, design documentation and analysis using typical commercial CAD/CAE software. Use of online resources in the collaborative design process. Design file transfer protocols. Design project using a technology based team environment. CAD/CAE system selection criteria. (1 hour discussion, 6 hours laboratory). (Same as Computer Science 322L)

331 Mechanical Behavior of Materials (3)  

333 Fluid Mechanics and Aerodynamics (3)  
Corequisites: EGME 205 and EGME 304. Principles of fluid mechanics and their applications; fluid properties; fluid statics; one-dimensional incompressible flow; concepts of multi-dimensional flows including conservation principles; similitude and dimensional analysis; internal and external viscous flow; elements of compressible flow; design considerations in fluid mechanics.

335 Introduction to Mechanical Design (3)  
Prerequisites: EGME 205, EGCE 302, EGME 102. Kinematics and dynamics of mechanisms; design and analysis of linkages, gears and cams through the use of analytical, graphical and computer-aided techniques.

350 Living and Working in Space (3)  

407 Heat Transfer (3)  
Prerequisites: Math 250B and EGME 333. Principles of heat transfer and their applications: introduction to conductive, convective and radiation heat transfer; one-dimensional heat conduction; concepts of multi-dimensional conduction; convective heat transfer in conduits and external surfaces; cross-flow and shell and tube heat exchangers; and thermal system design.

410 Introduction to the Finite Element Method and Applications (3)  
Prerequisite: approved study plan. Basic concepts of integral and matrix formulation of boundary value problems. One-dimensional finite element formulation of heat transfer, truss beam and vibration problems. Applications of commercial finite element programs. Selection criteria for code, element and hardware. CAD system interfaces.

411 Mechanical Control Systems (3)  
Prerequisites: EGME 205 and 308, and EGCE 302. Mechanical control system design and analysis. Pneumatic, hydraulic, electromechanical actuators and devices. Stability criteria, root locus plots, transfer functions, introduction to feedback control and microprocessor applications.
414 Design Project I (3)
Prequisites: EGME 322L and 421. Corequisite: EGME 426. Design methodology, CAD/CAE philosophy, optimization, product liability, probability/statistical principles, ASME codes, safety, human factors, material selection, legal aspects of design, professional ethics. Design project to be constructed in EGME 419, but feasibility study, preliminary design, assembly drawings, interim and final written project reports, interim and final oral presentations are required for 414. (1 hour lecture and 6 hours laboratory)

417 Computational Heat Transfer (3)

418 Space and Rocket Engineering (3)

419 Design Project II (2)
Prequisite: EGME 414. Completion of the design project initiated in EGME 414. Construction of prototype, model or components. Test proposed design, and prepare a written final design report. Teamwork and communications skills are emphasized. Interim and final oral presentations are required. (6 hours laboratory)

421 Mechanical Design (3)
Prequisites: EGCE 331 and 335. Design and application of machine components such as brakes, clutches, gears, springs, fasteners, pulleys and belting lubrication of machine elements, bearings, gaskets, seals, “O” rings, methods for study of impact, dynamic loading and fatigue; comprehensive treatment of failure, safety and reliability.

422 Mechanical Design Using Pro/ENGINEER (3)
Prequisite: EGME 322L or equivalent. Modeling, assembly and design documentation using Pro/ENGINEER. Design of mechanical components and assemblies using Advanced Pro/ENGINEER features such as blends, drafts, user defined features, relations, family tables and assembly management. Collaborative design project, utilizing online resources. May be repeated for one credit.

424 Data Acquisition and Instrumentation Using LabVIEW (3)
Prequisite: EGME 306A or equivalent. Graphical programming; design and development of virtual instruments using LabVIEW programming environment; building applications for data acquisition and data reduction, measurement, testing and control of engineering systems; collaborative term project. (2 hours discussion, 3 hours laboratory)

426 Design of Thermal and Fluid Systems (3)
Prequisite: EGME 407. Integration of fundamental principles of thermodynamics, fluid mechanics, heat transfer and related subjects in the design of thermal and fluid systems. Design process and economics are applied to pumps, fans, turbines, boilers, piping systems, cross-flow and shell and tube heat exchangers.

431 Mechanical Vibrations (3)

438 Analytical Methods in Engineering (3)
Prequisite: EGME 308. Ordinary and partial differential equations with constant and variable coefficients; orthogonal functions; conformal mapping; potential theory; engineering applications.

447 Piping Selection and Piping Network Design (3)
Prequisites: EGME 333 and EGCE 301 or EGME 331. Pressure losses in piping networks; selection of piping based upon fluid, temperature, pressure and economic considerations; piping connections, fittings and components; stress analysis; review of national piping codes.

451 Heating, Ventilating and Air Conditioning Systems (3)
Prequisites: EGME 304 and 407. The fundamentals of controlling heating, ventilating and air conditioning systems. Theory and analysis of fundamental thermodynamics relating to these systems. Laboratory demonstrations of actual systems.

452 Fluid Machinery (3)
Prequisites: EGME 304 and 333. Thermal and hydraulic design and analysis of pumps, fans, turbines and compressors. Component selection, system design and performance evaluations.

454 Optimization of Engineering Design (3)

456 Introduction to Mechatronics for Engineers (3)
457L Intelligent Systems Laboratory (2)
Prerequisite: EECE 456. Design and assembly of microprocessor-based mechanisms. Lab experiments encompass machine/high level programming and interfacing of microcontrollers with sensors and actuators. Design project. (1 hour lecture, 3 hours laboratory)

459 Plastics and Other Non-Metallics (3)

460 Failure of Engineering Materials (3)
Prerequisite: EGME 331. Imperfections in solids; fracture initiation and crack propagation; dislocations; yield point phenomenon; fatigue; creep; ultrasonic effects; radiation damage; stress corrosion; hydrogen embrittlement; failure of composite materials.

461 Fabrication Methods (3)
Prerequisite: EGME 331. Manufacturing processes. Metal joining processes. Casting, forging, powder metallurgy, machining and machining tools, finishing, coating, plating, non-metallic materials inspection and gaging and tolerances.

462 Composite Materials (3)
Prerequisite: EGCE 301 or EGME 331. Application, mechanical properties and fabrication studies of fiber reinforced composite materials, stress analysis of laminated anisotropic composite structures. Studies of special problems unique to composites.

463 Introduction to Robotics (3)
Prerequisite: EGME 335. Corequisite: EGME 376A. Kinematic, dynamic, control and programming fundamentals associated with industrial robots and programmable manipulators. Trajectory planning, application of robotics in manufacturing and integration of robots into flexible manufacturing systems.

475 Acoustics and Noise Control (3)
Prerequisite: Physics 227. Basic phenomena on the propagation, absorption and generation of acoustic waves, specification and measurement of noise, effects of noise on speech and behavior, legal aspects of industrial and building noise, principles and application of noise control.

476A Dynamic Systems and Controls Laboratory (2)
Prerequisite: EGME 431 and 306B. Dynamic systems, vibration, acoustics and other mechanical components; computer simulation of dynamic systems (Simulink); robotics, computer-controlled machining and automatic data acquisition. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of individual engineering laboratory reports. Must be passed with a “C” (2.0) or better to count towards the upper-division writing requirement (“C–” is not a passing grade). Not available for graduate degree credit. (6 hours laboratory)

476B Energy and Power Laboratory (2)
Prerequisites: EGME 304 and 407; and pre- or corequisite, EGME 306B. Mass transfer, heat transfer and thermodynamic phenomena and their interaction with mechanical systems. Team experiment. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of individual engineering laboratory reports. Must be passed with a “C” (2.0) or better to count towards the upper-division writing requirement (“C–” is not a passing grade). Not available for graduate degree credit. (6 hours laboratory)

480 Human Factors in Engineering (3)
Prerequisite: approved study plan. Principles of design for making products and systems faster, easier and more effective to use. Design project using these principles that consider human capabilities and limitation of senses and responses to sensory stimuli. Physiological, psychological and work factors are evaluated for design of equipment, work methods, environments and standards.

483 Computer-Aided Manufacturing (3)
Prerequisite: EGME 476A or equivalent. Introduction to computer-aided manufacturing processes. CNC machines, robot and PLC programming. Design for CIM. Fixed and flexible manufacturing systems. Process planning and scheduling. Simulation software for manufacturing systems. Laboratory experiments. (1 hour discussion, 4 hours laboratory)

486 Introduction to Electronics Packaging (3)

487 Thermal Control of Electronics Packaging (3)
Prerequisites: EGME 308 and 407. Fluid mechanics and heat transfer as related to the thermal control of electronic packages of varying sizes. Analysis of individual components, complete boards and complete systems is considered. Liquid and gas cooling mediums.

490 Seminar in Engineering (1)
Prerequisite: senior standing in engineering. Engineering profession, professional ethics and related topics. May be repeated once for credit with the approval of the department.

497 Senior Project (1-3)
Prerequisite: consent of instructor, adviser and department head. Directed independent design project.

499 Independent Study (1-3)
Prerequisite: approval of study plan by adviser and department head. Specialized topics in engineering, selected in consultation with and completed under the supervision of the instructor. May be repeated for credit.
508 Advanced Inviscid Fluid Flow (3)
Prerequisites: EGME 205, 308, EGME 333. Two- and three-dimensional potential flow theory. Sources, sinks, vortices, Rankine bodies, free jets, channel flow, air foils. Introduction to computational fluid dynamics. Complex potential and various transformation techniques are used.

511 Advanced Mechanical Vibrations (3)
Prerequisite: EGME 431. Vibrations in rotating and reciprocating machines; noise and vibration in fluid machinery; continuous systems; random vibrations; transient and nonlinear vibration, computer applications.

512 Advanced Mechanical Design and Management (3)
Prerequisite: EGME 421 or equivalent. Advanced modern mechanisms. Analysis and synthesis of mechanisms. Advanced topics in computer-aided design of mechanical, thermal and fluid systems. Methodology of modern design. Optimization in design.

516 Advanced Radiation Heat Transfer (3)
Prerequisite: EGME 407. Radiation heat transfer, including study of the geometric shape factors, ideal (black) and real systems, and energy transfer in absorbing, scattering and emitting media, and radiation combined with other modes of energy transfer.

520 Advanced Viscous Fluid Flow (3)

524 Advanced Thermodynamics (3)
Prerequisite: EGME 304. Equilibrium and stability criteria, third law of thermodynamics, multiple component systems, ionization, equilibrium reaction, lower core “ideal” gases, thermodynamic cycles.

526 Advanced Convective Heat Transfer (3)
Prerequisite: EGME 407. Convective heat transfer; heat transfer in external and internal flow fields for both laminar and turbulent fluid flow, applications.

530 Advanced Strength of Materials (3)
Prerequisite: EGME 421. Energy methods. Castilian’s theorem. Curved beams, beams on elastic supports, thick wall cylinders, shrink fits, localized stress, column instability, failure theories, bearings.

536 Advanced Conduction Heat Transfer (3)
Prerequisite: EGME 407. Conduction heat transfer; Bessel and Legendre functions, Laplace transforms, eigenfunctions, Fourier series solutions, heat sources and sinks, multidimensional problems, transient systems and numerical methods (finite difference and finite element methods).

538 Advanced Engineering Analysis (3)
Prerequisite: EGME 438. Partial differential equations in engineering, numerical techniques, integral equations, engineering applications.

540 Computer Applications In Engineering Design (3)

541 Finite Element Method for Mechanical Engineers (3)

554 Applied Optimal Mechanical Design (3)
Prerequisite: EGME 454 or equivalent. Formulation of design optimization problems in mechanical engineering. Mathematical programming methods. Practical aspects of optimization. Design of complex mechanical systems. Individual projects will be assigned to apply optimization techniques to an engineering system or component.
576  **Advanced Dynamics and Control of Mechanical Systems**  (3)
   Prerequisite: EGME 411. Advanced study of the dynamics and control of mechanical systems including: state space modeling, Lyapunov stability, modern design techniques and case studies.

597  **Project**  (1-6)
   Prerequisite: consent of graduate program adviser.

598  **Thesis**  (1-6)
   Prerequisite: consent of graduate program adviser.

599  **Independent Graduate Research**  (1-3)
   Prerequisite: classified graduate status. Open to graduate students only by consent of Mechanical Engineering graduate program adviser. May be repeated for credit only upon approval by the graduate program adviser.
INTRODUCTION

The Military Science Program focuses on academics, teamwork and physical fitness, and is integrity-based with a mentorship program in place to support all cadets. Military Science provides a dynamic dimension to the university by offering an unmatched hands-on leadership and management education. Military Science is also a university endorsed coed club and offers various extracurricular teams and activities such as “Ranger Challenge” (intercollegiate competition based on physical fitness and agility, rifle marksmanship and map reading/land navigation), Paintball, one Field Training Exercise (overnight bivouac) per semester, rappelling demonstrations and a Color Guard team (presents flags at ceremonies and events), as well as several other exciting activities. All curriculum and activities are designed to build and enhance leadership, management and team-building skills that apply to military and civilian sectors, and last a lifetime.

Military Science courses are accredited and available to students in all academic disciplines. Full-time students are also eligible to enroll as cadets in accordance with university and Department of the Defense policies. Several competitive financial assistance programs are available, which include: four-, three- and two-year scholarships; Reserve Forces and National Guard duty; GI Bill; and loan repayment options. Additionally, scholarship recipients and Advanced course students earn up to $500 per month in stipends.

Upon successful completion of the two- or four-year Reserve Officers Training Corps (ROTC) program, cadets are commissioned as second lieutenants in the United States Army, United States Army Reserves or Army National Guard.

Four-Year Program

This program is composed of a lower-division Basic Course and an upper division Advanced Course. The Basic Course refers to first- and second-year courses (MLSC 101, 102, 201 and 202) that are designed for beginning students who want to try Reserve Officers Training Corps (ROTC) without obligation. Once the Basic Course is completed, students qualify for entry into the upper-division Advanced Course (MLSC 301, 302, 401, 402), which prepares them to be commissioned as officers in the United States Army, the Army Reserves or the Army National Guard. Upon entry into the Advanced Course, cadets are required to sign a contract with the Department of the Army agreeing to complete the ROTC program and accept a commission as a second lieutenant. Once the contract is signed, advanced course cadets will receive up to $500 per month, along with free uniforms for all military science courses.

Two-Year Program

This program is for those students who have at least four semesters of work remaining on campus as either an undergraduate or graduate student, and who did not participate in ROTC earlier. These students enter the Advanced Course of the program after attending a four-week, all expenses paid, summer leadership internship or providing proof of completion of Military Basic Training, or three years JROTC. Students enrolled in the
two-year program are eligible for contracting under the same benefits, requirements and guidelines as the four-year students.

International Learning Opportunities in Military Science

Summer Internship Program is an overseas culture immersion internship aimed at broadening the cultural understanding of junior officers. Since the Army is in a number of countries across the world, it is critical that young officers understand different cultures to ensure the building of strong relationships.

Advanced course students have an opportunity to attend overseas Cadet Troop Leadership Training (CTLT) for three weeks between their junior and senior years. CTLT gives cadets a chance to serve as an acting platoon leader with an actual active duty U.S. Army unit. Many of the CTLT positions are with overseas units in Korea and Europe. Additionally, commissioned second lieutenants selected for active duty will have the opportunity to serve at duty stations all over the world, work with fellow military officers from other countries, attend foreign military schools and immerse themselves in the culture of their host nation while they live and work there.

Interested contracted cadets with strong cumulative grade point averages and who are physically fit have the opportunity to be sent to a three-week Army Airborne School or Air Assault School.

MINOR IN MILITARY SCIENCE

The Military Science minor consists of a combination of courses from many disciplines totaling 23 units. Students interested in this program should seek additional information from the Military Science Program office in E-301.

GENERAL REQUIREMENTS

All enrolled cadets will take courses corresponding to their academic standing in order to remain academically aligned.

Military Science 100 Army Physical Training (1)
   (this class can be repeated for credit up to eight times.)
Kinesiology 146 Weight Lifting (1)
   (for cadets desiring extra conditioning)

Freshmen
Military Science 101 Leadership and Personal Development (3)
Military Science 102 Introduction to Tactical Leadership (3)

Sophomore
Military Science 201 Innovative Team Leadership (3)
Military Science 202 Foundations of Tactical Leadership (3)

Leadership Training Course

The Leadership Training Course (LTC) is four weeks of classroom and field training held during the summer at Fort Knox, Kent. This course is an accelerated version of the two years of leadership development training cadets receive in the Basic Course. By transforming themselves through this rigorous training, cadets will qualify for enrollment in Advanced Army ROTC on campus – provided they have two years of college remaining (undergraduate or graduate). This course is for those who did not participate in military science during their freshman and sophomore years.

Junior
Military Science 301 Adaptive Tactical Leadership (4)
Military Science 302 Leadership in Changing Environments (4)

Leadership Development and Assessment Course

Every Army ROTC cadet who enters into the Advanced Course attends the Leadership Development and Assessment Course (LDAC) at Ft. Lewis, Wash. This course normally takes place between the junior and senior years of college and is the most important training event for an Army ROTC cadet. The 33-day training event incorporates a wide range of subjects designed to develop and evaluate leadership ability. The challenges are rigorous and demanding, both mentally and physically. LDAC tests intelligence, common sense, ingenuity and stamina. These challenges provide a new perspective on an individual's ability to perform exacting tasks and to make difficult decisions in demanding situations.

Senior
Military Science 401 Developmental Leadership (4)
Military Science 402 Adaptive Leadership (4)

Required for Commissioning

Military Science 450 Military History Seminar (3)
   (or approved Military History course)

MILITARY SCIENCE COURSES

Courses are designated as MLSC in the class schedule.

100 Army Physical Training (1)
   Required each semester of all students in the Military Science program. Improve and maintain physical fitness level of participants while teaching standards for the conduct of Army Physical Training (PT). Develop a good understanding of the Army Physical Fitness Program in accordance with FM 21-20, to participate, to cooperate, have fun and become physically fit. May be repeated for credit.

101 Leadership and Personal Development (3)
   Introduces personal challenges and competencies that are critical for effective leadership. How personal development of life skills such as critical thinking, goal setting, time management, physical fitness and stress management relate to leadership, officerhip and the Army profession. (1.5 hours lecture, 3 hours laboratory)

102 Introduction to Tactical Leadership (3)
   Leadership fundamentals, such as setting direction, problem solving, listening, presenting briefs, providing feedback and using effective writing skills. Dimensions of leadership values, attributes, skills and actions in the context of practical, hands-on and interactive exercises. (2 hours lecture, 3 hours laboratory)
201 Innovative Team Leadership (3)

Explores dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of Army leadership framework: trait and behavioral theories. Practice aspects of personal motivation and team building in the context of planning, executing and assessing team exercises. (2 hours lecture, 3 hours laboratory)

202 Foundations of Tactical Leadership (3)

Challenges of leading tactical teams in the complex Contemporary Operating Environment (COE). Dimensions of terrain analysis, patrolling and operation orders. Theoretical basis of the Army leadership framework explores the dynamic of adaptive leadership in the context of military operations (2 hours lecture, 3 hours laboratory)

301 Adaptive Tactical Leadership (4)

Challenges cadets to study, practice and evaluate adaptive tactical leadership skills as they are presented with challenging scenarios related to squad tactical operations. Students receive systematic and specific feedback on their leadership attributes and actions. (3 hours lecture, 3 hours laboratory)

302 Leadership in Changing Environments (4)

Increasingly intense situational leadership challenges to build cadet awareness and skills in leading tactical operations up to platoon level. Review aspects of combat, stability and support operations. Exploring, evaluating and developing skills in decision-making, persuading and motivating team members in the contemporary operating environment (COE). (3 hours lecture, 3 hours laboratory)

401 Developmental Leadership (4)

Develops proficiency in planning, executing and assessing complex operations, functioning as a member of a staff and providing performance feedback to subordinates. Situational opportunities to assess risk, make ethical decisions and lead fellow ROTC cadets. Lessons on military justice and personnel processes prepare students to make transition to becoming Army officers. (3 hours lecture, 3 hours laboratory)

402 Adaptive Leadership (4)

Dynamics of leading in the complex situations of current military operations in the contemporary operating environment (COE). Differences in customs and courtesies, military law, principles of war and rules of engagement in the face of international terrorism. Aspects of interacting with non-governmental organizations, civilians on the battlefield and host nation support. (3 hours lecture, 3 hours laboratory)

450 Military History Seminar (3)

Selected case studies in military history as they relate to the modern challenges facing the American profession of arms. Emphasizes written reports, oral presentations, discussion and field study. This course satisfies commissioning requirements.
INTRODUCTION

The Department of Modern Languages and Literatures offers a wide diversity of programs of language, cultural studies, linguistics, literature and teacher education aimed at meeting the varying needs of today’s students.

In our changing world, we must lower barriers to understanding. Communicating effectively in a foreign language is not simply an exercise in the acquisition of linguistic skills. In learning another language, we also gain insight into the thinking of another culture (often very different from our own); insights that afford us the perspective necessary to critically examine our own cultural values. In our department, we view language, culture, linguistics and literature as integrally related facets of the complex phenomenon of human communication that help us better understand ourselves, each other, our values and our roles in a changing multicultural world.

Our department has well-established baccalaureate programs in French, German, Japanese and Spanish, and master’s programs in French, German and Spanish. Additionally, we offer training for the California secondary credential program in Spanish, French, German and Japanese (FLED), a post baccalaureate program leading to a Certificate in Teaching English to Speakers of Other Languages (TESOL) and an M.S. in Education with a concentration in Teaching English to Speakers of Other Languages (TESOL). In addition to our degree and certificate programs, we offer minors in French, German, Japanese, Portuguese and Spanish. Coursework is also offered in Arabic, Chinese, Italian, Korean, Latin, Persian and Vietnamese.

Students interested in developing language and cultural competencies find a variety of programs in Modern Languages and Literatures. Programs are designed for those who wish to pursue more advanced studies of language and literature, as well as for the growing number of individuals who will find ability to communicate in other languages and sensitivity to other cultures important components in career preparation in the United States and abroad. Our programs are designed for those planning careers in education, government, social services, translation services, assessment, literature and the expanding areas of international business.

Our goal is to assist students in developing competence in other languages through teaching the majority of our courses in the target language. We strive to deepen students’ knowledge about language and the humanities through various means—reading representative authors in their respective literatures, familiarizing students with the cultural traditions of the peoples whose language they study, and expanding students’ knowledge of linguistics and socio-cultural context. As a department engaged in service learning, many of our majors apply their growing knowledge of languages and cultures to real community contexts.

CREDENTIAL INFORMATION

The Department of Modern Languages and Literatures offers approved Single Subject Matter Preparation Programs in French, German, Japanese and Spanish for prospective secondary teachers seeking the Single Subject Teaching Credential in conjunction with the Department of Secondary Education. Information concerning
admission to Teacher Education is available at the Center for Careers in Teaching (657-278-7130) (http://www.fullerton.edu/cct) and in the Office of Admission to Teacher Education (657-278-3352).

Program applications are accepted February 28 for the fall semester only. Before applying to a credential program, prospective teachers should attend an overview session sponsored by the Department of Secondary Education and then see an adviser in the Department of Modern Languages and Literatures. In addition, they must have completed the foreign language subject matter preparation requirements or have passed the CSET (California Subject Examination for Teachers) and have taken the C-BEST (California Basic Educational Skills Test). During the admission process, applicants will be required to demonstrate oral and written proficiency in the language. Current information is available in the department office and at http://hss.fullerton.edu/mll.

SPECIAL PROGRAM INFORMATION
International Programs
The Department of Modern Languages and Literatures encourages students to participate in a study program abroad. Such programs facilitate student mastery of the language and offer numerous cultural insights. The California State University’s International Programs offer a wide variety of study opportunities at the junior, senior and graduate level. Language exchange programs are also available with Fudan University (China), Autonomous University of Guadalajara (Mexico), University of Nanzan (Japan) and University of Paris (France), including international business courses and internships through Paris 9-Dauphine. Approved internships for the B.A. in International Business are available at the School of Business, Management, and Economics in Nürtingen (Germany). Language majors are required to complete the following minimum number of units in their major on campus before departure for, or upon return from, overseas: six units of upper-division coursework at CSUF, of which at least three units must be at the 400 level.

Language Concentration for International Business
The Department of Modern Languages and Literatures offers language concentrations in Chinese, French, German, Japanese, Portuguese and Spanish. This component of the B.A. in International Business consists of 15 units of upper-division language study (including an internship). These courses, as well as the prerequisites, must be completed with a grade of "C" (2.0) or better. For description of the international business program, please see the “International Business” section of this catalog.

FLAIR (Foreign Language Alliance Intra-Regional Program)
Concurrent Enrollment for French and German M.A. Programs
The French and German faculty at CSU Fullerton and CSU Long Beach have established a cooperative arrangement that permits graduate students enrolled at either campus to take courses concurrently at the other campus.

Benefits to students are considerable. With prior approval by the graduate adviser, coursework at either campus may be applicable to the M.A. degree. A greater selection of courses and faculty enriches graduate study and may shorten the time required to complete the degree. Cooperative scheduling ensures that time conflicts and travel time are minimized.

Garden Grove
The department offers several languages at the CSUF Garden Grove Center. For more information, contact the main office at 657-278-3534.

The CSU/UCLA Cooperative Program in Modern Languages and Literatures
The Cooperative Program in Modern Languages and Literatures gives students the opportunity (without additional fees) to take courses in foreign languages not available on this campus or any neighboring CSU campus, but offered at UCLA. For information regarding enrollment and qualifications, interested students should inquire at the department office.

Modern Language Media Center
A 24-station computer laboratory featuring multimedia interactive capabilities facilitates both individual and group learning activities in conjunction with a networked instructor station. The computer lab is also connected to the internet, where students can access a wide variety of authentic language materials contained in websites in the countries whose languages they are studying. Adjacent to the computer lab is a 16-station Sanako 300 computer lab.

Advisers
Undergraduate: All faculty members serve as advisers. Students may check the department office to determine their assigned faculty adviser.

Foreign Language Teacher Education: Hélène Domon, Reyes Fidalgo, Sandra Perez-Linggi, Setsue Shibata, Marjorie Tussing, Pilar Valero-Costa, James Hussar and Juan Ishikawa.

Graduate: Hélène Domon (M.A. in French), Marjorie Tussing (M.A. in German), Lydia Velez (M.A. in Spanish), and Cheryl Zimmerman (M.S. in Education TESOL).

M.S. TESOL and TESOL Certificate: Nathan Carr, Janet Eyring, Juan Carlos Gallego and Cheryl Zimmerman.

Upper-Division Writing Requirement
Modern Language (MLNG) 301 satisfies the course portion of the upper-division writing requirement for all foreign language majors.

Academic Standards Requirement
Each course counted to fulfill requirements for the major or minor must be completed with a grade of "C" (2.0) or better.

Advanced Placement
Students should enroll at the point in the sequence of courses for which their previous study and/or experience has prepared them. Students with no language background should enroll in fundamental 101-level courses. Normally, two years of high school language study are considered to be equivalent to one year of college language. Students just completing two years of high school language should begin at 200-level intermediate courses. A minimum of four years of high school language, or its equivalent, is considered a prerequisite for more advanced 300-level major work.
Courses at the 101 level are not open to students who have completed two or more years of high school study or one term of college study in that language unless such study was completed three years or more before entering the class. Courses at the 102 level are not open to students who have completed two or more years of high school study or two terms of college study in that language unless such study was completed two years or more before entering the class. Language courses at the 100 level are not open to native speakers of that language.

Due to the sequential nature of language instruction, consultation with an adviser in the Department of Modern Languages and Literatures is essential before enrolling in courses.

**International Baccalaureate Program**

Students entering the university with the International Baccalaureate shall request an oral interview with two instructors of the target language. Subject to their recommendation, the following credit may be awarded:

Students with the International Baccalaureate Higher Level Language Exam with a grade of four or better will have lower-division requirements waived, and upon recommendation will receive three to 12 units of upper-division language credit.

Students with the International Baccalaureate Subsidiary Level Language B Exam with a grade of four or better will have lower-division requirements waived, and upon recommendation will receive up to six units of upper-division language credit. If no upper-division units are recommended, a minimum of six units of 200-level credit will be awarded.

**Transfer Students**

In accordance with university rules, all transfer students must complete 30 units in residence at Cal State Fullerton. Of these 30 units, the transfer student majoring in French, German, Japanese or Spanish is required to complete 12 upper-division units, i.e., 300- or 400-level courses, including nine units of 400-level classes in the major on the Cal State Fullerton campus. The specific courses will be determined in consultation with the student’s adviser.

**Unit Requirements**

Each foreign language bachelor’s degree requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives.

**BACHELOR OF ARTS IN FRENCH**

The Bachelor of Arts in French consists of 30 units of upper-division French coursework, plus the required 3-unit upper-division English writing course, Modern Language (MLNG) 301. Prior to undertaking upper-division work, the French major will have completed the following lower-division courses or their equivalents:

**Basic Requirements (20 units)**

Each of the following courses or their equivalent:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>French 101 Fundamental French-A</td>
<td>5</td>
</tr>
<tr>
<td>French 102 Fundamental French-B</td>
<td>5</td>
</tr>
<tr>
<td>French 203 Intermediate French-A</td>
<td>3</td>
</tr>
<tr>
<td>French 204 Intermediate French-B</td>
<td>3</td>
</tr>
<tr>
<td>French 213 Intermediate Diction and Phonetics</td>
<td>2</td>
</tr>
<tr>
<td>French 214 Intermediate Conversation and Composition</td>
<td>2</td>
</tr>
</tbody>
</table>

**Upper-Division Requirements (33 units)**

I. Upper-Division Writing Requirement (3 units)

Modern Language 301 Writing in an Intercultural Context (3)

II. Language (3 units required*, up to 9 units)

French 307 Advanced Composition and Grammar (3)

OR French 308 Advanced Composition and Grammar (3)

French 310 French in the Professional World (3)

French 408 Advanced Writing: Syntax and Morphology (3)

III. Linguistics (3 units required*, up to 9 units)

French 300 Advanced Oral Expression and Phonetics (3)

French 409 Techniques of French-English Translation (3)

French 466 Introduction to French Linguistics (3)

IV. Civilization and Culture (6 units required, up to 12 units)

French 315 Origins of Modern France (3)

French 325 Contemporary French Civilization (3)

French 311 French for International Business (3)

French 407 French Film (3)

French 435T Topics in French/ Francophone Culture (3)

V. Literature (6 units required, up to 12 units)

French 375 Explorations in Literature (3)

One of the following Interdisciplinary Approaches to Literature:

French 470 French Literature and Power (3)

French 471 Literature and the Human Psyche (3)

French 472 Philosophical Exploration in Literature (3)

French 475 Senior Seminar in 20th-Century French Literature (3)

VI. Capstone Seminar (3 units required)

French 485 Senior Seminar in French Studies (3)

VII. Electives (9 units required)

In consultation with your adviser, choose nine (9) additional units of electives of which a minimum of six must be at the 400-level, from at least two of the categories II. - V. listed above.

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* Six (6) units are required in each of the areas II. and III. for the Single Subject Matter Preparation Program for the Secondary Education Teaching Credential.

† Required
MINOR IN FRENCH

Basic Requirements (20 units)
Each of the following or their equivalent:
- French 101 Fundamental French-A (5)
- French 102 Fundamental French-B (5)
- French 203 Intermediate French-A (3)
- French 204 Intermediate French-B (3)
- French 213 Intermediate Diction and Phonetics (2)
- French 214 Intermediate Conversation and Composition (2)

Upper-Division Requirements (12 units)
Six units from the following:
- French 307 Advanced Composition and Grammar (3)
  OR French 308 Advanced Composition and Grammar (3)
- French 315 Origins of Modern France (3)
  OR French 325 Contemporary French Civilization (3)

Plus, in consultation with an adviser, choose two additional electives from the following, if not taken above (6 units):
- French 300 Advanced Oral Expression and Phonetics (3)
- French 307 Advanced Composition and Grammar (3)
  OR French 308 Advanced Composition and Grammar (3)
- French 310 French in the Professional World (3)
- French 311 French for International Business (3)
- French 315 Origins of Modern France (3)
  OR French 325 Contemporary French Civilization (3)
- French 375 Explorations in Literature (3)
- French 407 French Film (3)
- French 408 Advanced Writing: Syntax and Morphology (3)
- French 409 Techniques of French-English Translation (3)
- French 415 French Classicism (3)
- French 425 French Romanticism (3)
- French 435T Topics in French/ Francophone Culture (3)
- French 466 Introduction to French Linguistics (3)
- French 470 French Literature and Power (3)
- French 471 Literature and the Human Psyche (3)
- French 472 Philosophical Exploration in Literature (3)
- French 475 Seminar in 20th Century French Literature (3)
- French 485 Senior Seminar in French Studies (3)

BACHELOR OF ARTS IN GERMAN
The Bachelor of Arts in German consists of 30 units of upper-division German coursework, plus the required 3-unit upper-division English writing course, Modern Language (MLNG) 301. Prior to undertaking upper-division work, the German major will have completed the following lower-division courses or their equivalents:

Basic Requirements (20 units)
Each of the following or their equivalent:
- German 101 Fundamental German-A (5)
- German 102 Fundamental German-B (5)
- German 203 Intermediate German-A (3)
- German 204 Intermediate German-B (3)
- German 213 Intermediate Reading-A (2)
- German 214 Intermediate Reading-B (2)

Upper-Division Requirements (33 units)
18 units required as listed below:
- German 305 Advanced Conversation and Composition (3)
- German 315 Introduction to German Civilization (3)
- German 325 Current Trends in Culture of German-Speaking Peoples (3)
- German 335 Introduction to Literature (3)
- German 399 German Phonetics (3)
- Modern Language 301 Writing in an Intercultural Context (3)

Plus, in consultation with an adviser, choose three of the following literature courses (9 units):
- German 430 German Literature and Culture to the Baroque (3)
- German 450 19th-Century German Literature and Culture (3)
- German 460 20th-Century German Literature and Culture (3)
- German 482 German Literature & Culture in Film (3)

Plus, in consultation with an adviser, choose two courses from the following (6 units required):
- German 300 German Conversation (3)
- German 310 German in the Business World (3)
- German 311 German for International Business (3)
- German 400 Advanced Conversation Practice and Vocabulary Expansion (3)
- German 405 Advanced Writing and Speaking (3)
- German 466 Introduction to German Linguistics (3)
- German 485T Senior Seminar in German Literature (3)

MINOR IN GERMAN

Basic Requirements (20 units)
Each of the following or their equivalent:
- German 101 Fundamental German-A (5)
- German 102 Fundamental German-B (5)
- German 203 Intermediate German-A (3)
- German 204 Intermediate German-B (3)
- German 213 Intermediate Reading-A (2)
- German 214 Intermediate Reading-B (2)
Upper-Division Requirements (12 units)
Six units required from the following:
German 305 Advanced Conversation and Composition (3)
German 315 Introduction to German Civilization (3)
OR German 325 Current Trends in Culture of German-Speaking Peoples (3)
In consultation with an adviser, choose two additional courses from the following (6 units):
German 300 German Conversation (3)
German 310 German in the Business World (3)
German 311 German for International Business (3)
German 315 Introduction to German Civilization (3)
German 325 Current Trends in Culture of German-Speaking Peoples (3)
In consultation with an adviser, choose two additional courses from the following (6 units):
German 300 German Conversation (3)
German 310 German in the Business World (3)
German 311 German for International Business (3)
German 315 Introduction to German Civilization (3)
German 325 Current Trends in Culture of German-Speaking Peoples (3)

BACHELOR OF ARTS IN JAPANESE
The Bachelor of Arts in Japanese consists of 30 units of upper-division Japanese coursework, plus the required 3-unit upper-division English writing course, Modern Language (MLNG) 301. Prior to undertaking upper-division work, the Japanese major will have completed the following lower-division courses or their equivalents:

Basic Requirements (20 units)
Each of the following or their equivalent:
Japanese 101 Fundamental Japanese-A (5)
Japanese 102 Fundamental Japanese-B (5)
Japanese 203 Intermediate Japanese-A (5)
Japanese 204 Intermediate Japanese-B (5)
Japanese 299 Directed Study (1-3)

Upper-Division Core Requirements (18 units)
Choose from the following:
Japanese 305 Advanced Japanese-A (3)*
Japanese 306 Advanced Japanese-B (3)*
Japanese 307 Advanced Spoken Japanese (3)*
Japanese 308 Advanced Writing Japanese (3)
Japanese 310 Japanese for Business (3)
Japanese 311 Japanese for International Business (3)
Japanese 315 Introduction to Japanese Civilization (3)
Japanese 316 Modern Japan (3)

Upper-Division Electives (12 units)
Choose from the following:
Japanese 375 Introduction to Literary Forms (3)
Japanese 420 Medieval Japanese Literature (3)
Japanese 440 Introduction to Modern Japanese Literature (3)
Japanese 450 Japanese Culture and Society in Film (3)
Japanese 466 Introduction to Japanese Linguistics (3)
Japanese 468 Japanese-English Contrastive Analysis (3)
Japanese 485T Senior Seminar: Variable Topics in Japanese (3)
Japanese 499 Independent Study (1-3)

MINOR IN JAPANESE
Basic Requirements (20 units)
Each of the following or their equivalent:
Japanese 101 Fundamental Japanese-A (5)
Japanese 102 Fundamental Japanese-B (5)
Japanese 203 Intermediate Japanese-A (5)
Japanese 204 Intermediate Japanese-B (5)
Japanese 299 Directed Study (1-3)

Upper-Division Requirements (12 units)
Six units required from the following:
Japanese 305 Advanced Japanese-A (3)*
Japanese 306 Advanced Japanese-B (3)*
Japanese 307 Advanced Spoken Japanese (3)*
Japanese 308 Advanced Writing Japanese (3)
Six units from the following:
Japanese 310 Japanese for Business (3)
Japanese 311 Japanese for International Business (3)
Japanese 315 Introduction to Japanese Civilization (3)
Japanese 316 Modern Japan (3)
Japanese 375 Introduction to Literary Forms (3)
Japanese 420 Medieval Japanese Literature (3)
Japanese 440 Introduction to Modern Japanese Literature (3)
Japanese 450 Japanese Culture and Society in Film (3)
Japanese 466 Introduction to Japanese Linguistics (3)
Japanese 468 Japanese-English Contrastive Analysis (3)
Japanese 485T Senior Seminar: Variable Topics in Japanese (3)
Japanese 499 Independent Study (1-3)

MINOR IN PORTUGUESE
Basic Requirements (8 units)
Each of the following or their equivalent:
Portuguese 101 Fundamental Portuguese-A (4)
Portuguese 102 Fundamental Portuguese-B (4)
Portuguese 103 Portuguese for Business (3)
Portuguese 104 Portuguese for International Business (3)
Portuguese 105 Introduction to Portuguese Civilization (3)
Portuguese 106 Modern Portugal (3)

Upper-Division Requirements (12 units)
Six units required from the following:
Portuguese 305 Advanced Portuguese-A (3)*
Portuguese 306 Advanced Portuguese-B (3)*
Portuguese 307 Advanced Spoken Portuguese (3)*
Portuguese 308 Advanced Writing Portuguese (3)
Portuguese 310 Portuguese for Business (3)
Portuguese 311 Portuguese for International Business (3)
Portuguese 315 Introduction to Portuguese Civilization (3)
Portuguese 316 Modern Portugal (3)

Upper-Division Electives (12 units)
Choose from the following:
Portuguese 375 Introduction to Literary Forms (3)
Portuguese 420 Medieval Portuguese Literature (3)
Portuguese 440 Introduction to Modern Portuguese Literature (3)
Portuguese 450 Portuguese Culture and Society in Film (3)
Portuguese 466 Introduction to Portuguese Linguistics (3)
Portuguese 468 Portuguese-English Contrastive Analysis (3)
Portuguese 485T Senior Seminar: Variable Topics in Portuguese (3)
Portuguese 499 Independent Study (1-3)
Upper-Division Requirements (12 units)
Portuguese 310 Portuguese in the Business World (3)
Portuguese 317 Advanced Conversation and Composition (3)
Portuguese 320 Introduction to Luso-Brazilian Culture and Civilization (3)
Portuguese 325 Contemporary Brazilian Civilization (3)

*Students with native or near-native proficiency are recommended to substitute an upper-division elective course in consultation with the major adviser.

BACHELOR OF ARTS IN SPANISH

The Bachelor of Arts in Spanish consists of 33 units of upper-division Spanish coursework, plus the required 3-unit upper-division English writing course, Modern Language (MLNG) 301. Prior to undertaking upper-division work, the Spanish major will have completed the following lower-division courses or their equivalents:

Basic Requirements (17-22 units)
Spanish 101/102 Fundamental Spanish (10)
  OR Spanish 105 Intensive Review of Fundamental Spanish (5)
Spanish 203 Intermediate Spanish A (3)
  OR Spanish 201 Spanish for Spanish Speakers A (3)
Spanish 204 Intermediate Spanish B (3)
  OR Spanish 202 Spanish for Spanish Speakers B (3)
Spanish 213 Intermediate Conversation* (3)
Spanish 214 Intermediate Composition (3)

*Spanish 213 not open to native speakers.

Upper-Division Requirements (36 units)
I. Upper-Division Writing (3 units)
Modern Language 301 Writing in an Intercultural Context (3)
II. Language (6 units)
Spanish 301 Advanced Grammar and Composition (3)
Spanish 400 Advanced Writing (3)
III. Culture (6 units)
Spanish 315 Introduction to Spanish Civilization (3)
Spanish 316 Introduction to Spanish-American Civilization (3)
IV. Literature (9 units)
Spanish 375 Introduction to Literary Forms (3)
Spanish 430 Spanish Literature to Neoclassicism (3)
  OR Spanish 461 Spanish Literature Since Neoclassicism (3)
Spanish 440 Spanish-American Literature to Modernismo (3)
  OR Spanish 441 Spanish-American Literature Since Modernismo (3)
V. Linguistics (6 units)
Spanish 467 Spanish Morphology and Syntax (3)

Spanish 466 Spanish Phonology and Dialectology (3)
  OR Spanish 468 Spanish-English Bilingualism and Language Contact (3)

VI. Seminar (3 units)
Spanish 475T Topics in Peninsular Literature (3)
  OR Spanish 485T Topics in Spanish American Literature (3)

VII. Elective (3 units)
Spanish 407, 415, 416 and any other of the 400-level courses not already taken, chosen in consultation with an adviser; 475T and 485T may be repeated with a different topic. Spanish 300, 310 and 311 not applicable.

MINOR IN SPANISH

Basic Requirements (17-22 units)
Each of the following or their equivalent:
Spanish 101/102 Fundamental Spanish (10)
  OR Spanish 105 Intensive Review of Fundamental Spanish (5)
Spanish 203 Intermediate Spanish A (3)
  OR Spanish 201 Spanish for Spanish Speakers A (3)
Spanish 204 Intermediate Spanish B (3)
  OR Spanish 202 Spanish for Spanish Speakers B (3)
Spanish 213 Intermediate Conversation* (3)
Spanish 214 Intermediate Composition (3)

*Spanish 213 not open to native speakers.

Upper-Division Requirements (12 units)
Six units from the following:
Spanish 301 Advanced Grammar and Composition (3)
Spanish 315 Introduction to Spanish Civilization (3)
  OR Spanish 316 Introduction to Spanish American Civilization (3)
In consultation with an adviser, choose two additional upper-division courses from the following:
Spanish 300 Advanced Conversation and Formal Speech (3)
Spanish 315 Introduction to Spanish Civilization (3)
Spanish 316 Introduction to Spanish American Civilization (3)
Spanish 375 Introduction to Literary Forms (3)
Spanish 400 Advanced Writing (3)
Spanish 407 Spanish Visual Representations of Cultural Transformations in the 20th Century (3)
Spanish 408 Mystic Influences on Spanish Peninsular Literature (3)
Spanish 415 Contemporary Spanish Culture (3)
Spanish 416 Contemporary Spanish American Culture (3)
Spanish 430 Spanish Literature to Neoclassicism (3)
Spanish 440 Spanish-American Literature to Modernismo (3)
Spanish 441 Spanish-American Literature Since Modernismo (3)
CERTIFICATE FOR TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)

In cooperation with the Department of English and Linguistics Programs, the Department of Modern Languages and Literatures offers a Certificate for Teaching English to Speakers of Other Languages (TESOL). The program consists of 24 units. In order to participate in the program, students must declare the TESOL Certificate along with their degree objective.

Admission Requirements

1. A baccalaureate degree from an accredited institution.
2. A grade-point average of at least 2.7 in the last 60 semester units attempted and a 3.0 grade-point average in the major.
3. Good standing at the last college attended.
4. At least two years of one foreign language, or one year each of two different foreign languages, or the equivalent with an average 3.0 GPA. This requirement will normally be waived for students from foreign countries who have studied English as a foreign language.
5. Modern Language 301 with a grade of "B-" (2.7) or better, or with program approval, the EWP with a score of 6 or better.
6. English 303 with a grade of "B-" (2.7) or better.
7. Oral and written proficiency in English to be verified during the student’s first semester in the program. A minimum TOEFL score of 573 for paper-based, 230 for computer-based, or 89 for the iBT, and a minimum score of 50 on the Test of Spoken English or 26 on the speaking section of the iBT (to be verified no later than at the end of the student’s first semester in the program) are required for non-native English speaking applicants who completed their bachelor’s degrees outside of the U.S. in a language other than English.

Study Plan Core Courses (12 units)

The study plan must include 24 units of committee-approved coursework: 12 units of core courses, three units of language pedagogy, six units of electives and three units for the practicum. All TESOL Certificate students must obtain a minimum “B-” (2.7) grade in each core course and a “B” (3.0) average in all core, language pedagogy and elective courses combined.

TESOL 500 Fundamentals in TESOL (3)
TESOL 509 Advanced Principles of TESOL: Listening/ Speaking Focus (3)*
TESOL 510 Advanced Principles of TESOL: Reading/ Writing Focus (3)*
TESOL 527 Second Language Acquisition (3)
Language Pedagogy (3 units)
TESOL 515 Pedagogical Grammar in TESOL (3)*
OR TESOL 520 Teaching Pronunciation and Oral Discourse in TESOL (3)*
OR TESOL 525 Teaching Vocabulary in ESL/EFL Classroom (3)

*In at least one of these courses each student will complete 20 hours of service learning at one of the sites approved by the TESOL Program.

Electives (6 units)

Select six units from the following:

Culture and Literature:
Anthropology 412, 470
Chicana/o Studies 450, 480
Human Communication 420, 422, 522
Reading 560
TESOL 511, 545
400- and 500-level adviser-approved American Studies courses
400- and 500-level adviser-approved English or American literature courses

Language and Linguistics
Anthropology 416
French/German/Japanese/Spanish 466
Japanese/Spanish 468
Linguistics 406, 412, 417, 442, 505, 507, 508
Reading 514
TESOL 515, 520 or 525, if not taken as a language pedagogy course.

Testing, Technology and Research
Anthropology 401
Ed El 511, 515, 518A, 518B, 519, 522, 551, 590
Ed Sec 504, 524, 535
Linguistics 501
Psychology 461, 465
Reading 516, 520
TESOL 530, 532

Professional Education

Elementary
Ed El 434, 500, 515, 521, 528, 529, 530, 531, 536, 541, 542, 552, 553
Reading 508
Secondary
Ed Sec 410, 504, 524, 535, 540, 550
Foreign Language Education 442
**Adult/College**

English 402, 402S, 590
Reading 507, 581

**Culminating Experience (3 units)**
TESOL 596 TESOL Practicum (3)

The practicum is to be taken at the end of the program. Students must consult with an adviser the semester before the practicum. Prerequisites are TESOL 500, 509, 510 and 527. The core and language pedagogy courses must be completed with an average of “B-” (2.7) or better in order for students to enroll in the practicum.

**MASTER OF ARTS IN FRENCH**

**Application Deadlines**

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

**Admission to Graduate Standing: Conditionally Classified**

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the section of this catalog on admission of graduates for the complete statement and procedures.

**Graduate Standing: Classified**

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified graduate standing upon the development of an approved study plan: a major in French consisting of 24 units (or equivalent) of upper-division studies with above-average scholarship. (A candidate presenting a B.A. which has fewer than 24 upper-division units in the language, or is otherwise inadequate, will be required to take additional courses to build a full undergraduate major before beginning the graduate program.) The student must also demonstrate proficiency in English, either by passing the English Writing Proficiency or equivalent exam, or by passing Modern Language 301 or equivalent with a grade of “C” (2.0) or better.

Adaptations of certain admission requirements may be made for promising foreign students.

In addition, a candidate must complete an initial orientation session.

**Study Plan**

The study plan consists of 30 units of graduate study (at least 15 units in 500-level courses), distributed as follows:

**Core Course (3 units)**
French 500 Graduate Seminar: Advanced Structure and Style (3)

**Linguistics Seminar (3 units)**
French 520 Graduate Seminar: Old French (3)

**Literature Seminars (9 units)**
Chose from the following:
French 557 Graduate Seminar: French Poetry (3)
French 571 Graduate Seminar: French Prose (3)
French 575 Graduate Seminar: French Drama (3)
French 576T Graduate Seminar: Major Writers (3)
French 579 Francophone Literature (3)

**Electives (15 units)**
Additional electives are to be chosen in consultation with the graduate adviser. A maximum of six units may be taken, with approval of the graduate committee, in a related field, at the 400 or 500 level.

French 407 French Film (3)
French 408 Advanced Writing: Syntax and Morphology (3)
French 409 Techniques of French-English Translation (3)
French 435T Topics in French/Francophone Culture (3)
French 466 Introduction to French Linguistics (3)
French 470 French Literature and Power (3)
French 471 Literature and the Human Psyche (3)

**Comprehensive Exam**

All students are required to obtain a reading list from the Graduate Adviser in French. Final evaluation is by comprehensive written and oral examination, including advanced competency in the French language. The candidate may, with the approval of the graduate committee, repeat the examination, but once only, within two years.

For further information, contact the Department of Modern Languages and Literatures.

**MASTER OF ARTS IN GERMAN**

**Application Deadlines**

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be post-
marked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the section of this catalog on admission of graduates for the complete statement and procedures.

Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified graduate standing upon the development of an approved study plan: a major in German consisting of 30 units (or equivalent) of upper-division studies with above-average scholarship. (A candidate presenting a B.A. which has fewer than 30 upper-division units in the language, or whose background is otherwise inadequate, normally will be required to take additional courses to build a full undergraduate major before beginning the graduate program.) The student must also demonstrate proficiency in English, either by passing the English Writing Proficiency exam or equivalent exam, or by passing Modern Language 301 or equivalent with a grade of “C” (2.0) or better. Adaptations of certain admission requirements may be made for promising foreign students.

Study Plan

The study plan requires 30 units of graduate study (at least 15 in 500-level courses), distributed as follows:

Core Courses (6 units)
German 500 Graduate Seminar: Advanced Structure and Style (3)
German 530 Graduate Seminar: Historical Linguistics (3)

Graduate Seminars in Literature (9-12 units)
German 571T* Graduate Seminar: German Literature (3)

Other Electives (if not taken as an undergraduate) (12-15 units)
German 430 German Literature and Culture to the Baroque (3)
German 450 19th-Century German Literature and Culture (3)
German 460 20th-Century German Literature and Culture (3)
German 482 German Literature and Culture in Film (3)
German 485T Senior Seminar in German Literature (3)
German 499 Independent Study (1-3)
German 598 Thesis (3-6)
German 599 Independent Graduate Research (1-3)

*Variable topic course may be taken again for credit.

Comprehensive Exams

A reading list must be completed by all students in consultation with an adviser. Final evaluation is by a comprehensive written and oral examination, including advanced competency in the German language. The candidate may, with the approval of the graduate committee, repeat the examination, but once only, within two years. With the approval of the graduate committee, a student may substitute a thesis for some of the units required under “Other Electives.”

For further information, contact the Department of Modern Languages and Literatures.

MASTER OF ARTS IN SPANISH

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified

University requirements include: A baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the Graduate Admissions section of this catalog for complete statement and procedures.

Candidates will need a B.A. with a minimum GPA of 3.0 in Spanish, consisting of at least 24 units (or equivalent) of upper-division studies. A candidate presenting a bachelor of arts that has fewer than 24 upper-division units in the language, or whose background is otherwise inadequate, will be required to take additional courses with a minimum GPA of 3.0 to build a full undergraduate major before beginning the graduate program. The student must also demonstrate proficiency in English, either by passing the English Writing Proficiency exam or equivalent exam or by passing Modern Language 301 or equivalent with a grade of “C” (2.0) or better.

Satisfactory evaluation of language proficiency by committee is also required. Adaptations of certain admission requirements may be made for promising foreign students.

Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing is eligible for classified graduate standing upon the development of an approved study plan, which should be done in consultation with the graduate adviser prior to the completion of nine graduate units.

Study Plan

The study plan consists of 30 units of graduate study (at least 18 in 500-level courses), distributed as follows:

Required Core Courses (6 units)
Spanish 500 Graduate Seminar: Advanced Structure and Style (3)
Spanish 530 Graduate Seminar: Historical Linguistics (3)

Graduate Seminars in Literature (12 units)
Peninsular Literature (6 units)
Spanish 556 Grad Seminar: Spanish Poetry (3)
Spanish 571 Grad Seminar: Spanish Prose and Narrative Fiction (3)
Spanish 575 Grad Seminar: Spanish Drama (3)
Spanish-American Literature (6 units)
Spanish 557  Grad Seminar: Spanish-American Poetry (3)
Spanish 567  Grad Seminar: Spanish-American Novel (3)
Spanish 576T  Grad Seminar: Hispanic Topics (3)

Other Electives (12 units)
May be chosen from either 400- or 500-level courses (up to 6 of the 12 units may be taken in a related field with the approval of the adviser):
Spanish 407  Spanish Visual Representations of Cultural Transformations in the 20th Century (3)
Spanish 408  Mystic Influences on Spanish Peninsular Literature (3)
Spanish 430  Spanish Literature to Neoclassicism (3)
Spanish 440  Spanish-American Literature to Modernismo (3)
Spanish 441  Spanish-American Literature Since Modernismo (3)
Spanish 461  Spanish Literature Since Neoclassicism (3)
Spanish 466  Spanish Phonology and Dialectology (3)
Spanish 467  Spanish Morphology and Syntax (3)
Spanish 468  Spanish-English Bilingualism and Language Contact (3)
Spanish 475T  Senior Seminar: Topics in Spanish Peninsular Literature (3)
Spanish 485T  Senior Seminar: Topics in Spanish American Literature (3)
Spanish 556  Graduate Seminar: Spanish Poetry (3)
Spanish 557  Graduate Seminar: Spanish American Poetry (3)
Spanish 567  Graduate Seminar: Spanish American Novel (3)
Spanish 571  Graduate Seminar: Spanish Prose and Narrative Fiction (3)
Spanish 575  Graduate Seminar: Spanish Drama (3)
Spanish 576T  Graduate Seminar: Hispanic Topics (3)
Spanish 599  Independent Graduate Research (1-3)

Comprehensive Exams
All students are required to complete a reading list. Upon completion of all requirements, a final evaluation by a comprehensive written examination must be taken to demonstrate mastery of the fields. The examination consists of three separate tests: Linguistics, Peninsular Literature and Spanish-American Literature. A student who fails one part of the written examination will have the option of retaking the failed part, but only one time through another written examination. The graduate committee may administer a supplemental oral examination if it deems it appropriate. If the candidate fails all or any two parts of the examination, the whole process must be repeated. The candidate may, with the approval of the graduate committee, repeat the examination, but only once within two years.


This program is multi-disciplinary, involving study in the fields of American studies, anthropology, education, English, human communication, linguistics and psychology in order to provide the candidate with the requisite knowledge for success as an English as a Second Language (ESL) or English as a Foreign Language (EFL) teacher, resource specialist or program coordinator.

Application Deadlines
Applications need to be postmarked no later than March 1 for the fall semester and October 1 for the spring semester. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified
University requirements include: a baccalaureate degree from an accredited institution with a grade-point average of at least 2.7 in the last 60 semester units attempted, and good standing at the last institution attended. In addition, the candidate must have a 3.0 grade-point average in the major.

Prerequisites
1. Two years of one foreign language, or one year each of two different foreign languages or the equivalent, with an average 3.0 GPA.
2. Modern Language 301, with a grade of “B-” (2.7) or better, or with program approval, the EWP with a score of 6 or better.
3. English 303 with a grade of “B-” (2.7) or better.
4. One of the following: American Studies 301, 345; Anthro 300, 360; Comparative Literature 325; English 300, 305, Human Comm 320, or equivalent with a “B-” (2.7) or better.
5. Linguistics 406 with a grade of “B-” (2.7) or better.

Oral and written proficiency in English to be verified during the student's first semester in the program. A minimum TOEFL score of 573 for paper-based, 230 for computer-based, or 89 for the iBT, and a minimum score of 50 on the Test of Spoken English or 26 on the speaking section of the iBT (to be verified no later than at the end of the student's first semester in the program) are required for non-native English speaking applicants who completed their bachelor's degrees in a language other than English.

Study Plan
The study plan must include 33 units of committee-approved coursework: 18 units of core courses, three units of language pedagogy, nine units of electives, and three units for the practicum, which includes a comprehensive examination. All TESOL students must obtain a minimum "B-" (2.7) grade in each core course and a "B" (3.0) average in all core, language pedagogy and elective courses combined.

Core Courses (18 units)
TESOL 500  Fundamentals in TESOL (3)
TESOL 509  Advanced Principles of TESOL: Listening/Speaking Focus (3)*
TESOL 510  Advanced Principles of TESOL: Reading/Writing Focus (3)*
TESOL 527  Second Language Acquisition (3)
TESOL 560  Second Language Assessment (3)
TESOL 595  Curriculum and Program Design for TESOL (3)
Language Pedagogy (3 units)
TESOL 515 Pedagogical Grammar and TESOL (3)*
   OR TESOL 520 Teaching Pronunciation and Oral Discourse in TESOL (3)*
   OR TESOL 525 Teaching Vocabulary in ESL/EFL (3)

*In at least one of these courses each student will complete 20 hours of service learning at one of the sites approved by the TESOL Program.

Electives (9 units)
Students select nine (9) units from the list of courses provided below. Complete titles and descriptions of courses can be found in the departmental course listings of this catalog.

Culture and Literature
Anthropology 412, 470
Chicana/o Studies 450, 480
Human Communication 420, 422, 522
Reading 560
TESOL 511, 545
400- and 500-level adviser-approved American Studies courses
400- and 500-level adviser-approved English or American literature courses

Language and Linguistics
Anthropology 416
French/German/Japanese/Spanish 466
Japanese/Spanish 468
Linguistics 412, 417, 442, 505, 507, 508
Reading 514
Spanish 467
TESOL 515, 520 or 525, if not taken as a language pedagogy course

Testing, Technology and Research
Anthropology 401
Ed El 511, 515, 518A, 518B, 519, 522, 551, 590
Ed Sec 504, 524, 535
Linguistics 501
Psychology 461, 465
Reading 516, 520
TESOL 530, 532

Professional Education
Elementary
Ed El 434, 500, 521, 528, 529, 530, 531, 536, 541, 542, 552, 553
Reading 508

Secondary
Ed Sec 410, 522, 536, 540, 550
Foreign Language Education 442

Adult/College
English 402, 402S, 590
Reading 507, 581

Culminating Experience (3 units required)
TESOL 596 TESOL Practicum (3)

The practicum is to be taken at the end of the program. Students must consult with an adviser the semester before the practicum. Prerequisites are TESOL 500, 509, 510 and 527. The core and language pedagogy courses must be completed with an average of “B-” (2.7) or better in order for students to enroll in the practicum.

Comprehensive Examination
After completing all coursework, students must take a written examination of all the courses taken in the program. An oral examination may also be required. The candidate may, with the approval of the graduate committee, repeat the examination, but only once within two years of having taken it for the first time. For further information, contact the TESOL graduate program adviser in the Department of Modern Languages and Literatures.

ARABIC COURSES
Courses are designated ARAB in the class schedule.

101 Fundamental Arabic-A (5)
Introduction to essentials of Modern Standard Arabic vocabulary and structures. Emphasis on basic reading, writing and conversational skills using culturally appropriate language. Conducted primarily in Arabic. Not for educated native speakers.

102 Fundamental Arabic-B (5)
Prerequisite: Arabic 101 or equivalent. Continuation of systematic introduction of fundamental vocabulary and grammatical structures of Modern Standard Arabic. Emphasis on sustained development of reading/writing and speaking skills along with considerations of Arabic culture. Conducted primarily in Arabic.

203 Intermediate Arabic-A (3)
Prerequisites: Arabic 102 or equivalent. Instruction in listening and reading comprehension, and oral and writing practice, in Arabic based on cultural and literary materials, with further development in vocabulary and grammar. Conducted primarily in Arabic.

299 Directed Study (1-3)
 Supervised research projects in Arabic language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

499 Independent Study (1-3)
 Supervised research projects in Arabic language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.
**CHINESE COURSES**

Courses are designated CHIN in the class schedule.

100 **Introduction to Chinese Conversation** (3)

Introduction to spoken Mandarin Chinese, with emphasis on vocabulary development, use of common phrases and sentences, and culturally appropriate language at beginning levels. Conducted primarily in Chinese.

101 **Fundamental Chinese-A** (5)

Chinese 101 is designed for non-native speakers of Chinese. Development of listening and reading comprehension and speaking. Introduction of writing and development of cultural awareness to communicate on a basic level. Conducted primarily in Chinese.

102 **Fundamental Chinese-B** (5)

Prerequisite: Chinese 101 or equivalent. Chinese 102 is designed for non-native speakers of Chinese. Continued development of listening and reading comprehension, speaking and writing to communicate on a basic level. Conducted primarily in Chinese.

201 **Mandarin Chinese for Chinese Speakers-A** (3)

Prerequisites: elementary high oral competency, able to read and write at least 500 characters or consent of the instructor. Expand learners' oral competencies and develop their reading and writing up to 800 characters. Conducted primarily in Chinese.

202 **Mandarin Chinese for Chinese Speakers-B** (3)

Prerequisites: elementary high oral competency, able to read and write at least 800 characters or consent of the instructor. Expand learners' oral competencies and develop their reading and writing up to 1200 characters. Conducted primarily in Chinese.

203 **Intermediate Chinese-A** (3)

Prerequisites: Chinese 102 or equivalent. Instruction in listening and reading comprehension, and oral and writing practice, in Chinese based on cultural and literary materials, with further development in vocabulary and grammar. Conducted primarily in Chinese.

299 **Directed Study** (1-3)

Supervised research projects in Chinese language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

301 **Advanced Writing in Chinese** (3)

Prerequisites: Chinese 204. Advanced levels of written expression through expository writing and research writing related to specific themes. Provides a basis of discussion, systematic study of complex modes of expression, and thoughtful compositions. Conducted in Chinese.

310 **Mandarin Chinese in the Business World** (3)


311 **Mandarin Chinese for International Business** (3)

Prerequisites: intermediate middle competency in reading, writing and speaking of Mandarin Chinese. (Testing may be required.) Expand vocabulary, reading comprehension and oral and written analysis of materials dealing with cultural, social, economic and political realities in the Chinese-speaking business world. Overview of the Chinese economy, major trade relations and business practices. Conducted in Chinese.

315 **Introduction to Chinese Civilization** (3)

Prerequisites: intermediate high competency in reading, writing and speaking Mandarin Chinese; Chinese 202 or equivalent. (Testing may be required.) Social, intellectual and artistic heritage of Chinese civilization. Reading and discussion of characteristics of Chinese civilization while strengthening linguistic facility in Mandarin Chinese. Conducted in Chinese.

325 **Contemporary Chinese Culture** (3)

Prerequisites: intermediate high competency in reading, writing and speaking Mandarin Chinese; Chinese 202 or equivalent. Reading and discussion to develop understanding of the social, political, economic and intellectual problems, trends and issues of present-day China while strengthening linguistic ability in Mandarin Chinese. Conducted in Chinese.

499 **Independent Study** (1-3)

Supervised research projects in Chinese language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

**FOREIGN LANGUAGE EDUCATION COURSES**

Courses are designated as FLED in the class schedule.

307 **Personal Proficiency in Educational Technology for Second Language Teachers** (3)

Prerequisite: Ed Sec 310. Developing proficiency in the use of classroom technologies. Training in computer terminology, spreadsheets, word processing, publication and presentation applications; Internet searches, information literacy, electronic communication issues. Meets state requirements for Single Subject Preliminary Credential.

442 **Teaching Foreign Languages in the Secondary School** (3)

Prerequisite: admission to teacher education or consent of instructor. Principles, methods and materials of language learning and teaching. Includes lectures, activities and fieldwork. Required before admission to student teaching. Credit/no credit only. "B" (3.0) or better needed for credit.

449E **Externship in Secondary Teaching** (3)

See description under Department of Secondary Education.

449I **Internship in Secondary Teaching** (10)

See description under Department of Secondary Education.
FRENCH COURSES

Courses are designated FREN in the class schedule.

101 Fundamental French-A (5)
Introduces essentials of the French language: fundamental vocabulary and grammatical structures. Conversational and reading/writing skills are equally stressed, and relevant cultural aspects are considered. Practice in the language laboratory required. Conducted in French.

102 Fundamental French-B (5)
Prerequisite: French 101 or equivalent. Continues introduction of fundamental vocabulary and grammatical structures. Maintains equal emphasis on speaking and reading/writing skills, along with considerations of French culture. Practice in the language laboratory is required. Conducted in French.

203 Intermediate French-A (3)
Prerequisite: French 102 or equivalent. Intensive practice in conversation and composition involving intermediate-level use of language and further exploration of French culture. Concurrent enrollment in French 213 is recommended. Practice in the language laboratory is required. Conducted in French.

204 Intermediate French-B (3)
Prerequisite: French 203. Intensive review of grammatical structures; developing mastery of conversational and compositional skills at the intermediate level. Concurrent enrollment in French 214 is recommended. Practice in the language laboratory is required. Conducted in French.

213 Intermediate Diction and Phonetics (2)
Prerequisite: French 102 or equivalent. Analysis of particular problems in pronunciation. Practice in accurately pronouncing cultural and literary materials. Concurrent enrollment in French 203 is recommended. Conducted in French.

214 Intermediate Conversation and Composition (2)
Prerequisite: French 203. Discussion and practice in written expression based on cultural and literary materials. Concurrent enrollment in French 204 is recommended. Conducted in French.

300 Advanced Oral Expression and Phonetics (3)
Prerequisite: French 204 and 214 or equivalent. Developing oral control of the language through discussions, oral presentations, dialogues/debate and further study of phonetics. Vocabulary development in areas of student concerns. Conducted in French.

307 Advanced Composition and Grammar (3)
Prerequisites: French 204 and 214 or equivalent. Helps achieve advanced levels of oral and written expression. Literary materials provide a basis for discussions, systematic study of complex modes of expression and thoughtful compositions. Grammar emphasizes verbal structures, sequence of tenses and moods. Conducted in French.

308 Advanced Composition and Grammar (3)
Prerequisites: French 204 and 214 or equivalent. Helps achieve advanced levels of oral and written expression. Literary materials provide a basis for discussions, systematic study of complex modes of expression and thoughtful compositions. Grammar emphasizes relational aspects: prepositions, conjunctions and adjectival agreement. Conducted in French.

310 French in the Professional World (3)
Prerequisites: French 204 and 214 or equivalent. Working knowledge of spoken and written professional language usage in the French-speaking world. Emphasizes cultural and sociological contexts of professional interaction. Use of appropriate current periodicals and electronic resources. Conducted in French.

311 French for International Business (3)
Prerequisites: French 204 and 214 or equivalent. Designed to give students experience in reading comprehension and analysis of materials dealing with economic and political realities of international trade in the French-speaking world. Use of appropriate current periodicals and electronic resources. Conducted in French.

315 Origins of Modern France (3)
Prerequisite: French 204 and 214 or equivalent. Social, intellectual and artistic origins of French civilization: the medieval world-view transformed by the Renaissance; feudal society becoming the ancient regime. Literary selections will be read in modern French. Conducted in French.

325 Contemporary French Civilization (3)
Prerequisites: French 204 and 214 or equivalent. Contemporary French culture organized along the lines of economics, geography, political life, social and artistic institutions. Current events are illustrated by recent documents (TV news, internet, videos, articles, films) and activities, including group presentations and debates. Conducted in French.

375 Explorations in Literature (3)
Prerequisites: French 204 and 214 or equivalent. Promotes deeper understanding and appreciation of French literary texts. Each genre (narrative, dramatic, poetic) introduces great writers. In-depth study of selected works initiates students to critical modes of reading and tools for literary analysis. Conducted in French.

407 French Film (3)
Prerequisite: French 307 or 308 or equivalent. Developing art of the French film, with special emphasis on the many roles of language. Subjects include: montage, visual/verbal meaning, literary(cinematic narrative), non-realistic language, read language, non-narrative continuity. Conducted in English.
408 Advanced Writing: Syntax and Morphology (3)
Prerequisite: French 307 or 308 or equivalent. Mastery of forms and structure of the French language. Analysis and guided composition of various styles of discourse. Detailed study of mood, sequence of tenses, voice, aspects and nuances of meaning. Conducted in French.

409 Techniques of French-English Translation (3)
Prerequisite: French 307 or 308 or equivalent. Overview of theories of translation; examination of several types and examples of translation (technical to literary). Major emphasis on actual translation from English to French and French to English.

415 French Classicism (3)
Prerequisites: French 307 and 375. Decisive moment in French experience. Focuses on literature of the Classic period (1660-1685), but open at both ends to include the formation and perenniality of French Classicism. Conducted in French.

425 French Romanticism (3)
Prerequisites: French 307 and 375. Revolution in feeling and intellect in 19th-century France. The Romantic period (1820-1850). May include material preceding or following those dates. Conducted in French.

435T Topics in French/ Francophone Culture (3)
Prerequisites: French 307 or 308 and French 325 or equivalent. Different “texts” (cinema, the media, internet, literature, art) centered around cultural topics (e.g., “City and Country,” “The Outsider”). Tools to understand French-speaking culture(s), from recent social issues to classic art and literature. Course may be taken up to three times with a different topic. Conducted in French.

466 Introduction to French Linguistics (3)
Prerequisite: French 307 or 308. Analytical procedures of general linguistics applied to French. Structural contrasts between French and English. Application of linguistic analysis to the teaching of modern foreign languages. Conducted in French.

470 French Literature and Power (3)
Prerequisites: French 307 or 308 and French 375 or equivalent. Socio-political dimensions of French literature throughout its history. Expressions of alliance with, or resistance to, the established political order will be studied from the medieval epic through 20th century literary texts. Conducted in French.

471 Literature and the Human Psyche (3)
Prerequisites: French 307 or 308, and French 375 or equivalent. Psychological explorations in French literature through texts that provide insights into the human psyche and shape our notion of the self at different moments of French cultural history. A variety of works will be studied, from the Renaissance through the 20th century. Conducted in French.

472 Philosophical Exploration in Literature (3)
Prerequisites: French 307 or 308 and French 375 or equivalent. Philosophical dimensions of French literature throughout its history. Interrogations about the human condition, and the role and place of human consciousness in the universe will be guiding theme in texts ranging from the Renaissance through the 20th century. Conducted in French.

475 Seminar in 20th-Century French Literature (3)

485 Senior Seminar in French Studies (3)
Prerequisites: French 307, 315, 325, 375; and 470, 471 or 472. Students will develop an individualized research project to integrate and expand their knowledge and skills. They will analyze and synthesize, debate, and evaluate their own and other students’ projects on social, literary, linguistic, cultural, and/or philosophical issues related to the French-speaking world. May be repeated for credit with different topic.

499 Independent Study (1-3)
Supervised projects in French language, linguistics, culture or literature. Consent of the instructor and department chair required. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3)
Prerequisite: graduate standing. Devoted to: (1) a comparative analysis of English and French linguistic structures systematically applied in exercises and translations; and (2) analysis of style in French with discussion of styles in a variety of literary and non-literary texts. Conducted in French.

520 Graduate Seminar: Old French (3)
Prerequisite: graduate standing. Readings in the medieval literature of northern France. A variety of dialects and centuries. Conducted in French.

530 Graduate Seminar: Historical Linguistics (3)
Prerequisite: French 466. Some previous study of Latin recommended. Introduction to the principles of historical linguistics. Primary emphasis on the transformation of classical Latin (phonology, morphology, syntax and lexicon) into contemporary French. Conducted in French.

557 Graduate Seminar: French Poetry (3)
Prerequisite: graduate standing. Poetry of French expression that focuses on specific poets or poetic movements while situating them in their historical context. Various critical strategies may be used to analyze the selected works. Conducted in French.

571 Graduate Seminar: French Prose (3)
Prerequisite: graduate standing. Narrative genre in French that focuses on specific texts or movements while situating them in their historical context. Various critical strategies may be used to analyze these texts. Conducted in French.
575 Graduate Seminar: French Drama (3)
Prerequisite: graduate standing. Chronological overview of French drama. Treats, in each period, relationships between society, dramatic and theatrical forms, typical thematic content of plays, and the social role of theater. Conducted in French.

576T Graduate Seminar: Major Writers (3)
Prerequisite: graduate standing. May be repeated for credit. Conducted in French.

579 Francophone Literature (3)
Prerequisite: graduate standing. Francophone literatures (Quebec, West Indies, Meghreb and black Africa) since the 1950s. Linguistic, artistic and socio-political issues raised in the literature of these ex-colonies. Conducted in French.

598 Thesis (3-6)
Prerequisite: recommendation of student's graduate committee.

599 Independent Graduate Research (1-3)
Prerequisites: fluency in French, graduate standing, and consent of instructor. Supervised research projects in French language, linguistics, culture or literature. May be repeated for credit.

GERMAN COURSES
Courses are designated GRMN in the class schedule.

101 Fundamental German-A (5)
Development of listening and reading comprehension, speaking and cultural awareness to communicate on a basic level. Introduction to customs and culture of German-speaking countries. Conducted primarily in German.

102 Fundamental German-B (5)
Prerequisite: German 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Further study of customs and culture of German-speaking countries. Conducted primarily in German.

203 Intermediate German-A (3)
Prerequisite: German 102 or equivalent. Development of listening comprehension and speaking. Emphasis on vocabulary building and developing conversational skills. Conducted in German. May be taken concurrently with German 204, 213 or 214.

204 Intermediate German-B (3)
Prerequisite: German 102 or equivalent. Development of listening and reading comprehension and writing. Emphasizes vocabulary building and developing writing competency. Conducted in German. May be taken concurrently with German 203, 213 or 214.

213 Intermediate Reading-A (2)
Prerequisite: German 102 or equivalent. Development of reading comprehension using edited and basic authentic materials. May be taken concurrently with German 203 or 204. Conducted in German.

214 Intermediate Reading-B (2)
Prerequisite: German 213 or equivalent. Continued refinement of reading comprehension based on authentic materials. May be taken concurrently with German 203 or 204. Conducted in German.

299 Directed Study (1-3)
Prerequisite: consent of instructor and department chair. Supervised study projects in the German language. May be repeated for credit.

300 German Conversation (3)
Prerequisites: German 204 or equivalent and intermediate competency. Open to lower-division students with consent of instructor. Development of oral competencies in the context of students' own or contemporary concerns. Conducted in German.

305 Advanced Conversation and Composition (3)
Prerequisites: German 204 or equivalent and intermediate competency. Open to lower-division students with consent of instructor. Free oral and written expression. Conducted in German.

310 German in the Business World (3)
Prerequisites: German 203, 204, 213, 214 or equivalent and intermediate competency. Working knowledge of business language in the German-speaking world. Emphasizes business correspondence, conversation between business partners and the language of advertising. Conducted in German.

311 German for International Business (3)
Prerequisites: German 203, 204, 213, 214 or equivalent and intermediate competency; German 310 recommended. Expands reading comprehension through authentic texts and on building vocabulary of the German business world, and overview of the German economy and business practices. Conducted in German.

315 Introduction to German Civilization (3)
Prerequisites: German 204 or equivalent and intermediate competency. Readings and discussions in German literature, arts and institutions to develop insights into German culture. Conducted in German.

325 Current Trends in Culture of German-Speaking Peoples (3)
Prerequisites: German 204 or equivalent and intermediate competency. Readings and discussion of German contributions to present-day civilization while strengthening facility with German language. Conducted in German.

335 Introduction to Literature (3)
Prerequisites: German 305 and advanced competency. Introduction to the art of literature in a cultural context. Analysis and interpretation of various texts. Conducted in German.

399 German Phonetics (3)
Prerequisite: intermediate competency. Analysis of students' pronunciation and intensive practice of phonetic patterns, including intonation. Development of conversational competency. May be repeated for credit; but may count only once toward German major.
400 Advanced Conversation Practice and Vocabulary Expansion (3)
Prerequisite: German 305. Intensive oral practice with emphasis on vocabulary expansion. Conducted in German.

405 Advanced Writing and Speaking (3)
Prerequisite: German 305. Practice in writing on various topics in detail, in expressing hypotheses and presenting arguments or points of view accurately and effectively. Emphasis on development differences of formal and informal style. Conducted in German.

430 German Literature and Culture to the Baroque (3)
Prerequisites: German 305, 315 and 335. Masterpieces of German literature from the Hildebrandslied to Der Abenteuerliche Simplicissimus and their relationship to cultural, historical and intellectual developments between ca. 800-1670 A.D. Conducted in German.

450 19th-Century German Literature and Culture (3)
Prerequisites: German 305, 315 and 335. 19th-century German literature from Romanticism to Naturalism. Decisive philosophic, political and economic influences. Conducted in German.

460 20th-Century German Literature and Culture (3)
Prerequisites: German 305, 315 and 335. Major German prose, drama and poetry of the 20th century. Conducted in German.

466 Introduction to German Linguistics (3)
Prerequisite: German 305. Analytical procedures of general linguistics as applied to German. Structural contrasts between German and English. Application of linguistic analysis to the teaching of modern foreign languages.

482 German Literature and Culture in Film (3)
Prerequisite: advanced standing in literature. Critical study of literary works and their film adaptations, as well as a critical analysis of film as communication. May be repeated for credit with different film syllabus.

485T Senior Seminar in German Literature (3)
Prerequisite: senior standing in German. Research and discussion of a literary movement, genre or author. Subject varies and is announced in the class schedule. May be repeated for credit with different topic. Conducted in German.

499 Independent Study (1-3)
Supervised research projects in German language or literature to be taken only with consent of instructor and department chair. May be repeated for credit.

530 Graduate Seminar: Historical Linguistics (3)
Prerequisites: German 466 and consent of instructor. Introduction to the principles of historical linguistics. Primary emphasis on the development of German from Indo-European to contemporary German by examining phonological, morphological and syntactical changes through the centuries. Conducted in German.

571T Graduate Seminar: German Literature (3)
Prerequisite: consent of instructor. Various genres in German that focus on specific texts or movements within a cultural context. May be repeated for credit with a different topic. Conducted in German.

598 Thesis (3-6)
Prerequisite: recommendation of student’s graduate committee.

599 Independent Graduate Research (1-3)
Prerequisites: advanced competency and consent of instructor. Supervised research projects in German language or literature. May be repeated for credit.

ITALIAN COURSES
Courses are designated ITAL in the class schedule

101 Fundamental Italian-A (5)
Development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level with a focus on oral expression. Introduction to Italian customs, culture and civilization. Conducted primarily in Italian.

102 Fundamental Italian-B (5)
Prerequisite: Italian 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level with an emphasis on oral expression. Further study of Italian customs, culture and civilization. Conducted primarily in Italian.

203 Intermediate Italian-A (3)
Prerequisite: Italian 102 or equivalent. Instruction in listening and reading comprehension, and oral and writing practice in Italian based on cultural and literary materials, with further development in vocabulary and grammar with an emphasis on oral expression. Conducted primarily in Italian.

299 Directed Study (1-3)
Supervised research projects in Italian language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

499 Independent Study (1-3)
Supervised research projects in Italian language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.
Courses are designated JAPN in the class schedule.

100 Japanese Conversation for Beginners (3)
Introduction to spoken Japanese, with emphasis on vocabulary development at the beginning levels. For students who would like to learn conversational Japanese without having to learn the writing system.

101 Fundamental Japanese-A (5)
Development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Introduction to Japanese customs, culture and civilization.

102 Fundamental Japanese-B (5)
Prerequisite: Japanese 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Further study of Japanese customs, culture and civilization.

203 Intermediate Japanese-A (5)

204 Intermediate Japanese-B (5)

299 Directed Study (1-3)
Prerequisite: Japanese 102 or equivalent. Supervised study projects in Japanese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

305 Advanced Japanese-A (3)
Prerequisite: Japanese 204 or equivalent. Practice in four skills of advanced Japanese emphasizing reading comprehension in the context of contemporary concerns. Conducted in Japanese.

306 Advanced Japanese-B (3)
Prerequisite: Japanese 204 or equivalent. Practice in four skills of advanced Japanese emphasizing reading comprehension in the context of contemporary concerns. Conducted in Japanese.

307 Advanced Spoken Japanese (3)
Prerequisite: Japanese 204 or equivalent. Emphasis on the spoken aspect of advanced Japanese through dialogues, discussions and oral presentations in the context of contemporary concerns. Conducted in Japanese.

308 Advanced Writing in Japanese (3)
Prerequisite: Japanese 204 or consent of instructor. Helps students achieve an advanced level of written expression in Japanese and cultural awareness through reading and writing on various topics. Emphasizes further development of writing skills in Japanese using "kyoiku-kanji" with accurate grammar.

310 Japanese for Business (3)
Prerequisite: Japanese 204. Acquaints students with the practical vocabulary and structure of business language, as well as the cultural background of business procedures in the Japanese business world. Conducted in Japanese.

311 Japanese for International Business (3)

315 Introduction to Japanese Civilization (3)
Prerequisite: Japanese 204 or equivalent. Readings and lectures in Japanese literature, arts and institutions from earliest history to 1688, to develop insights into Japanese culture while strengthening facility in the language. Conducted primarily in Japanese.

316 Modern Japan (3)
Prerequisite: Japanese 204 and 315. Readings and lectures in Japanese literature, arts and institutions from 1688 to the present, to develop insights into Japanese culture while strengthening facility in the language. Conducted primarily in Japanese.

375 Introduction to Literary Forms (3)

390 Japanese Culture and Society: Anime (3)
Prerequisite: completion of General Education Category III.B.2. Japanese culture and society, as well as multicultural analysis of global issues as reflected in Japanese animated films. Conducted in English.

420 Medieval Japanese Literature (3)
Prerequisite: Japanese 375. Masterpieces of Japanese literature from eighth to 16th centuries and their relationship to cultural, historical and intellectual developments in these eras. Conducted primarily in Japanese.

440 Introduction to Modern Japanese Literature (3)
Prerequisite: Japanese 375. Literary use of language, literary creation, reading and critical evaluation of literary works. Reading excerpts of modern Japanese literary works on various topics. Conducted primarily in Japanese.

450 Japanese Culture and Society in Film (3)
Prerequisite: at least one class from Japanese 305 – 308. Development of modern Japanese culture and society using film that reflects important Japanese cultural and social concepts, and ways of looking at and dealing with the world. Conducted primarily in Japanese.

466 Introduction to Japanese Linguistics (3)
Prerequisite: Japanese 306 or equivalent. Analytical procedures of general linguistics as applied to phonological, semantic, morphological, syntactic and discourse aspects of Japanese. Conducted primarily in Japanese.
468 Japanese-English Contrastive Analysis (3)
Prerequisites: Japanese 306 and 466 (may be taken concurrently) or equivalent. Contrastive analysis of phonological, lexical, syntactic and discourse aspects of Japanese and English. Conducted primarily in Japanese.

485T Senior Seminar: Variable Topics in Japanese (3)
Prerequisites: Japanese 305 or 306 and at least one 400-level course in Japanese. Research and discussion of a cultural, literary or linguistic theme. Subject varies and is announced in the class schedule. May be repeated for credit with a different topic. Conducted primarily in Japanese.

499 Independent Study (1-3)
Supervised projects in Japanese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

KOREAN COURSES
Courses are designated KORE in the class schedule.

101 Fundamental Korean-A (5)
Development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Introduction to Korean customs, culture and civilization. Conducted primarily in Korean.

102 Fundamental Korean-B (5)
Prerequisite: Korean 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Further study of Korean customs, culture and civilization. Conducted primarily in Korean.

203 Intermediate Korean-A (3)
Prerequisite: Korean 102 or equivalent. Instruction in listening and reading comprehension, as well as oral and writing competence in Korean involving intermediate level language based on cultural materials with further exploration of Korean culture. Conducted primarily in Korean.

299 Directed Study (1-3)
Supervised research projects in Korean language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

499 Independent Study (1-3)
Supervised research projects in Korean language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

MODERN LANGUAGE COURSES
Courses are designated as MLNG in the class schedule.

196 Student-to-Student Tutorials (1-3)
(See index.)
102 Fundamental Portuguese-B (4)
Prerequisite: Portuguese 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Further study of customs, culture and civilization of Portuguese-speaking countries. Conducted in Portuguese.

310 Portuguese in the Business World (3)
Prerequisites: Portuguese 102. Practical business-related terminology and the cultural and socio-political contexts of doing business in Portuguese-speaking countries. Conducted in Portuguese.

317 Advanced Conversation and Composition (3)
Prerequisite: Portuguese 102 or equivalent. Free oral and written expression. Conducted in Portuguese.

320 Introduction to Luso-Brazilian Culture and Civilization (3)
Prerequisites: Portuguese 310 or 317 or equivalent, good reading knowledge of Portuguese. Main currents of Portuguese culture and civilization and Brazil's intellectual and artistic development from discovery to independence. Conducted in Portuguese.

325 Contemporary Brazilian Civilization (3)
Prerequisite: Portuguese 310 or 317 or equivalent. Readings and discussion to develop understanding of the social and intellectual problems, trends and contributions to Brazil since independence. Present-day Brazil. Conducted in Portuguese.

499 Independent Study (1-3)
Supervised projects in Portuguese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

SPANISH COURSES
Courses are designated SPAN in the class schedule.

101 Fundamental Spanish-A (5)
Development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Introduction to customs, culture and civilization of Spanish-speaking countries. Conducted primarily in Spanish.

102 Fundamental Spanish-B (5)
Prerequisite: Spanish 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Introduction to customs, culture and civilization of Spanish-speaking countries. Conducted primarily in Spanish.

105 Intensive Review of Fundamental Spanish (5)
Prerequisite: prior experience equivalent to Spanish 101 and 102 or three years of high school Spanish taken two or more years ago. Intensive course to develop listening and reading comprehension, speaking, writing and cultural awareness necessary to communicate on a basic level. Conducted primarily in Spanish.

201 Spanish for Spanish Speakers-A (3)
Prerequisite: consent of instructor. Intermediate course designed to strengthen existing communicative skills in Spanish. Emphasizes oral expression, vocabulary building, spelling, grammar, reading and composition. Students may not receive credit for both Spanish 201 and 203. Conducted in Spanish.

202 Spanish for Spanish Speakers-B (3)
Prerequisite: consent of instructor. Intermediate course designed to further develop existing communicative skills in Spanish. Students may not receive credit for both Spanish 202 and 204 Conducted in Spanish.

203 Intermediate Spanish-A (3)
Prerequisite: Spanish 102 or 105 or equivalent. Development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. Emphasizes oral expression and developing correct pronunciation. Concurrent enrollment in Spanish 213 is recommended. Conducted in Spanish.

204 Intermediate Spanish-B (3)
Prerequisite: Spanish 201 or 203 or equivalent. Continued development of listening and reading comprehension, practice in speaking and writing Spanish based on cultural and literary materials. Emphasizes vocabulary building and developing grammatical accuracy. Concurrent enrollment in Spanish 214 is recommended. Conducted in Spanish.

213 Intermediate Conversation (3)
Prerequisite: Spanish 102 or 105 or equivalent. Practice in oral expression. Concurrent enrollment in Spanish 203 is recommended. Not open to students with proficiency in Spanish. Conducted in Spanish.

214 Intermediate Composition (3)
Prerequisite: Spanish 201 or 203 or equivalent. Practice in written expression based on cultural and literary materials. Concurrent enrollment in Spanish 204 is recommended. Conducted in Spanish.

299 Directed Study (1-3)
Supervised study projects in Spanish language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

300 Advanced Conversation and Formal Speech (3)
Prerequisite: Spanish 204 or 213. Develop formal, as well as conversational control of spoken Spanish in the context of contemporary cultural topics related to the Spanish-speaking world. Not open to those with native-like proficiency in Spanish. Conducted in Spanish.

301 Advanced Grammar and Composition (3)
Prerequisites: Spanish 214 or equivalent. Grammar analysis and written expression. Conducted in Spanish.
310 Spanish in the Business World (3)
Prerequisite: Spanish 301, which may be taken concurrently, and Econ 201 and 202. Practical vocabulary and structure of business language, as well as the cultural background of business procedures in the Hispanic world. No credit toward Spanish major or minor. Conducted in Spanish.

311 Spanish for International Business (3)
Prerequisite: Spanish 310. Acquisition of vocabulary appropriate to the Hispanic business world and study of its economic institutions. Emphasizes reading comprehension, conversation and composition. No credit toward Spanish major or minor. Conducted in Spanish.

315 Introduction to Spanish Civilization (3)
Prerequisite: Spanish 301, which may be taken concurrently, or equivalent. Readings and discussions in Spanish literature, arts and institutions. Strengthening of facility in the language. Conducted in Spanish.

316 Introduction to Spanish-American Civilization (3)
Prerequisite: Spanish 301, which may be taken concurrently or equivalent. Readings and discussion in Spanish-American literature, arts and institutions. Strengthening of facility in the language. Conducted in Spanish.

375 Introduction to Literary Forms (3)
Prerequisite: Spanish 301 or equivalent. Introduction to literary forms and concepts of literary techniques and criticism. Analysis and interpretation of various texts. Strengthening of a student's abilities in reading, language and literary criticism. Conducted in Spanish.

390 Spanish Culture Through Cinema and Literature (3)
Prerequisite: completion of General Education Category III.B.2. Traces the development of modern Spanish society (20th century) using various visual media including literature (in translation) and film (subtitled). Conducted in English.

400 Advanced Writing (3)
Prerequisite: Spanish 375, which may be taken concurrently. Exploration of a topic or theme to develop several language skills, especially writing, to broaden and deepen cultural awareness from a humanistic perspective, and to develop and refine critical, analytical, and creative writing competencies. Conducted in Spanish.

407 Spanish Visual Representations of Cultural Transformations in the 20th Century (3)
Prerequisite: Spanish 315. Traces the development of modern Spanish society from the Second Republic of 1930 to 1983's democracy. How films are texts capable of expressing social, historical or political issues and cultural changes. Conducted in Spanish.

408 Mystic Influences on Spanish Peninsular Literature (3)
Prerequisites: Spanish 375 and 400. Using literary texts, this course examines the influence of three great religions – Judaism, Christianity, Islam – and the mystic expressions of these religions on Spanish authors and thinkers from 1500 to 20000. Conducted in Spanish.

415 Contemporary Spanish Culture (3)
Prerequisite: Spanish 315. Cultural-social, economical, political-characteristics of contemporary Spanish life. Conducted in Spanish. Not applicable for graduate degree credit.

416 Contemporary Spanish-American Culture (3)
Prerequisite: Spanish 316. Social, economic, artistic and political aspects of contemporary life in Spanish America. Conducted in Spanish. Not applicable for graduate degree credit.

430 Spanish Literature to Neoclassicism (3)
Prerequisites: Spanish 315 and 375. Spanish literature from its beginnings to 1700. Representative works of each genre. Conducted in Spanish.

440 Spanish-American Literature to Modernismo (3)
Prerequisites: Spanish 316 and 375, Spanish-American literature to modernismo. Conducted in Spanish.

441 Spanish-American Literature Since Modernismo (3)
Prerequisites: Spanish 316 and 375. Spanish-American literature from modernismo to the present. Conducted in Spanish.

461 Spanish Literature Since Neoclassicism (3)
Prerequisites: Spanish 315 and 375. Representative works of Spanish literature from 1700 to the present. Conducted in Spanish.

465 Transformation in the 20th Century (3)
Prerequisites: Spanish 375 and senior standing in Spanish. Not applicable for graduate degree credit.

467 Spanish Morphology and Syntax (3)
Prerequisite: Spanish 301 or equivalent. Analytical procedures of general linguistics as applied to Spanish word and sentence structure. Conducted in Spanish.

468 Spanish/English Bilingualism and Language Contact (3)
Prerequisite: Spanish 467. Comprehensive study of topics related to Spanish-English Bilingualism and language contact. Analysis of the linguistic situation of the Hispanic groups in the United States within psycholinguistic, grammatical and sociolinguistic theoretical frames. Conducted in Spanish.

475T Senior Seminar: Topics in Spanish-American Literature (3)
Prerequisites: Spanish 375 and 400. Using literary texts, this course examines the influence of three great religions – Judaism, Christianity, Islam – and the mystic expressions of these religions on Spanish authors and thinkers from 1500 to 20000. Conducted in Spanish.

485T Senior Seminar: Topics in Spanish-American Literature (3)
Prerequisites: Spanish 375 and senior standing in Spanish. Selected topics of the literature of Spain. Subject matter will change. May be repeated for credit. Conducted in Spanish.
499 Independent Study (1-3)
Supervised research projects in Spanish language, literature, culture, linguistics or business to be taken with consent of instructor and department chair. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3)
Prerequisite: Spanish 467 or equivalent. Focuses on: (1) a transformational analysis of Spanish syntactic structures; (2) a classic approach to grammar; and (3) analysis of style in different contemporary writers, following a linguistic approach. Complemented with exercises and translations from English to Spanish. Conducted in Spanish.

530 Graduate Seminar: Historical Linguistics (3)
Prerequisite: Spanish 466, 467 or equivalent. Principles of historical linguistics as seen through the evolution of Classical Latin (phonology, morphology, syntax and lexicon) into contemporary Spanish. Conducted in Spanish.

556 Graduate Seminar: Spanish Poetry (3)
Prerequisite: Spanish 430, 461 or equivalent. Chronological overview of Peninsular poetry with special attention on specific authors and movements. Conducted in Spanish.

557 Graduate Seminar: Spanish-American Poetry (3)
Prerequisite: Spanish 440, 441 or equivalent. Chronological overview of Spanish-American poetry from 1888 (Latin American Modernism) to Vanguardist and present day poetry and "Anti-Poetry." Conducted in Spanish.

567 Graduate Seminar: Spanish-American Novel (3)
Prerequisite: Spanish 440, 441 or equivalent. Historical overview of the development of the Spanish-American novel from the Colonial period (picaretasque) to the Modern Experimental Novel. Conducted in Spanish.

571 Graduate Seminar: Spanish Prose and Narrative Fiction (3)
Prerequisite: Spanish 430 or 461 or equivalent. An in-depth study of major prose and narrative works from various historical periods of Spanish literature. Conducted in Spanish.

575 Graduate Seminar: Spanish Drama (3)
Prerequisite: Spanish 430, 461 or equivalent. Chronological overview of Peninsular drama with emphasis on major authors and their most representative works. Conducted in Spanish.

576T Graduate Seminar: Hispanic Topics (3)
Prerequisite: Spanish 430,440, 441, 461 or equivalent. May be repeated for credit with different subject matter. Topics include: Contemporary Spanish Culture, Contemporary Spanish-American Culture, El Ensayo y La Critica Literaria Hispano-Americana. Conducted in Spanish.

598 Thesis (3-6)
Prerequisite: recommendation of student's graduate committee.

599 Independent Graduate Research (1-3)
Prerequisites: fluency in Spanish and consent of instructor. Supervised research projects in Spanish language or literature. May be repeated for credit.

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) COURSES
Courses are designated as TESL in the class schedule

500 Fundamentals in TESOL (formerly 400) (3)
Prerequisites: completion of or concurrent enrollment in English 303 and Linguistics 406. Prepares students for coursework offered in the M.S. TESOL and TESOL Certificate Programs and for careers in TESOL. Teacher trainees learn requisite skills for teaching ESL/EFL classes at all levels of instruction and to be professionals in the field.

509 Advanced Principles of TESOL: Listening/ Speaking Focus (3)
Prerequisites: one of the following: French, German, Japanese 466 or Spanish 466 or 467 or Linguistics 406; and TESOL 500. Overview of theories, methods and procedures for teaching listening and speaking skills to second language learners. Focus on planning and delivery of communicative ESL/EFL lessons.

510 Advanced Principles of TESOL: Reading/Writing Focus (3)
Prerequisites: one of the following: French, German, Japanese 466 or Spanish 466 or 467 or Linguistics 406; and TESOL 500. Overview of theories, methods and procedures for teaching functional and academic reading and writing skills to second language learners. Emphasizes planning and delivery of content-based ESL/EFL lessons.

511 Teaching English Abroad (3)
Prerequisite: TESOL 500. Prepares students to understand the cultural and socio-political significance of teaching English outside the U.S. Investigates methods, techniques, materials, classroom management and evaluation in programs abroad. Create or adapt materials for a selected country or region.

515 Pedagogical Grammar in TESOL (3)
Prerequisites: English 303, Linguistics 406, TESOL 500. Systematic approach to the theories and practical aspects of teaching grammar to non-native speakers of English within a communicative framework. Emphasizes ordering, selecting and preparing appropriate materials and activities. Expands on concepts introduced in TESOL 500.

520 Teaching Pronunciation and Oral Discourse in TESOL (3)
Prerequisites: English 303, Linguistics 406, TESOL 500. Prepares teacher trainees with a working knowledge of phonological and oral discourse terms and concepts; and explores strategies for designing and teaching ESL/EFL lessons that include attention to oral communication and pronunciation enhancement.
525 Teaching Vocabulary in the ESL/EFL Classroom (3)
Prerequisite: TESOL 500. Complexities of vocabulary knowledge and linguistic and cultural aspects of vocabulary learning. Applies theories and research findings to the classroom. Instruction in contextualized vocabulary learning and appropriate dictionary use.

527 Second Language Acquisition (3)
Prerequisites: French, Japanese or German 466; or Spanish 466 or 467; or Linguistics 406; and TESOL 500. Methodology for research in second language acquisition and development; sociolinguistic and psycholinguistic patterns in bilingualism; interactions of language and culture in the language acquisition process.

530 Research Methods for TESOL and Applied Linguistics (3)
Prerequisite: TESOL 500 or concurrent enrollment. Basic familiarity with aspects of research design, and developing an understanding of quantitative and qualitative research methods. Training in becoming more effective consumers of research, and in conducting original empirical research.

532 Technology in Second Language Learning (3)
Prerequisites: TESOL 500 or FLED 442 or valid teaching credential. Examination and discussion of key concepts and issues in educational technology relevant to teaching second languages. An exploration of theories, practices, and equipment currently used. Focus on uses of computers, the internet, videos, etc.

545 Teaching Culture in the Language Classroom (3)
Prerequisite: TESOL 500. Provides a framework for teaching culture and value systems in the second language classroom. Emphasizes teaching patterns of culture, methods of cultural comparison, audio-visual materials and textbook evaluation.

560 Second Language Assessment (3)
Prerequisites: TESOL 509 and 510. Theories, issues, basic statistical concepts in second language testing and techniques for second language assessment. Practice in analyzing commercial language tests and in constructing tests for classroom use.

595 Curriculum and Program Design for TESOL (3)
Prerequisites: TESOL 500, 509 and 510. Approaches for curriculum planning in TESOL. Instruction in needs assessment, goal setting, syllabus design and program evaluation. Students will produce projects for a specific group and setting.

596 TESOL Practicum (3)
Prerequisites: completion of the appropriate program core courses (TESOL Certificate or M.S. Education-TESOL) and consent of instructor or adviser. Teaching English to speakers of other languages at Cal State Fullerton or in other schools. Supervised by instructor and supervisors. Seminar meetings by arrangement. May be repeated for credit.

599 Independent Graduate Research (1-3)
Prerequisites: graduate standing and consent of instructor. Supervised research projects in teaching English to speakers of other languages (TESOL). May be repeated for credit.

VIETNAMESE COURSES
Courses are designated VIET in the class schedule.

101 Fundamental Vietnamese A (5)
Development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level, with a focus on oral expression. Introduction to Vietnamese customs, culture and civilization. Conducted primarily in Vietnamese.

102 Fundamental Vietnamese B (5)
Prerequisite: Vietnamese 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Further study of Vietnamese customs, culture and civilization. Conducted primarily in Vietnamese.

201 Vietnamese for Vietnamese Speakers-A (3)
Prerequisite: student must be able to sustain conversation; Consent of instructor. Intermediate course to develop communication through reading and writing and to improve oral communication.

202 Vietnamese for Vietnamese Speakers-B (3)
Prerequisite: advanced speaking competency. Developing reading/writing skills. A broad range of topics are studied and students write articles and letters, as well as essays and reports on cross-cultural topics.

203 Intermediate Vietnamese-A (3)
Prerequisites: Vietnamese 102 or equivalent. Instruction in listening and reading comprehension, and oral and writing competence in Vietnamese involving intermediate level language based on cultural materials, with further exploration of Vietnamese culture. Conducted primarily in Vietnamese.

299 Directed Study (1-3)
Supervised research projects in Vietnamese language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

499 Independent Study (1-3)
Supervised research projects in Vietnamese language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.
INTRODUCTION

The faculty and students in the Department of Music share a deep passion for and common desire to achieve excellence in music. The department offers a wide spectrum of degree programs and options with an overall emphasis in musical performance. The curriculum provides basic preparation for careers in music, music education or further graduate study, and is designed to provide a balanced education in the many facets of musical experience. Artist-teachers offer instruction in all aspects of performance; practicing composers and theorists teach courses in theory and composition; active musicologists provide instruction in history and literature; and specialists in music education teach the courses in that field. It is the goal of the department to develop each student’s musical and intellectual potential to the highest level of individual capability. California State University, Fullerton has been fully and continuously accredited by the National Association of Schools of Music since 1966.

FACULTY


ADVICEMENT

All undergraduate music majors are required to obtain advisement each semester. Full-time faculty serve as advisers, and students are assigned according to their area of concentration.

CREDENTIAL INFORMATION

The bachelor’s degree in music may be effectively combined with subject matter studies necessary for the single subject teaching credential in music. Undergraduates are encouraged to work with the department adviser, advisers for music education, and the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. Postbaccalaureate students should contact the department credential adviser and Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation and orientation.

INTERNATIONAL STUDY IN MUSIC

Through the CSU International Program, music majors at CSUF have the opportunity to spend a year studying at the Trossingen State Conservatory of Music (Staatliche Hochschule für Musik, Trossingen) in southern Germany. Located at the southern end of the Black Forest, about 20 north of the Swiss border, the Trossingen Conservatory offers conservatory study in voice and all instruments. The school is part-
particularly known for early music performance. At least one semester of German is required. For more information, contact the department chair or the office of International Education and Exchange (657-278-2787, UH-244).

**REQUIREMENTS FOR UNDERGRADUATE MUSIC MAJORS**

1. Music majors are generally enrolled in the Bachelor of Arts degree program at the time of admission. Students may request a change in their degree objective to the Bachelor of Music upon completion of at least one semester of coursework at the university, successful completion of a jury examination and recommendation of the faculty in the appropriate area of concentration. Exceptional transfer students may be permitted to enter the B.M. program at the beginning of their first semester. Enrollment in the Bachelor of Music program is limited.

2. Upon entering the university as a new music major, or upon officially changing to a major in music, each student will present an audition in the appropriate principal performance area (instrument or voice) and a placement audition for class piano, unless the student’s principal instrument is piano or organ.

3. All students must pass proficiency examinations in traditional harmony (sight-singing, dictation, keyboard and paperwork) and piano before being approved for graduation. Transfer students will fulfill the theory requirement by passing the entrance examination in theory; first-time students and transfers with insufficient preparation at entrance will normally take the examinations in Music 211 and 221. The piano-proficiency requirement may be met by completing Music 282B with a grade of "C" (2.0) or better. Students planning to enter the teaching credential program in music are required to earn a "B" (3.0) or better in Music 282B. Students whose principal performance area is piano or organ may satisfy the piano-proficiency requirement by completing Music 285 with a grade of "C" (2.0) or better; this requirement must be completed prior to a student’s promotion to 300 level.

4. Each music major must declare a single principal performance area, which must be approved by the faculty of that area upon completion of the entrance audition. A successful audition is required for the student to receive state-funded applied-music instruction at the 100 (freshman) level. Instruction must commence in the student’s first semester as a music major. The major of students whose auditions do not qualify them to receive instruction at the 100 level will be changed administratively from music to “undeclared.” A new student must meet all university admission requirements and be fully matriculated into the university no later than one week before the beginning of classes in order to receive state-funded applied music. In order to be approved for graduation, each student must achieve at least the 300 level of proficiency in the principal performance area. B.A. Liberal Arts-option students who elect project alternative 2 (Music 497: Project) need reach only the 200 level.

5. Each music major is required to present one or more recitals or a project appropriate to the degree program before being approved for graduation. The project option is available only in the Liberal Arts and Music History and Theory options of the Bachelor of Arts degree. Recitals at the 300 level of performance are designated Music 398; recitals at the 400 level of performance are designated Music 498. See the sections below on the Liberal Arts and Music History and Theory options for recital/project information applicable to those degrees.

6. Undergraduate music majors are required to participate in a major performance ensemble (Music 406) and complete it with a grade of “C” (2.0) or better each semester of residence as follows:

   a. Students who declare a wind instrument or percussion as the principal performance area must register for band; students who declare a string instrument as the principal performance area must register for orchestra; students who declare voice as the principal performance area must register for choir.

   b. Students accepted into the Bachelor of Music program in Jazz and Commercial Music will register for Jazz Ensemble as their major performance ensemble after they have completed four major ensemble units. Students who declare jazz keyboard, electric guitar or electric bass as their principal instrument must complete two units of major performance ensemble, after which they may enroll for 408J as a substitute for the next two units of the major performance ensemble requirement. After this, these students must enroll for Jazz Ensemble (Music 406L, S or T) for the major ensemble requirement, according to the student’s qualifications and subject to audition. Music Majors admitted into the Bachelor of Music program in jazz and commercial music studies and have participated in a major performance ensemble at CSUF for at least four semesters will thereafter enroll in Jazz Ensemble (Music 406L, S or T) to satisfy the departmental major performance requirement.

   c. A student whose principal performance area is keyboard or classical guitar must register for one of the above major performance ensembles, according to the student’s qualifications and subject to audition.

   d. A music major who has been admitted into the Bachelor of Music program in composition, keyboard or classical guitar, and who has participated in a major performance ensemble for at least five semesters (a minimum of two semesters at California State University, Fullerton), may thereafter substitute chamber music and/or small performance ensembles (Music 386, 407, 408) to satisfy the departmental major performance ensemble (Music 406) requirement.

   e. The educational purpose of the requirement that all music majors participate in an appropriate major performance ensemble during each semester of residence is to permit each student to experience the highest level of ensemble music-making commensurate with the student’s skill. To this end, the CSUF choir
and band programs are of the traditional graded structure. University Singers (406E) and Wind Symphony (406F) are for the more advanced students; Men’s Chorus (406M), Symphonic Winds (406C) and Women’s Choir (406W) are for students of less skill or experience. Placement in bands, orchestra, and choirs will be based on student abilities determined by the directors of those ensembles. Music majors will be assigned to the ensemble for which they are best qualified. A student does not have the option of satisfying the requirements for participation in a major performance ensemble by enrolling in an ensemble intended for those of less ability or experience.

7. Applied-music study in the principal performance area is required as stipulated under the requirements for each degree program. The following conditions apply:

a. If a student pursuing the Bachelor of Arts degree or the Bachelor of Music degree reaches the 300 level in the principal performance area before the required units in applied music are completed, Music Department electives may be substituted for the remaining applied-music units.

b. In addition to the six units of applied music required in the principal performance area, Bachelor of Music students in the Composition concentration must complete six units of applied composition (including the 498 recital) after taking Music 422. The 498 recital will consist of a presentation of the student's own compositions.

c. Students pursuing the Bachelor of Music degree in any option except Composition must achieve the 300 level in performance before giving the 398 recital and 400 level in performance before giving the 498 recital. Recital approval will be given only to students who are currently studying with CSUF applied music faculty. Specific information on jury-level criteria is available from the Music Department office.

d. In order to qualify for state-funded applied music (including Music 398 and Music 498 recitals), an undergraduate student must currently be enrolled for a minimum of six units of music classes (including applied music), at least two of which must be in an academic area, i.e., any course other than performing ensembles and applied music. (A student needing fewer than six units of music classes to graduate will not be required to take extra units to meet the six-unit requirement and will receive applied instruction if otherwise qualified.) In addition, the student must be enrolled in the appropriate major performance ensemble, as stipulated in section 6 above. If the student receives a grade of "D+" (1.3) or lower, or "WU" in applied music or in the major performance ensemble, or if the student fails to complete six units of music classes as described above, applied lessons will be withheld in the subsequent semester. A student who fails applied music must present an acceptable reinstatement audition before state-funded lessons will be resumed.

e. Students are limited to a maximum of three semesters of applied music at a given level of performance. Applied music may be denied for failure to make satisfactory progress within the degree.

f. Students in the B.A. program are eligible for a maximum of eight units of state-funded applied music (398 and 497 included). B.M. students are eligible for a maximum of 14 units (398 and 498 included).

8. To be approved for graduation, a music major must maintain a 2.5 GPA in all music coursework that is to be used to meet degree requirements. In addition, a student must earn a grade of "C" (2.0) or better in all music courses required for the Bachelor of Arts in Music or Bachelor of Music degree.

9. All requests for exceptions to departmental or curricular requirements must be directed by petition in advance to the department chair.

10. Undergraduate music majors are required to accumulate 60 hours of performance-related activities—30 hours during each of the first two semesters or 15 hours during each of the first four semesters of matriculation as a music major at CSUF. Performance-related activities include recital and concert attendance, as well as learning about and participating in house and stage management, publicity and public relations, lighting and sound editing.

MUSIC DEGREE PROGRAMS

The Department of Music offers a variety of courses that lead to baccalaureate and graduate degrees. The baccalaureate degree may be earned in either of two degree programs (Bachelor of Arts or Bachelor of Music). Within these programs, a student will pursue a concentration in Liberal Arts, Music History and Theory, Music Education, Performance, Composition, Accompanying, or Jazz and Commercial Music.

The Bachelor of Arts requires a minimum of 120 units; the Bachelor of Music a minimum of 132 units. This includes courses for the major, general education, all university requirements and electives.

BACHELOR OF ARTS IN MUSIC

The Bachelor of Arts in Music shall consist of no fewer than 50 units of music, of which at least 29 shall be upper-division (300-level and above). All Bachelor of Arts students must complete the core requirements listed immediately below as well as the additional coursework needed for one of three concentrations: Liberal Arts, Music History and Theory, or Music Education.

Core Requirements for the Bachelor of Arts (34 units)

Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
MUSIC HISTORY AND LITERATURE (50 UNITS)

This concentration is particularly appropriate for the student who wishes to obtain a solid liberal arts education with a specialization in music, as well as for students who wish to pursue careers in the music industry other than performance and teaching.

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A, B, C; 462) (14)
Principal performance area (applied music) (4)
Major performance ensemble (Music 406A, C, E, F, L, M, S, W) as appropriate to the concentration and emphasis (4)

Liberal Arts Concentration (50 Units)

This concentration is particularly appropriate for the student who wishes to obtain a solid liberal arts education with a specialization in music, as well as for students who wish to pursue careers in the music industry other than performance and teaching.

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A, B, C; 462) (14)
Principal performance area (applied music) (4)
Major performance ensemble (Music 406A, C, E, F, L, M, S, W) as appropriate to the concentration and emphasis (4)

Additional Requirements (16 units)
Music theory (Music 316 or 418; 320; 323 or 422) (6)
Conducting (Music 382A or 383A) (2)
Senior recital or project (Music 398 or 497) (1)
Music history and literature (from Music 451 through 459A inclusive) (2, 3)
Electives in Music (5): (minimum of five units upper-division; no more than two units of Music 193, 293, 393, 493).

*Required of all undergraduate music majors every semester of residence. (See "Introduction," item 6.)

Senior Project

Two alternatives, each with a different focus and prerequisite, are available to the student:

Alternative 1 (Music 398: Recital): Prerequisite is achievement of 300 applied-music level in the area of principal performance one semester before the semester in which the student plans to present the recital. The student will present a brief recital in a regular recital time or in the appropriate workshop (at faculty discretion).

Alternative 2 (Music 497: Project): Prerequisite is achievement of 200 applied-music level in the area of principal performance one semester before the semester in which the student plans to present the project. The student will prepare a special project in the senior year that will culminate in a research paper, lecture or lecture-recital.

The recital will be included when calculating the student’s quota of state-funded applied-music lessons.

MUSIC HISTORY AND THEORY CONCENTRATION (50 UNITS)

This concentration is designed as a balanced program in music history and theory, and provides suitable preparation for advanced degrees in musicology or music theory.

It also provides basic preparation for advanced study in other fields, such as musical acoustics, music therapy, ethnomusicology, library science in music, and music in industry and recreation.

Students seeking the concentration in Music History and Theory must submit a paper to the music history or theory coordinator not later than the beginning of their junior year. Acceptance into the degree program is contingent on the submission of a satisfactory paper. Student grades in prior music history and theory courses will also guide faculty decisions regarding a student’s acceptance into the degree program.

Allied Requirement for the Music History and Theory Concentration:

Foreign language proficiency, preferably German, to be satisfied as described under the requirements for the Bachelor of Music, Voice Concentration.

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A, B, C; 462) (14)
Principal performance area (Music 193, 293) (4)
Major performance ensemble (Music 406A, C, E, F, L, M, S, W) (4)*

Additional Requirements (16 units)
Music theory (Music 316 or 418; 320; 323 or 422) (10)
Conducting or composition (Music 382A or 383A or 422) (2)
Project-proposal preparation (Music 499) (1)
Music history or theory project (Music 497) (1)
Electives in Music (2): minimum of two units upper-division.

*Required of all undergraduate music majors every semester of residence. (See "Introduction," item 6.)

MUSIC EDUCATION CONCENTRATION

The emphasis in instrumental, choral and general/elementary music are designed to provide comprehensive, rigorous preparation for teaching in the California public schools.

Students intending to teach music in the California public schools must complete the B.A. in Music Education and certain additional courses and competence examinations to meet the requirements of the Single Subject Matter Preparation Program (SSMPP). (See below, Earning a Teaching Credential.) Completion of the SSMPP leads to consideration for acceptance into the Single-Subject Credential Program in Music (which includes student teaching). Subsequent completion of the Credential Program then earns the student a credential (license) from the State of California to teach music in California public schools, grades K-12.

Instrumental Emphasis (50 units)

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (Music 193, 293) (4)
Major performance ensemble (Music 406A,C,F) (4)*

Additional Requirements (16 units) selected from the following:
Orchestral instruments (Music 281B,P,S,W) (4)
Music theory (Music 320, 323) (4)
Conducting (Music 382A,B) (4)
Instrumental Music Education Practicum (Music Education 394I) (3)
Chamber music (Music 407D,E,M,Y; 408B, G,S,W,X) (2)
Recital (Music 398) (1)

Choral Emphasis (50 units)

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (Music 193, 293) (4)
Major performance ensemble (Music 406A,E,M,W) (4)*

Additional Requirements (16 units) selected from the following:
Music theory (Music 320) (2)
Orchestral instruments (Music 284) (1)
Music and Child Development (Music 333) (3)
Conducting (Music 383A,B) (4)
Literature and pedagogy (Music 354, 468) (4)
Chamber music (Music 407V, 408V) (2)
Recital (Music 398) (1)

*Required of all undergraduate music majors every semester of residence. (See “Introduction,” item 6.)

General Music Emphasis (50 units)

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (4)
Major performance ensemble (Music 406A,C,E,F,M,W) (4)*

Additional Requirements (16 units) selected from the following:
Music theory (Music 320) (2)
Orchestral instruments (Music 284) (1)
Vocal Pedagogy (Music 468) (2)
Conducting (Music 383A,B) (4)
Music and Child Development (Music 333) (3)
Public School Choral Materials (Music 354) (2)
Chamber music (Music 407V or 408V) (1)
Recital (Music 398) (1)

Piano Pedagogy Emphasis (63 units)
The emphasis in piano pedagogy is designed to provide rigorous preparation for individual and group piano instruction. It does not lead to a teaching credential for the California public schools.

Core Requirements for the Bachelor of Arts (34 units)
Music theory/musicianship (Music 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (Music 193, 293) (4)
Major performance ensemble (Music 406A,C,E,F,M,W) (4)*

Additional Requirements (29 units)
Music theory (Music 320) (2)
Music history and literature (Music 454A,B) (4)
Keyboard ensemble (Music 408K) (1)
Applied piano (Music 393) (3)
Conducting (Music 382A or 383A) (2)
Recital (Music 398) (1)
Piano Pedagogy/Practicum (Music 467A,B,C; 477) (9)
Piano Pedagogy/Observation and Internship (Music 466) (3)
Advanced MIDI, Harpsichord, Organ (1 unit from Music 372, 373, 426)
Functional Skills for Keyboard Majors (Music 285) (2)
Piano-Vocal Collaboration (Music 386) (1)

*Required of all undergraduate music majors every semester of residence. (See “Introduction,” item 6.)

EARNING A TEACHING CREDENTIAL

Students intending to teach music in the California public schools must demonstrate subject-matter competence prior to admission to the Single Subject Credential program. This may be done either by: (a) completing the coursework for the Single Subject Matter Preparation Program (SSMPP); or (b) passing subject-matter tests specified by the State of California (CSET) and administered by the Educational Testing Service. Applications are accepted only in the spring for the credential program (Feb. 28 deadline) beginning the subsequent fall. In both cases, an interview and certain competence examinations administered by the Music Education area must be passed prior to enrolling in the Single Subject Credential Program in Music (which includes student teaching).

The following courses are prerequisite to admission to the Credential program for students who choose to complete SSMPP coursework in lieu of taking the subject matter examination (CSET). These courses are intended to be taken concurrently with degree work.

Instrumental Emphasis (27 units)
Music Education 395I (2); 404 (3); Music 283 (1); 333 (3); 353 (2); 444 (2); 469 (2); Ed Sec 310 (3); 320 (3); 330 (3); 340 (3)
Choral Emphasis (23 units)
Music Education 394V (3); 395V (2); 404 (3); Music 380A (1); Ed Sec 310 (3); 320 (3); 330 (3); 340 (3)

General Music Emphasis (21 units)
Music Education 394V (3); 395V (2); 404 (3); Music 380A,B or C (1); Ed Sec 310 (3); 320 (3); 330 (3); 340 (3)

Prior to admission to the Single Subject Credential Program in Music, the student must have completed all SSMPP requirements, including the bachelor's degree, with the recital (Music 398) completed. Applicants for the Single Subject Credential Program in Music must also demonstrate functional ability in keyboard and voice.

Keyboard competence may be shown either by successful audition or completion of Music 282B (Piano Class for Music Majors) with a minimum grade of "B" (3.0). Vocal competence may be shown either by successful audition or completion of Music 283 (voice class) with a minimum grade of "B" (3.0).

A minimum GPA of 2.75 is required for admission to the Single Subject Credential Program in Music. The prospective Single Subject Credential student must pass the CBEST (California Basic Education Skills Test), as well as an assessment interview with the Music Education faculty. In the interview the applicant is expected to demonstrate musical and interpersonal skills essential to music teaching, as well as an overall synthesis of learning.

Once accepted into the Single Subject Credential in Music, students must complete the following 31 units to earn the preliminary Single Subject Credential:

Music Education: Music Ed 442 (3), 449E (3)
Professional Education: Ed Sec 410 (3) Ed Sec 440F (2), Ed Sec 440S (4)
Student Teaching: Music Ed 449I (10), 449S (3) and Ed Sec 460 (3)

BACHELOR OF MUSIC

This degree program is designed to provide training for highly gifted students who show promise and capability of becoming professional performers and composers.

The degree consists of 132 semester units. A minimum of 70 semester units in music are required, at least 32 of which must be upper-division.

Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)
Major performance ensemble (Music 406) (4)*
Recital (Music 498) (1)

COMPOSITION CONCENTRATION (70 UNITS)

Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)
Major performance ensemble (Music 406) (4)*
Recital (Music 498) (1)

Additional Requirements (31 units)
Music theory (Music 316, 323, 418, 419, 420, 422) (14)
Conducting (Music 382A and 383A; or Music 382A and 382B, or Music 383A and 383B) (4)
Applied composition (5)
Electives in music (8)

Allied Requirement for Composition Concentration

Students in the Composition Concentration must demonstrate proficiency in one foreign language (French, German or Italian) to be satisfied as described under the requirements for the Bachelor of Music, Voice concentration.

*Required of all undergraduate music majors every semester of residence. (See "Introduction," item 6.)

INSTRUMENTAL CONCENTRATION

Orchestral Instruments Emphasis (70 units)
Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121,122, 211,221, 319,320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)
Major performance ensemble (Music 406) (4)*
Recital (Music 498) (1)

Additional Requirements (31 units)
Music theory (Music 323, 418, 422) (6)
Principal performance area (applied music) (6)
Recital (Music 398) (1)
Conducting (Music 382A,B) (4)
Chamber music (Music 407C,D,E,M,Y and/or 408B,S,W,X) (6)
Electives in music (8)

Classical Guitar Emphasis (70 units)
Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Major performance ensemble (Music 406) (4)*
Principal performance area (applied music) (6)
Recital (Music 498) (1)
Additional Requirements (31 units)
Music theory (Music 316, 418, 422) (6)
Principal performance area (applied music) (6)
Recital (Music 398) (1)
Conducting (Music 382A) (2)
Chamber music (Music 407G and/or 408G) (6)
Fingerboard skills (Music 385G) (2)
Guitar history and literature (Music 459A) (2)
Guitar pedagogy (Music 459B) (2)
Electives in music (4)

*Required of all undergraduate music majors every semester of residence. (See "Introduction," item 6.)

KEYBOARD CONCENTRATION (70 UNITS)
Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)
Major performance ensemble (Music 406) (4)*
Recital (Music 498) (1)

Additional Requirements (31 units)
Music theory (two courses from Music 418, 420, 422) (4-5)
Music history and literature (Music 454A,B) (4)
Conducting (Music 382A or 383A) (2)
Recital (Music 398) (1)
Principal performance area (applied music) (6)
Chamber music (Music 407D,E,M,Y and/or 408B,G,K,S,W,X) (3)
Piano-Vocal Collaboration (Music 386) (1)
Pedagogy (Music 467A,B,C) (6)
Harpsichord or organ class (Music 372 or 373) (1)
Electives in music (2-3)

VOICE CONCENTRATION (70 UNITS)
Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)
Major performance ensemble (Music 406) (4)*
Recital (Music 498) (1)

Additional Requirements (31 units)
Music theory (Music 316, 422) (4)
Music history and literature (Music 456; 457A,B; 462) (10)
Recital (Music 398) (1)
Principal performance area (applied music) (6)

Opera Theatre (Music 406D) (2)
Diction (Music 380A,B,C) (3)
Conducting (Music 383A) (2)
Pedagogy (Music 468) (2)
Elective in music (1)

Allied Requirement for Voice Concentration
Students in the Voice Concentration must demonstrate proficiency in two foreign languages (to be chosen from French, German and Italian), each to be satisfied by one of the following:
1. four years study of foreign language at the secondary school level
2. passing an examination given by the Department of Modern Languages and Literatures
3. completing the second semester of the beginning university sequence of a foreign language

*Required of all undergraduate music majors every semester of residence. (See "Introduction," item 6.)

ACCOMPANYING CONCENTRATION (70 UNITS)
Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)
Major performance ensemble (Music 406) (4)*
Recital (Music 498) (1)

Additional Requirements (31 units)
Music theory (Music 316, 418, 422) (6)
Music history and literature (Music 457A) (2)
Principal performance area (applied music) (5)
Chamber music (Music 408B,G,K,S,W,X) (2)
Harpsichord class (Music 372) (1)
Organ class (Music 373) (1)
Functional skills (Music 285) (2)
Piano-Vocal Collaboration (Music 386) (2)
Diction (Music 380A,B,C) (3)
Recitals (Music 398, 498) (2)
Electives in music (3)

Note: Two 498 recitals are required. The other is listed under “Core Requirements.”

JAZZ AND COMMERCIAL MUSIC CONCENTRATION
Instrumental Emphasis (70 units)
Core Requirements for the Bachelor of Music (39 units)
Music theory (Music 111, 112, 121, 122, 211, 221, 319, 320) (14)
Music history and literature (Music 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (6)*
Major performance ensemble (Music 406) (4)*

If Piano/Electric Guitar/Electric Bass is the major instrument, two additional units of Music 408J may be substituted to fulfill this requirement.
Recital (Music 398) (classical and jazz in content) (1)
Additional Requirements (31 units)
Jazz Harmony and Analysis (Music 213) (2)
Jazz and Commercial Arranging (Music 312) (2)
Jazz History (Music 451) (3)
Jazz Pedagogy (Music 469) (2)
Principal Performance area (applied music-jazz) (6)
Major Performance Ensemble (Music 406L and/or S)* (4)
Chamber Music Ensemble – Jazz Combos (Music 408J) (1,1,1)
Recital (Music 498-jazz in content) (1)
Three units from the following:
Jazz Improvisation (Music 264, 364, 464) (1,1,1)
Jazz/Commercial Keyboard (Music 384) (1)
Electives in Music (3)
Music 306 and 326 are strongly encouraged

*Required of all undergraduate music majors every semester of residence. (See “Introduction,” item 6.)

MINOR IN MUSIC

Students whose majors are in other fields may pursue the minor in music. A maximum of 14 lower-division units may be included in work counted toward the music minor. The minor requires a minimum preparation of 20 units (at least five in residence at CSUF) as follows:

Theory of Music (6 units), selected from Music 101, 111, 112, 121, 122, 211, 221 or any 300- or 400-level theory classes for which the student is qualified
Music History and Literature (5-6 units), selected from Music 100; 102; 151; 302; 303; 304; 305; 307; 350; 351A,B,C; 355; or courses at the 400 level for which the student is qualified
Applied Techniques (8-9 units), selected from Music 182; 183; 184A,B; 185A,B; 281B,P,S,W; 282A,B; 283; 284; 326; 426; or any course in ensemble (e.g., band, orchestra, choir), conducting, piano or voice at the 300 or 400 level for which the student is qualified.
Music minors may also elect to take private instruction in applied music (Music 193, 293, 393, 493) through University Extension for an additional fee.

MASTER OF MUSIC AND MASTER OF ARTS IN MUSIC

Two graduate degrees in music are offered in the Department of Music: the Master of Music and the Master of Arts in Music. Each degree seeks to serve a special group of graduate students. For those who intend to pursue advanced degrees beyond the master’s level, the Master of Music normally leads to the D.M.A. The Master of Arts normally leads to the Ph.D.

Admission to Graduate Standing: Conditionally Classified

All applicants admitted into the music program enter in conditionally classified graduate standing. University requirements include:
1. Baccalaureate from an accredited institution
2. Grade-point average of at least 2.5 in the last 60 semester units attempted
3. Good standing at the last college attended
4. For foreign students, a minimum TOEFL score of 560

Each applicant must also present satisfactory entrance materials according to the area of specialization (performance, composition, music history/literature, education, piano pedagogy), and pass entrance exams in music theory and music history. A student whose audition is unsatisfactory or who fails to meet satisfactorily the entrance exam requirements shall be removed from “conditionally classified” status.

Application Deadlines

Information regarding deadlines for online applications to the M.A. and M.M. degrees is available at the department website.

Graduate Standing: Classified

A graduate student may apply for classified graduate standing upon attainment of the following prerequisites: (a) completion of all requirements for conditionally classified standing as described above; (b) an undergraduate major in music (or the equivalent of a major; i.e., 29 undergraduate upper-division units in music appropriate to the student’s desired graduate emphasis) according to the student’s desired graduate emphasis with a minimum grade-point average of 3.0 in the major; and (c) satisfactory completion of Music 500 Introduction to Graduate Study in Music. One objective of Music 500 is the preparation of a study plan listing all courses required for completion of the degree. This study plan must receive the approval of the Area Coordinator of the student’s area of specialization, the Music Department graduate program adviser, and the Associate Vice President for Graduate Studies and Research. Opportunity is given to the student to remove any deficiencies in undergraduate-level preparation. Courses taken to satisfy deficiencies usually will not be included on the student’s study plan and thus will not count toward the master’s degree. Students who do not pass one or more of the entrance examinations shall take and complete specified coursework with a grade of “B” (3.0) or higher or may retake the complete exam at its next administration.

Writing skills will be assessed at entrance using the student’s entrance essay and the essay portion of the music history examination. Those who do not initially possess the expected proficiency will be required to achieve it before taking Music 500. This may include taking appropriate coursework stipulated by the Music Department.
Writing proficiency will be assessed further in Music 500. Completion of Music 500 with a minimum grade of “B” (3.0) satisfies the writing proficiency requirement.

Prospective students must also pass entrance requirements in music theory and music history. The music theory requirement must be met by passing the entrance examination. The music history requirement must be met by passing the entrance examination. The music theory entrance requirement must be satisfied before a student may take coursework for the study plan. The music history entrance requirement must be satisfied before a student may take any 500-level music history seminar.

MASTER OF MUSIC

The Master of Music provides an avenue of graduate study for the highly creative composer or for the superior performer in a program tailored to each student’s demonstrated talent and to each student’s professional development. Applicants must have completed either a Bachelor of Music degree in performance or composition, or show evidence of equivalent rigorous training. For the entrance audition, applicants in performance must demonstrate proficiency equivalent to the 400 level, the level expected of a performance major in the Bachelor of Music program at the time of the senior recital; composition applicants must submit a portfolio of scores for examination by the theory-composition faculty. For admission to the programs in choral or instrumental conducting, applicants must show evidence of substantial conducting coursework at the undergraduate level plus practical experience. Further, to audition for entrance into the program, each choral applicant must demonstrate conducting proficiency with a mixed chorus and each instrumental applicant must demonstrate conducting proficiency with a band or orchestra. Choral applicants must also demonstrate basic vocal and keyboard proficiencies and vocal sight reading ability. Under exceptional circumstances, a videotape may be substituted for the live audition.

Study Plan

The Master of Music degree program requires a minimum of 30 units of graduate study in music, at least half of which must be in 500-level courses. Music 500 Introduction to Graduate Study in Music, must be included within the first nine units taken as a graduate student under both options. Music 500, Music 406-408 (2) and Music 552-555 (3). Music 500, writing proficiency requirement.

In Music 500 with a minimum grade of “B” (3.0) satisfi es the

MASTER OF ARTS IN MUSIC

Three options are offered in this degree program: Option I in music history and literature, Option II in music education and Option III in piano pedagogy. All three options provide for breadth of advanced study as well as an area of specialization. The degree is intended for students preparing for college teaching in music history, music education and piano pedagogy, or teachers and supervisors of music at the elementary or secondary level, or professional independent piano teachers. For the entrance audition in history and literature, applicants must submit an example of a previously written research paper on a musical subject. Applicants to the program in music education and to the program in piano pedagogy must submit a 30-minute tape demonstrating their teaching technique in a classroom situation, plus additional written materials.

Study Plan

The Master of Arts degree program requires a minimum of 30 units of graduate study, no more than six of which may be outside the field of music and at least half of which must be in 500-level courses in the major.

Option I in music history and literature requires (a) reading ability in a foreign language, preferably German or French, prior to advancement to candidacy, and (b) a thesis. Students in Option II, music education, shall complete a thesis or a project. Students in Option III, piano pedagogy, shall complete either a project (consisting of a recital, public lecture and written essay) or a thesis.

Eight semester units are common to Options II and III – Music 500 (3), Music 406-408 (2) and Music 552-555 (3). Music 500, Introduction to Graduate Study in Music, must be included within the first nine units taken as a graduate student under both options.

For further details or advisement, consult the Department of Music graduate program adviser.

MUSIC COURSES

Courses are designated as MUS in the class schedule.

100 Introduction to Music (3)

Musical enjoyment and understanding through a general survey of musical literature representative of a variety of styles and performance media. Music will be related to other arts through lectures, recordings and concerts. For non-music majors.

101 Music Theory for Non-Music Majors (3)

Basic theory and practical applications to improve music performance and listening skills. Sight-singing and relationship to keyboard and simple melodic instruments. For non-music majors.

102 Introduction to American Folk Music (3)

American folk music, by region and period. Lecture, reading and listening assignments, and various audio-visual materials. No previous musical experience required.

111 Diatonic Harmony (2)

Scales and intervals, triads and their inversions, harmonizations, non-harmonic tones, modulation and seventh chords. Co-enrollment in Music 121 is required for music majors and is recommended for others. For Music majors or by permission of department only.

112 Diatonic Harmony (2)

Prerequisites: Music 111, 121. Scales and intervals, triads and their inversions, harmonizations, non-harmonic tones, modulation and seventh chords. Co-enrollment in Music 122 is required for music majors and is recommended for others. For Music majors or by permission of department only.
121 Musicianship I – Diatonic (1)
Application of materials in Music 111. Sight-singing, dictation and keyboard exercises. Co-enrollment in Music 111 is required. For Music majors or by permission of department only. (2 hours activity)

122 Musicianship II – Diatonic (1)
Prerequisites: Music 111, 121. Application of materials in Music 112. Sight-singing, dictation and keyboard exercises. Co-enrollment in Music 112 is required. For Music majors or by permission of department only. (2 hours activity)

151 Survey of Western Musical Literature (2)
Prerequisites: Music 111, 121. Literature of music in Western civilization. Students should be able to read music in order to analyze form and style. For Music majors or by permission of department only.

182 Piano Class for Music Majors (2)
Prerequisites: Music majors only; Music 111. Keyboard skills for students whose major performance instrument is not piano. For Music majors or by permission of department only. (1 hour lecture, 2 hours activity)

183 Voice Class for Non-Music Majors (1)
Prerequisite: consent of instructor. Elementary singing and musicianship techniques. Recommended for non-majors who wish to participate in a CSUF choral ensemble or for students who wish to apply for music major status. May be repeated for credit. (2 hours activity)

184A Piano Class for Non-Music Majors (1)
Beginning and elementary piano skills for the non-music major. (2 hours activity)

185A Guitar Class for Non-Music Majors (1)
Beginning and elementary classical guitar techniques for the non-music major. May be repeated for credit. (2 hours activity)

185B Guitar for Non-Music Majors (1)
Prerequisite: Music 185A or consent of the instructor. Elementary classical guitar techniques for the non-music major. Continuation of Music 185A. May be repeated for credit. (2 hours activity)

193 Individual Instruction (1-2)
Prerequisite: jury recommendation. Individual study with approved instructor. Technique and repertoire. Music majors must register for a minimum of one unit per semester. Performance majors approved by jury recommendation should register for two units per semester. Jury examination required. May be repeated for credit.

196 Student-to-Student Tutorials (1-3)
Prerequisites: a 3.0 or higher grade-point average and/or consent of instructor and simultaneous enrollment in the course, or previous enrollment in a similar course or its equivalent. Consult "University Curricula" in this catalog for a more complete course description.

211 Chromatic Harmony (2)
Prerequisites: Music 112, 122. Chromatic practice of the 19th century. Secondary dominants; ninth, 11th and 13th chords; sequence; Neapolitan and augmented sixth chords. Co-enrollment in Music 221 is required for music majors and is recommended for others. For Music majors or by permission of department only.

213 Jazz Harmony and Analysis (2)
Prerequisite: Music 264. Prerequisite or Corequisite: Music 221. Provides tools to understand principles of jazz harmony and form. Description of chords, including seventh, ninth and 13th chords; altered chords; modulation as found in jazz music; and modes. (4 hours activity)

221 Musicianship III Chromatic (1)
Prerequisites: Music 112, 122. Application of materials in Music 211. Sight-singing, dictation, and keyboard exercises. For Music majors or by permission of department only. (2 hours activity)

264 Jazz Improvisation I (1)
Prerequisites: Music 111, 112. Ability on a standard jazz instrument, or consent of instructor. Application of scales and their relationship to chords. Modes, jazz rhythmic phrasing, blues progressions and cycle of dominant seventh chords. Basic jazz keyboard drills and ear training are involved. (2 hours activity)

281B Orchestral Instruments/Brass Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

281P Orchestral Instruments/Percussion Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

281S Orchestral Instruments/String Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

281W Orchestral Instruments/Woodwind Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

282A Piano Class for Music Majors (2)
Prerequisite: Music 182 with a grade of "C" (2.0) or better, or consent of instructor. Keyboard skills for students whose major performance field is not piano. For Music majors or by permission of department only. (1 hour lecture, 2 hours activity)

282B Piano Class for Music Majors (2)
Prerequisite: Music 282A with a grade of "C" (2.0) or better, or consent of instructor. Keyboard skills for students whose major performance field is not piano. Meets minimum piano proficiency requirements for degree. For Music majors or by permission of department only. (1 hour lecture, 2 hours activity)
283 Voice Class for Instrumentalists (1)
Prerequisite: teaching credential candidate or consent of instructor. Vocal skills for students whose major performance field is not voice. Prepares music education students to work with young singers in group settings by understanding their own vocal problems and the solutions in a variety of vocal styles. Satisfies voice-proficiency requirement for music credential candidates. (2 hours activity)

284 Instrument Class for Singers, Pianists, and Guitarists (1)
Instrumental skills for music majors and minors other than Instrumental Music Education. Prepares Choral and General-Music music-education students to work with beginning instruments in group settings. Study of ranges, transpositions and techniques of various orchestral instruments. (3 hours activity)

285 Functional Skills for Keyboard Majors (2)
Development of the ability to sight-read, harmonize, transpose and improvise. (4 hours activity)

293 Individual Instruction (1-2)
(See Music 193)

302 History of Jazz (3)
Prerequisite: completion of General Education (G.E.) Category III.B.1. Historical study of jazz music in America, along with its antecedents; chronological development and stylistic evolution with consideration of related trends. Emphasizes listening, reading and written work. Intended for non-music majors. May not be used as a music-major elective.

303 World Music (3)
Prerequisite: completion of G.E. Category III.B.1. Art, folk and popular music of selected world areas; topics vary according to semester and are chosen from Latin American, North American, Asian, African and European cultures and traditions. Emphasizes listening, reading and written work. Intended for non-music majors. May not be used as a music-major elective.

304 Music of Mexico (3)
Prerequisite: completion of G.E. Category III.B.1. Historical survey of folk, popular, and art music traditions of Mexico and music in Mexican American/Chicano society, with coverage of pre-Cortesian and contemporary indigenous musical practices; focus on the relationship of music to Mexican history and culture. Emphasizes listening, reading and written work. Intended for non-music majors. May be used as a music-major elective. (Same as Chicana/o 304)

305 Women in Music (3)
Prerequisite: completion of G.E. Category III.B.1. Contributions women have made as composers and performers, and as musical patrons, as well as the historical limitations to which women musicians have been subject. Emphasizes listening, reading and written work. Intended for non-music majors. May be used as a music-major elective.

306 Business of Music (3)
Prerequisite: Music 100 or 151. Comprehensive survey of the business aspects of songwriting, publishing, copyright, legal affairs, the record industry, music in broadcast and film, and career planning and development.

307 History of Rock Music (2)
Prerequisite: completion of G.E. Category III.B.1. History of American and British rock and popular music and their place in society; begins with the study of the roots of American popular music. Emphasizes listening, reading and written work. Intended for non-music majors. May be used as a music-major elective.

308 Music of the Middle East (3)
Prerequisite: completion of G.E. category III.B.1. Middle Eastern music in its socio-cultural, historical and global contexts. Development of listening, critical thinking and writing skills. Directed towards non-majors.

312 Jazz and Commercial Arranging (2)
Prerequisite: Music 211 and 213. Harmonic practices in commercial music; stage band and jazz writing techniques. May be repeated once for credit.

314A Special Projects in Jazz and Commercial Music (2)
Prerequisite: Music 312 or consent of instructor. Three- and four-part voice accompaniment; planning and executing the mult chorus, small-group arrangement.

314B Special Projects in Jazz and Commercial Music (2)
Prerequisite: Music 314A or consent of instructor. Introduction to harmonic substitutions; planning and executing arrangements for larger groups of instruments.

316 16th-Century Counterpoint (2)
Prerequisite: Music 211, 221. Sixteenth-century counterpoint in two, three and four parts, covering motet, canon, double counterpoint.

319 Form and Analysis (3)
Prerequisite: Music 211, 221. Structural elements of music such as motive, phrase and period: binary, ternary, rondo, sonata allegro and larger musical forms in representative musical works.

320 20th-Century Techniques to 1945 (2)
Prerequisite: Music 211, 221. Compositional practices from 1890 to 1945; Written examples in the various styles. Sight singing, keyboard practice and dictation. (1 hour lecture, 2 hours activity)

322 Orchestration (2)
Prerequisites: Music 319, 320 or consent of instructor. Instrumentation and scoring. Writing and analyzing orchestral music.

326 Introduction to Music Technology (2)
Prerequisites: Music major and Music 211, 221. Introduction to the theory and use of computer software for sound design and music production. Demonstrations and assignments dealing with techniques for creating music in the digital domain.
333 Music and Child Development (3)  
Prerequisite: Music majors only or consent of instructor. Relationship of music to child growth and development for the child ages five to 12. Survey of age-appropriate music materials.

350 Music in American Society (3)  
Prerequisite: completion of G.E. Category III.B.1. Music in its relationship to American culture and society. Sociological approach through the study of musical repertoires and concert life, as well as audience participation in musical consumption. Emphasizes listening, reading and written work. Intended for non-music majors. May not be used as a music-major elective.

351A History and Literature of Western Music (3)  
Prerequisites: Music 112, 122, 151. History and literature of European music, from early Greek beginnings through the Renaissance. Emphasizes listening, reading and written work. Intended for music majors.

351B History and Literature of Western Music (3)  
Prerequisites: Music 151, 211, 221, 351A. History and literature of European music of the Baroque and Classic eras. A grade of "C" (2.0) or higher fulfills the course requirement of the university upper-division baccalaureate writing requirement for music majors. Emphasizes listening, reading and written work. Intended for music majors.

351C History and Literature of Western Music (3)  
Prerequisites: Music 151, 211, 221; 351A,B. History and literature of European and American music, from the Romantic era to the present. Intended for music majors.

353 Public-School Instrumental Music Materials (2)  
Prerequisite: Music 382A or concurrent enrollment. Instrumental-music materials, repertoire, programming and curriculum for public-school instrumental-music ensembles. Topics include solo, chamber and large-ensemble repertoire.

354 Survey of Public School Choral Music Materials (2)  
Prerequisite: Music 383A. Examination and analysis of choral repertoire suitable for junior and senior high choruses.

355 Film Music (3)  
Prerequisite: completion of G.E. Category III.B.1. Historical survey of the use of music in motion pictures. Analysis and examination of film scores. Emphasizes listening, reading and written work. Intended for non-music majors. May be used as a music-major elective.

356 Afro-American Music Appreciation (3)  
(Same as Afro-Ethnic Studies 356)

357 Blacks in the Performing Arts (3)  
(Same as Afro-Ethnic Studies 357 and Theatre 357)

358A Diction for Singers (English and Italian) (1)  
Prerequisites: sophomore standing and music major status and consent of instructor. Techniques of improving singing diction. Refining English and Italian diction through group and individual exercises. Not a substitute for formal foreign-language study. (2 hours activity)

364 Jazz Improvisation II (1)  
Prerequisite: Music 380A. Problems of basic phonetics in German as applied to singing diction. Continued study of the International Phonetic Alphabet as the fundamental tool for improving singing diction. Refining English and Italian diction through group, individual exercises. Not a substitute for formal foreign-language study. (2 hours activity)

365G Guitar Performance Workshop (1)  
Prerequisite: consent of instructor. Weekly workshop performances by students, faculty and guests. Recommended for guitar majors each semester. May be repeated for credit. (2 hours activity)

365I Instrumental Workshop (1)  
Prerequisite: consent of instructor. Weekly workshop performances by students, faculty and guests. Recommended for instrumental majors each semester. May be repeated for credit. (2 hours activity)

365K Keyboard Workshop (1)  
Weekly workshop performances by students, faculty and guests. Recommended for keyboard majors each semester. May be repeated for credit. (2 hours activity)

365S String Workshop (1)  
Prerequisite: consent of instructor. Weekly workshop performances by students, faculty and guests. Recommended for string majors each semester. May be repeated for credit. (2 hours activity)

365V Vocal Workshop (1)  
Corequisite: enrollment in applied vocal study or consent of Vocal Area Coordinator. Techniques of artistic performance explored through classroom demonstrations, master classes, and recitals on and off campus. Additional recital and performance attendance is required. Course may be repeated for credit. (2 hours activity)

372 Harpsichord Class for Music Majors (1)  
Prerequisite: 300 jury level in piano or organ, or consent of instructor. Harpsichord as an instrument, the application of Baroque stylistic characteristics and training in the rudiments of continuo playing in ensemble with voices and instruments. (2 hours activity)

373 Organ Class for Music Majors (1)  
Prerequisite: 300 jury level in piano or organ. Organ as an instrument, the playing techniques and repertoire. Differences between piano and organ techniques. (2 hours activity)
380C Diction for Singers (French) (1)
Prerequisite: Music 380A. Problems of basic phonetics in French as applied to singing diction. Continued study of the International Phonetic Alphabet with oral and written exercises. Not a substitute for formal foreign-language study; prior study of French recommended. (2 hours activity)

382A Instrumental Conducting (2)
Prerequisites: two courses from Music 284; 281B,P,S,W; or consent of instructor. Principles, techniques, and methods of conducting orchestral and band groups. (4 hours activity)

382B Instrumental Conducting (2)
Prerequisites: two courses from Music 284; 281B,P,S,W; or consent of instructor. Continuation of 382A, including laboratory experience in conducting instrumental groups, using standard instrumental literature. (4 hours activity)

383A Choral Conducting (2)
Prerequisite: one semester of voice class or consent of instructor. Principles, techniques and methods of conducting choral groups. (4 hours activity).

383B Choral Conducting (2)
Prerequisites: Music 383A plus one semester of voice class or consent of instructor. Continuation of 383A, including laboratory work with class and vocal ensembles, using standard choral repertoire. (4 hours activity)

384 Jazz/Commercial Keyboard (1)
Prerequisite: Pass Piano Proficiency or Music 282B. Provides skills to play underlying harmonies and keyboard voicings found in jazz and popular music. (2 hours activity)

385G Guitar Fingerboard Skills (2)
Prerequisite: upper-division guitar standing or consent of the instructor. Developing comprehensive understanding of the guitar fingerboard, with emphasis on scales, intervals, chord formation, harmonic progressions and sight-reading. (2 hours activity)

386 Piano--Vocal Collaboration (1)
Prerequisite: 300 level in performance and consent of instructor. Collaborative skills for pianists and vocalists, with representative examples from standard teaching literature for voice and piano. Classroom performances, outside rehearsals, listening and recital attendance required. May be repeated for credit. (2 hours activity)

393 Individual Instruction (1-2)
(See Music 193.)

395 Internship and Professional Experience (1-3)
Fieldwork in music under supervision of resident faculty and professionals in the field. Requires minimum six hours fieldwork per week for each unit credit. May be repeated for credit to a maximum of six units. Open to all music students by consent of instructor.

398 Recital (1)
Prerequisites: 300 jury level in the principal performance area and consent of instructor. Co-requisite: Enrollment in Music 365 I, S, G, K or V. Preparation and presentation of representative works in the principal performance area. In the semester of recital presentation, Music 398 will substitute for one unit of 393.

406A Major Performance Ensemble/Symphony Orchestra (1)
Prerequisite: audition or consent of instructor. Study and performance of standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406B Major Performance Ensemble/Concert Choir (1)
Prerequisite: audition. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production) May be repeated for credit.

406C Major Performance Ensemble/Symphonic Winds (1)
Prerequisite: consent of instructor. Study and performance of standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406D Major Performance Ensemble/Opera Theatre (1)
Prerequisites: audition and consent of instructor. Musical, dramatic and language techniques of music theatre. Assignments made according to casting requirements. Public performances of scenes, programs or complete operas. Open to majors and non-majors. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

406E Major Performance Ensemble/University Singers (1)
Prerequisite: audition. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production) May be repeated for credit.

406F Major Performance Ensemble/Wind Symphony (1)
Prerequisite: advanced wind and percussion students accepted by audition. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)
406H Major Performance Ensemble/Opera Orchestra (1)
Prerequisite: permission of instructor. Performance in the orchestra for collaborative Music Department/Theatre Department productions. Includes musical preparation, joint rehearsal preparation with the Theatre Department, and performances. Does not satisfy the Music Department major performance ensemble requirement. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

406L Major Performance Ensemble/Jazz Ensemble I (1)
Prerequisite: audition and consent of instructor. Study and perform advanced standard and contemporary jazz literature for large ensemble. Public concerts on campus and in the community each semester. Concert or jazz festival tours may be included. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (3 or more hours activity)

406M Major Performance Ensemble/Men's Chorus (1)
Prerequisite: audition. This course enables students to learn and perform a wide variety of high-quality choral literature written especially for men's voices. Students also gain improved competence in sight singing, musicianship, and vocal skills. Open to both music majors and non-music majors. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

406S Major Performance Ensemble/Jazz Ensemble II (1)
Prerequisite: audition or consent of instructor. Study and perform standard and contemporary jazz literature for large ensemble. Public concerts on campus and in the community each semester. Concert or jazz festival tours may be included. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (3 or more hours activity)

406T Major Performance Ensemble/Jazz Ensemble III (1)
Prerequisite: audition or consent of instructor. Study and perform standard and contemporary jazz literature for large ensemble. Public concerts on campus and in the community each semester. Concert and jazz festival tours may be included. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (3 or more hours activity)

406U Major Performance Ensemble/University Band (1)
Prerequisite: consent of instructor. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406W Major Performance Ensemble/Women's Choir (1)
Prerequisite: consent of instructor. Learn and perform a wide variety of high-quality choral literature written especially for women's voices, while improving competence in sight singing, musicianship and vocal skills. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

407C Cello Choir (1)
Course is open to cellists by audition. Rehearse, study and perform literature written or arranged for various groups of cellos. Combine rehearsals, sectional workshops, master classes and joint concerts with guest artists/ conductors. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407D Percussion Ensemble (1)
Prerequisite: consent of instructor. Study and perform music written for percussion ensemble. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407E Brass Ensemble (1)
Prerequisite: consent of instructor. Study and perform music written for large brass choir/ensemble. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407G Guitar Orchestra (1)
Prerequisite: audition; consent of instructor. Numerous public performances, on and off campus, of music written for large ensemble of classical guitars. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407K Clarinet Choir (1)
Prerequisite: audition. Study and perform music for clarinet choir. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407M Horn Ensemble (1)
Prerequisite: consent of instructor. Study and perform music written for French horn ensemble with emphasis on the solution of various problems relating to multiple horn literature. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407V Jazz Singers (1)
Prerequisite: audition and/or consent of instructor. Study and perform standard and contemporary vocal jazz literature. Public concerts on campus and in the community each semester. Concert/festival tours may be included. Open to non-music majors by audition. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

407Y Diverse Instrument Ensemble (1)
Prerequisite: audition. Ensemble of diverse instruments and voices. Performs a wide range of repertoire for indeterminate instrumentation, as well as arrangements and transcriptions of music from the Middle Ages to the present. Open to all performance areas, including electric as well as acoustical instruments. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)
408B Chamber Music Ensemble/Brass (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408C Collegium Musicum (1)
Prerequisite: audition. Study and perform instrumental and vocal music from the middle Ages, Renaissance and Baroque. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408D Chamber Music Ensemble/Strings (1)
Open to all qualified classical guitar students and to other music students by consent of instructor. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408E Chamber Music Ensemble/Guitar (1)
Open to all qualified classical guitar students and to other music students by consent of instructor. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408F Chamber Music Ensemble/Keyboard (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408G Chamber Music Ensemble/Jazz Combo (1)
Study, read and perform jazz repertoire representative of various styles. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (2 hours activity)

408H Chamber Music Ensemble/Saxophone (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408I Chamber Music Ensemble/Brass (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408J Chamber Music Ensemble/Jazz Combo (1)
Study, read and perform jazz repertoire representative of various styles. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (2 hours activity)

408K Chamber Music Ensemble/Strings (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408L Chamber Music Ensemble/Woodwind (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Section 1: Woodwind Quintets. Section 2: Small, Mixed Ensembles. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408M Chamber Music Ensemble/Vocal (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408N Chamber Music Ensemble/Keyboard (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408P Chamber Music Ensemble/Brass (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408Q Chamber Music Ensemble/Keyboard (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408R Chamber Music Ensemble/Strings (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408S Chamber Music Ensemble/Guitar (1)
Open to all qualified classical guitar students and to other music students by consent of instructor. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408T Chamber Music Ensemble/Brass (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408U Chamber Music Ensemble/Strings (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408V Chamber Music Ensemble/keyboard (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408W Chamber Music Ensemble/Woodwind (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408X Chamber Music Ensemble/Saxophone (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

411 Survey of Music Theory (3)
Prerequisites: completion of all lower-division theory requirements, and at least senior standing or equivalent. Theoretical basis of music from 1500 to the present through analysis, readings and discussion. Intended primarily for graduate and post-baccalaureate students. Fulfills graduate entrance examination requirement in music theory. May not be applied to a graduate study plan.

418 18th-Century Counterpoint (2)
Prerequisite: Music 211, 221. Eighteenth-century counterpoint in two, three and four parts, covering invention, canon, double and triple counterpoint and fugue.

419 Advanced Form and Analysis (3)
Prerequisite: Music 351C. Continuation of Music 319; larger musical works.

420 Compositional Techniques since 1945 (3)
Prerequisites: Music 320, 351C or consent of instructor. Compositional practices from 1945 to the present, including synthesis of sound. Written examples in various styles.

422 Composition (2)
Prerequisites: Music 316, 319 and 320 or consent of instructor. Composition of smaller forms in various contemporary styles.

426 Applications of Music Technology (2)
Prerequisite: Music 326. Continuing supervised laboratory experimentation with equipment, concepts and techniques encountered in Music 326. Students pursue individual assignments based on experience, ability and interest. May be repeated for credit.

433 Music in Childhood (3)
Prerequisite: completion of a music course in General Education Category III.B.1. Songs, creative activities and materials for teaching music to elementary school-aged children. Teaching-learning strategies.

444 Survey of Marching Bands (2)
Prerequisite: consent of instructor. Techniques, materials, administration for marching band. Charting for field shows and parade activities. (1 hour lecture, 2 hours activity)

450 History of Musical Style (3)
Prerequisites: Music 351A,B,C or equivalent, or consent of instructor. Intensive review of principal musical styles in Western music. Intended primarily for graduate and post-baccalaureate students. Fulfills graduate entrance examination requirement in music history. May not be applied to a graduate study plan.
451 Jazz History and Style (3)
Prerequisites: Music 211; 351A,B. History and literature of jazz music, including African roots, developments and aspects of style periods, and the contemporary state of jazz. Intended for music majors. Activities include listening, analysis, and a term paper.

453A Choral Literature (2)
Prerequisites: Music 351A,B. Choral literature, from Medieval, Renaissance and Baroque eras analyzed in historical perspective; investigation of performance practice issues.

453B Choral Literature (2)
Prerequisites: Music 351A,B,C. Choral literature, from Classic, Romantic and Contemporary eras analyzed in historical perspective; investigation of performance practice issues.

454A Piano Literature (2)
Prerequisites: Music 351A,B,C and upper-division piano standing or consent of instructor. Representative styles and schools of piano literature; solo and ensemble repertoire – contrapuntal forms, sonatas and variations.

454B Piano Literature (2)
Prerequisites: Music 351A,B,C and upper-division piano standing or consent of instructor. Representative styles and schools of piano literature; solo and ensemble repertoire – character pieces, fantasies, suites, and études.

455 Wind Ensemble Literature (3)
Prerequisites: Music 351 A, B, C and Music 382 A, B; Comprehensive survey of the history and literature of the wind ensemble. Developments in musical style and repertory, and the social and historical contexts for the wind ensemble.

456 Opera Literature (3)
Prerequisites: Music 351A,B,C. Operatic literature and performance practices from the Baroque period through the present. Stylistic and historical considerations of selected works examined in detail.

457A Song Literature (2)
Prerequisites: Music 319; 351A,B,C, or consent of instructor. Open to all music majors. German Lieder with representative examples of periods and styles. Historical contexts, poetry and compositional techniques. Prior study of German recommended.

457B Song Literature (2)
Prerequisites: Music 319; 351A,B,C, or consent of instructor. Open to all music majors. French mélodie with representative examples of periods and styles. Historical contexts, poetry and compositional techniques. Prior study of French language recommended.

458 Symphonic Literature (3)
Prerequisites: Music 351A,B,C. Literature of the symphony orchestra, from the classical era through the mid-20th century.

459A Guitar Literature (2)
Prerequisites: Music 351A,B,C. Historical survey of the literature for Baroque and classical guitar, lute and vihuela; study of transcriptions for modern guitar.

459B Guitar Pedagogy (2)
Prerequisites: Music 151; 211; 351A,B,C. Upper-division guitar standing or consent of the instructor. Fundamentals of teaching and coaching classical guitar. Materials and methods for individual and group instruction.

462 World Music for Music Majors (3)
Prerequisites: Music 351 A,B,C. Art, folk and popular music of selected world areas; topics vary according to semester and are chosen from Latin American, North American, Asian, African and European cultures and traditions.

464 Jazz Improvisation III (1)
Prerequisite: Music 364 or consent of instructor. Continuation of Jazz improvisational pedagogy and techniques with an emphasis on performance application. Form, stylistic analysis and ear training. (2 hours activity)

465S Topics in Violin Playing (1)
Concurrent enrollment in Music 193, 293, 393, 493 or 593. Various topics of violin playing and performing. Discussion and demonstration includes both technical and musical elements applicable to violin performance.

466 Pedagogy Observation and Internship (1)
Prerequisite: junior-level piano standing or consent of instructor. Corequisite: 467A,B or C. Observation of and supervised internship in piano teaching. Teaching techniques and development of lesson plans and materials. (2 hours activity)

467A Piano Pedagogy (2)
Prerequisite: upper-division piano standing or consent of instructor. Materials and methods for beginning and elementary students. Co-enrollment in Music 466 recommended.

467B Piano Pedagogy (2)
Prerequisite: upper-division piano standing or consent of instructor. Materials and methods for intermediate and early advanced students. Co-enrollment in Music 466 recommended.

467C Piano Pedagogy (2)
Prerequisite: upper-division piano standing or consent of instructor. Materials and methods for class piano. Co-enrollment in Music 466 recommended.

468 Vocal Pedagogy (2)
Prerequisite: junior standing, prior or concurrent college-level applied vocal study and permission of instructor. Physiology, anatomy and acoustics as they apply to singing; fundamental principles of vocal pedagogy for studio and public school teaching. Outside practice teaching required.
469 Jazz Pedagogy (2)
Prerequisite: 300 applied level required; 281B,P,W recommended. Preparation to teach jazz in high schools and colleges. Provides background in administration, preparation, rehearsal and evaluation of various types of jazz ensembles: big bands, combos and vocal jazz groups.

477 Piano Pedagogy Practicum (3)
Prerequisites: Music 467A,B,C. Supervised piano teaching in individual and group learning environments. Emphasizes the following elements: keyboard technique, literature, communication skills, lesson plans and piano curriculum. May be repeated for credit. (6 hours activity)

484 Performance Techniques for Opera (2)
Corequisite: enrollment in Music 493 or Music 593; audition. Stage movement and characterization techniques for the classically trained singer. Style in performance with reference to arias and small scenes from standard operatic and music theatre literature. (1 hour lecture, 2 hours activity)

493 Individual Instruction (1-2)
(See Music 193.)

496 Student-to-Student Tutorials (1-3)
Prerequisites: grade point average of 3.0 and consent of instructor. Previous or concurrent enrollment in the course being tutored or an equivalent course. Consult "Student-to-Student Tutorials" in this catalog for more complete course description.

497 Senior Project (1)
Independent investigation of an area of special interest in music culminating in a research paper, lecture, or lecture-recital.

498 Recital (1)
Prerequisites: 400 jury level in the principal performance area (400 jury level in composition for composition majors) and consent of instructor. Corequisite: Music 365 K,I,S,G, or V. Preparation and presentation of representative works in the principal performance area. In the semester of recital presentation, Music 498 will substitute for one unit of Music 493.

499 Independent Study (1-3)
Special topic in music selected in consultation with and supervised by the instructor. May be repeated for credit.

500 Introduction to Graduate Study in Music (3)
Required of all music graduate students within the first nine study-plan units. Basic bibliography, literature and research techniques, as well as other materials useful in graduate study.

524 Seminar in Music Theory (3)
Prerequisite: Music 500. Theoretical subjects (form/style analysis, history of music theory, etc.) to be chosen by instructor. May be repeated for credit.

552 Seminar in Music of the Renaissance (3)
Prerequisites: Music 351A,B,C; Music 500 or equivalent. Forms, styles and characteristics of music between 1400 and 1600. Analysis of works by representative composers and theoretical writers.

553 Seminar in Music of the Baroque Period (3)
Prerequisites: Music 351A,B,C; Music 500 or equivalent. Musical forms, styles and performance practices of the Baroque period. Analysis of representative works.

554 Seminar in Music of the Classic Period (3)
Prerequisites: Music 351A,B,C; Music 500 or equivalent. History and literature of music from approximately 1730 to 1820. Analysis of representative works.

555 Seminar in Music of the Romantic Period (3)
Prerequisites: Music 351A,B,C; Music 500 or equivalent. Structure and development of music in the 19th century. Analysis of representative works.

556 Seminar in Twentieth-Century American Music (3)
Prerequisite: Music 500. History and literature of American art music in the 20th century. Analysis of representative musical works and repertories, as well as musical, historical and social developments.

567 Seminar in Piano Pedagogy (3)
Prerequisites: Music 351A,B,C; Music 500 or equivalent. Graduate-level study of advanced learning theories, musical issues and pedagogical methods involved in teaching piano through lectures, discussions and student presentations. Practice teaching required. May be repeated for credit.

568 Graduate Seminar in Vocal Pedagogy (2)

570G Seminar in Guitar Literature (3)
Prerequisites: Music 351A,B,C; Music 500 or equivalent. Advanced study of guitar literature, with performances and analysis by class members and lectures by the instructor. Requirements can be met by performance and/or analysis. May be repeated for credit.

570P Seminar in Piano Literature (2)
Prerequisites: Music 351A,B,C; 500 or equivalent. Advanced study of piano literature, with performances and analysis by class members and lectures by the instructor. Requirements can be met by performance and/or analysis. May be repeated for credit.

570V Vocal Literature Seminar (2)
Prerequisites: Music 457A, 457B, 500 or permission of instructor. Advanced techniques and problems in the study of vocal literature for analysis and performance. Topics include historical contexts, literary and textual interpretation, music form and analysis, and performance practices.
583 Seminar in Advanced Choral Conducting and Interpretation (2)
Prerequisites: Music 383B, 500, conducting experience or consent of instructor. Choral conducting techniques. Lab work with student groups and concert conducting. May be repeated for credit.

593 Individual Instruction (1-2)
Prerequisite: jury recommendation. Individual instruction with approved instructor. Performance techniques and repertoire. May be repeated for credit.

597 Project (1-3)
The culminating experience of all M.M. students, and of M.A. Music Education and M.A. Piano Pedagogy students who so elect. Number of units is variable depending on options chosen in conjunction with advisers from activities, such as public recitals, lecture, corollary essay, original composition(s) or a significant research study.

598 Thesis (3)
Individual investigations of specific problems in the area of concentration by candidates for the M.A. degree. Students must submit an enrollment request form by week one of the preceding semester.

599 Independent Graduate Research (1-3)
Prerequisites: graduate standing in music and consent of instructor. Research and study projects in areas of specialization beyond regularly offered coursework. Oral and/or written reports required. Students must submit an enrollment request form by week one of the preceding semester.

MUSIC EDUCATION COURSES
Courses are designated as MUSE in the class schedule.

394 Music Education Practicum
Prerequisites: Music 382B or 383B; Ed Sec 310. For Music Education majors. Observation and application of musical concepts and materials, experience in sequential pedagogy, classroom delivery skills, and concurrent development of management skills, aural and visual discrimination skills, error detection and transposition skills.

395 Clinical Practice in Conducting
Prerequisite: Music Ed 394. For Music Education majors. Clinical practice and field applications of concepts, materials and procedures as applied to field situations, as in public and private schools. Each student observes, analyzes, assists when appropriate, and document a variety of actual classroom teaching situations and performances at various levels.

404 Microcomputers and MIDI for School Music Classrooms (3)
Prerequisite: Ed Sec 310. Pre-service and in-service music teachers learn how to use microcomputers and musical instrument digital interface (MIDI) for classroom management and pedagogical purposes. Students gain experience with software for word processing, database, spreadsheet, music notation, music pedagogy and MIDI.

442 Principles and Methods of Teaching Music in the Public Schools (3)
Prerequisite: admission to teacher education. History, principles of public education, grades K-12, with emphasis on music. Philosophy, methods, materials and procedures for organizing and teaching music in elementary and secondary schools. Must be taken concurrently with Secondary Education 440F and 440S.

449E Externship in Secondary Teaching (3)
Prerequisite: must be taken concurrently with Music Ed 442. For candidates who have declared for the single subject credential in music. See description and prerequisite under Department of Secondary Education.

449I Internship in Secondary Teaching (10)
Prerequisite: for candidates who have declared for the single subject credential in music. See description and prerequisite under Department of Secondary Education.

501 Contemporary Music Education (3)
Recent renovations and overview of the history, philosophy and methodology of the art of teaching music. Trends and applications of educational theory in relation to the teaching of music.

529 Advanced Pedagogy in Music Education (3)
Advanced pedagogical strategies for music teaching and learning, including world approaches to music education (e.g., Kodaly, Suzuki, Orff), current music learning theory and applications from cognitive and developmental psychology. Implications and applications for school music classes and curriculum development.

531 Foundations of Music Education (3)

533 Psychology of Music (3)
Contemporary topics merging research and practice in the fields of music teaching and learning theory. Topics include musical behavior, psycholacoustical parameters of music, perception, affective response, musical memory, learning theory, musical cognition.
INTRODUCTION

The Bachelor of Science in Nursing is designed to provide students with knowledge, skills, and attitudes necessary for the performance of the professional nursing role and characteristics of the generally educated person. The program prepares a nursing generalist who can provide care within a framework of scientific and professional accountability, and can function independently in a variety of health settings. The program provides students with the necessary foundation for graduate education and specialization and promotes and fosters commitment to lifelong learning for personal and professional growth.

The Master of Science in Nursing provides nurses with the foundation and capability to function independently in a variety of health settings and provide care within a framework of scientific and professional accountability. Both advanced practice nursing and functional options are offered, and students must choose one of these specialty areas. The advanced practice nursing options include client-oriented Nurse Anesthetist, School Nursing and Women’s Health Care concentrations. Within the Women’s Health Care concentration, students will choose an emphasis as either a nurse midwife or women’s health care nurse practitioner. The functional option includes a Nursing Leadership Concentration.

Certified registered nurse anesthetists administer approximately 65 percent of the 26 million cases of anesthetic delivery each year. Women’s health nurse practitioners provide primary ambulatory health care to women across the life span, primarily working in outpatient offices, but also in hospitals, community clinics, and other settings. Nurse-midwives focus on the care of women during pregnancy and on well-woman gynecologic health care across the life span. They work in a variety of outpatient, hospital and community clinic settings. There are many career possibilities for Master of Science in Nursing degree graduates in the community, in medical centers, corporate health care, school districts, group practice and other independently owned health care services.

The RN to BSN Program is offered at multiple locations throughout the state of California, in partnership with numerous health care organizations. This innovative approach allows students who would be unable to come to campus access to obtain a BSN degree in a “lock step” cohort model program. For current locations see the Department of Nursing’s website.

Student clinical placements in Joint Commission or other accredited agencies require cleared status on background checks.

All programs are accredited by the Commission on Collegiate Nursing Education (CCNE).

BACHELOR OF SCIENCE IN NURSING

The baccalaureate curriculum offers entry-level students and registered nurses with an associate degree in nursing (or its equivalent) an upper-division program leading to a Bachelor of Science degree with a major in nursing. Graduates are eligible for certification as public health nurses in the State of California.

The baccalaureate program is accredited by the Commission on Collegiate Nursing Education (CCNE).
Scholarships, Awards, Financial Aid

Financial aid and community scholarships are available. Maria Dolores Hernandez Scholarship information for nursing students is available on the department website. Outstanding Graduate Student, W. J. Traber Humanism Award, and Vera Robinson Humor Award are given to graduating seniors.

ENTRY-LEVEL BACCALAUREATE PATHWAY

The entry-level baccalaureate (EL-BSN) curriculum offers students who are not registered nurses (RNs) a pathway to a Bachelor of Science degree with a major in nursing. Graduates are eligible for certification as public health nurses in the State of California. The EL-BSN program is accredited by the California Board of Registered Nursing.

Admission Requirements

1. Meet requirements for admission to the university as a freshman or transfer student. Completion of the following prerequisites with a minimum grade of “C” (2.0): Math, English, Critical Thinking, Speech/Communication, Anatomy and Physiology (with laboratory), Microbiology (with laboratory), and Chemistry: Inorganic, Organic, and Biochemistry (with laboratory). Sciences have a recency requirement of five years.

Admission Procedures

Admission to the EL-BSN pathway is a two-step process. The first step requires application to the University as a "pre-nursing" major. Students are accepted into the nursing program once a year in the fall semester only. The University sets deadlines for new applications. For current deadlines, see the Admissions website at http://www.fullerton.edu/admissions.htm.

1. Attend a mandatory information session (registration information is available at http://nursing.fullerton.edu).
2. Submit a university application (freshmen and upper division transfer applications) available at www.csumentor.edu and an official transcript of all previous college work. Lower division transfer students apply directly to the Department of Nursing only.
3. Submit a nursing application form to the Department of Nursing Office (EC-190) with an official transcript of all previous college work (application available at http://nursing.fullerton.edu).
4. Please note that admission to the University as a pre-nursing student does not guarantee admission to the EL-BSN major. This program has impacted status which means that more applications are received than spaces available.
5. Applications are screened using supplemental admission criteria including pre-requisite course completion, minimum GPA requirement, TEAS (Test of Essential Academic Skills) examination, application/volunteer work experience, and residency. Information about TEAS testing dates and times is available at http://nursing.fullerton.edu.

Program Regulations

1. All required nursing courses must be taken in sequence. Theory and clinical nursing courses must be taken concurrently.
2. Students must maintain a cumulative 2.0 grade-point average in all units attempted and attain a minimum grade of “C” (2.0) in all nursing and support courses. Plus/minus designations are not used for final course grades.
3. The student who earns less than a grade of “C” (2.0) in nursing or support courses must repeat that course satisfactorily prior to being readmitted to the next nursing course in sequence. Readmission occurs on a space available basis only. A nursing or support course may be repeated only one time and requires departmental consent. No more than three nursing courses may be repeated; only one of these may be a clinical course.
4. For admission into clinical courses, students are required to have professional liability insurance, a clear criminal background check, current health insurance, current American Heart CPR certification for healthcare providers, and must meet the health requirements of the University and assigned clinical agencies. Health clearance requirements include a physical exam, two (2) step Tuberculosis screening or chest x-ray with annual symptom screening, positive titers for measles, mumps, varicella, hepatitis-B, and flu vaccine.
5. Professional standards are to be maintained. An impaired student or a student who demonstrates unprofessional behavior or behavior that indicates unsafe practice may be denied progression or may be dismissed from the program. Refer to the BSN and supplemental EL-BSN Handbook for complete progression and retention policy.

Requirements for Degree

The total number of units required for the entry-level pathway to the Bachelor of Science in Nursing is 127. Degree requirements consist of a specific combination of prerequisites, general education, and other nursing courses. The following courses are required for the EL-BSN nursing major: NURS 321, 321L, 322, 323, 324, 400, 400L, 402, 402L, 403, 403L, 404, 404L, 405, 405L, 406, 406L, 407, 407L, 410, 410L, 411, 411L, 450, 450L and a 4-unit preceptorship.

RN TO BSN PATHWAY

Admission Requirements

1. Meet requirements for admission to the university as a transfer student. Completion of the following prerequisites with a minimum grade of “C” (2.0) must be attained in each course.
2. Completion of an associate degree in nursing or its equivalent.
3. Current licensure as a registered nurse in California or eligibility for licensure.
4. Completion of one college level course in each of the following: anatomy (with laboratory), physiology (with laboratory), chemistry (with laboratory), microbiology (with laboratory), psychology, and sociology or anthropology. A minimum grade of “C” (2.0) must be attained in each course.
Admission Procedures

Students are accepted into the nursing program twice each year, in the fall and spring semesters. The University sets deadlines for new applications. For current deadlines, see the Admissions website at http://www.fullerton.edu/admissions.htm.

1. Submit a university application (available at www.csumentor.edu) and an official transcript of all previous college work to the Office of Admissions and Records.

2. Submit a nursing application form to the Department of Nursing Office (EC-190) with a transcript copy of all previous college work and two letters of reference from current or previous employers or instructors.

3. Check with the Department of Nursing website for application deadlines and required documents.

Program Regulations

1. All required nursing and support courses must be taken in sequence. Check each nursing course for prerequisites and co-requirements. Students may enroll in only one clinical course (Nursing 305L, 355L, 402L, or 452L) per semester.

2. Students must apply for the clinical nursing courses (Nursing 355L, 402L, and 452L) each semester prior to enrollment in the class (November 1 deadline for spring semester and April 1 for fall semester). Enrollment in the seminar and clinical sections is limited.

3. Students must maintain a cumulative 2.0 grade-point average in all units attempted and attain a minimum grade of “C” (2.0) in all nursing and support courses.

4. Plus/minus designations are not used for final course grades.

5. The student who earns less than a grade of “C” (2.0) in nursing or support courses must repeat that course satisfactorily prior to being admitted into the next nursing course in sequence. A nursing or support course may be repeated only one time and requires departmental consent. No more than three nursing courses may be repeated; of these only one may be a clinical course.

6. For admission into clinical courses, students must have current California R.N. licensure, professional liability insurance, current American Heart CPR certification for health care providers, documentation of immune status for MMR, varicella, and Hepatitis B, verification of TB testing and annual chest x-ray if PPD is positive, record of flu vaccine and access to transportation. For senior clinical courses, proof of current driver's license and automobile insurance are required. Each clinical site has specific requirements students must meet to be placed at that site (e.g., differing security and health clearances, orientation, etc.).

7. Students are required to consult with an adviser at least once each semester to discuss their study plan.

8. Professional standards are to be maintained. A student who demonstrates unprofessional behavior or behavior that indicates unsafe practice may be denied progression or may be dismissed from the program. Refer to BSN Handbook for complete progression and retention policy.

9. Any student with a lapse of five years between clinical nursing courses (Nursing 305, 305L, 355, 355L, 402, 402L, 452, 452L) must take a placement test and remediate, if necessary, before admission to the subsequent clinical nursing courses. This also applies to the co-requisite theory course (e.g., Nursing 305).

Requirements for the Degree

The total number of units required for the Bachelor of Science in Nursing RN to BSN pathway is 123. This consists of a specific combination of prerequisites, general education, nursing, and elective courses. Nursing 302 is required as the first course.

The following courses are required for the nursing major: Nursing 300, 302, 305, 305L, 307, 320, 353, 355, 355L, 357, 400, 400L, 402, 402L, 450, 450L, 452, and 452L. Total: 44 units. Nine additional units of CSUF upper-division general electives are required to complete upper-division, in-residence units. A 3-unit statistics course, with multivariate, inferential, parametric content, is included as a required course and meets upper-division GE requirements for the BSN degree.

All students must complete the university upper-division baccalaureate writing requirement, which includes the Examination in Writing Proficiency. Nursing 305 and Nursing 305L are approved as meeting the upper-division writing course requirement.

MASTER OF SCIENCE IN NURSING

The Master of Science degree in Nursing (MSN) prepares students for a specialty focus to expand their career options. The MSN program is designed to foster interdisciplinary collaborative skills and independent functioning within a focused specialty area, called an MSN concentration. Current MSN concentrations are: Nursing Leadership, Nurse Anesthetist, School Nursing and Women’s Health Care. Within the Women’s Health Care concentration, students will choose an emphasis as either a nurse midwife or women’s health care nurse practitioner. The Nursing Leadership, School Nursing and Women’s Health Care concentrations are flexible, allowing for either full-time or part-time study. The Nurse Anesthetist concentration follows a set full-time schedule. High quality resources, both on and off campus, are available for the MSN concentrations.

Scholarships, Awards, Financial Aid

Financial aid and community scholarships are available. Scholarship information is available on the Department’s website and can be requested from the Department office. The Outstanding Graduate, W. J. Traber Humanism Award, and Vera Robinson Humor Award are given out annually to MSN graduates.
Application Deadlines
The University sets deadlines for new applications. For current deadlines, see the Admissions website at http://www.fullerton.edu/admissions.htm.

1. Submit a university application (available at www.csumentor.edu) and an official transcript of all previous college work to the Office of Admissions and Records.
2. Submit a nursing application packet with required checklist items to the Department of Nursing Office (EC-190) with a transcript copy of all previous college work and three letters of reference from current or previous employers or instructors.

The packet can be found on the Department of Nursing website at http://nursing.fullerton.edu.

Women’s Health Care, Nursing Leadership and School Nursing: Applications are accepted for fall and occasionally for spring semester with a deadline of March 1 for fall and October 1 for spring.

Nurse Anesthetist: Applications are accepted for fall semester only with a deadline of November 30th to begin the following fall.

Note: Deadlines may be changed based upon enrollment projections. For current information, check the Department of Nursing’s website.

Admission Requirements
Applicants seeking admission to the Master of Science in Nursing program must have:

1. An associate degree in nursing from an accredited institution or its equivalent (except EL-MSN).

2. A grade-point average of at least 3.0 on a 4.0 scale in the final 60 units of nursing coursework is required by the Department of Nursing.

3. Undergraduate upper-division courses in statistics (except RN to MSN) and research (except RN to MSN and EL-MSN) with a grade of “C” (2.0) or better are required for admission. Statistics courses with multivariate, inferential, parametric content will be accepted.

4. An upper-division community health nursing course (except RN to MSN and EL-MSN applicants).

5. Current California RN license, professional liability insurance, CPR card (BCLS), medical clearance (PPD or chest X-ray), proof of influenza vaccine or declination; positive titers for Measles, Mumps, Rubella, Hepatitis B, and Varicella. Valid California automobile licensure and insurance are also required. The majority of health care agencies require security clearance for clinical placement.

6. Three letters of reference and a personal written statement of purpose.

7. An interview as required.

8. Applicants who have completed previous coursework may petition the department for potential waiver of units up to the established university limits.

Applicants for the Nursing Leadership Concentration:
EL-MSN Clinical Pathway must fulfill the following additional requirements:

1. Attend a mandatory information session (registration information is available at http://nursing.fullerton.edu).

2. Complete the following pre-requisites with a minimum grade of “C” (2.0): Anatomy and Physiology (with laboratory), Chemistry: Inorganic, Organic, and Biochemistry (with laboratory), English, Speech/Communication, Microbiology (with laboratory), Psychology, Sociology or Cultural Anthropology, and Statistics. All sciences have a recency requirement of five years.

Applicants for the Accelerated RN to Master’s Degree Pathway must fulfill the following additional requirements:

1. Meet requirements for admission to the university as a transfer student for the BSN completion program.

2. Complete one college-level course in each of the following: anatomy (with laboratory), physiology (with laboratory), chemistry (with laboratory), microbiology (with laboratory), psychology, and sociology or anthropology. A minimum grade of “C” (2.0) must be attained in each course.

3. Complete one year of satisfactory work experience as a registered nurse is recommended.

4. Personal written statement of purpose (goals and objectives).

5. Complete writing assessment.

6. Interview with Graduate Program Adviser.

For those interested in the Nurse Anesthetist concentration, additional requirements include:

1. Minimum of one year of nursing experience in critical care, emergency, or post-anesthesia care.

2. Completion of ACLS and PALS.

For those interested in the Women’s Health Care concentration, additional requirements include:

1. Nurse-midwifery specialty - Minimum of six months recent clinical nursing experience within labor and delivery or equivalent experience the past five years; one year experience preferred.

2. Nurse Practitioner specialty - Minimum of one year recent clinical nursing experience preferably in OB/Gyn nursing.

For those interested in the School Nursing concentration, additional requirements include:

1. Must have a preliminary school nurse services credential or be in the process of obtaining this credential.

Admission Procedures
Each of the MSN concentrations has an information packet describing prerequisites and admissions procedures in detail. These can be accessed via the Nursing website at http://nursing.fullerton.edu. Supplemental information relating to the nurse anesthetist concentration may be accessed at http://www.kpsan.org.
Program Regulations

For graduate-level courses, a grade of “B” (3.0) or better is required to progress in the program. This applies to ALL courses in the graduate curriculum, core, specialty, and sub-specialty.

In the Nursing Leadership Concentration: EL-MSN Clinical Pathway, students are required to maintain full-time status in foundational coursework. A minimum GPA of 3.0 must be maintained in all coursework to remain in the EL-MSN program. A grade of “C” (2.0) is required of EL-MSN students in foundational nursing courses and a grade of “B” (3.0) is required in graduate courses. The student who earns less than a grade of “C” (2.0) in foundational nursing courses must repeat that course satisfactorily prior to being readmitted to the next nursing course in sequence. Readmission occurs on a space available basis only. A nursing course may be repeated only one time and requires departmental consent. No more than three nursing courses may be repeated; only one of these may be a clinical course.

Students will be placed on academic probation if they receive a grade less than a “B” (3.0) for graduate courses. Graduate courses are defined as either a semester-long course or as a ‘module’ within a semester-long course that has stand alone criteria and evaluation processes. The module courses are represented throughout the nurse anesthesia curriculum. Once a student is placed on academic probation there are two possibilities within the Department of Nursing graduate concentrations:

1. In the concentrations that are not “lock-step,” e.g., nursing leadership, school nurse and women’s health, students have the option of remediation. A course with a grade of “B-” (2.7) or less may be repeated once. Students will be advised that their progression of study may be interrupted if the course where the unacceptable grade is received is prerequisite to others that follow. In other words, if 505A is not passed with an acceptable grade, then the student would not be able to proceed to 505B until the 505A course is remediated. Students will need to remediate the next time the course is taught, which may cause a delay, as courses are only taught once each year. This option can only be used once. A student who receives a second unacceptable grade in another course while in the program will be dismissed from the concentration. Consequently, if a student who is on academic probation earns a grade that is less than a “B” (3.0), then the student would be dismissed from the concentration and the CSUF nursing program.

2. In the nurse anesthesia concentration, students are full time and the curriculum is “lock-step.” Students are advised when they are accepted into the program that they must complete courses on the time line with their cohort. There is no opportunity for repeating a course within the curriculum. Consequently, if a student who is on academic probation earns a grade that is less than a “B” (3.0), then the student would be dismissed from the concentration and the CSUF nursing program.

NURSING LEADERSHIP CONCENTRATION

The Nursing Leadership Concentration is offered on campus based and in a blended model, utilizing distance methodologies. Community-based mentors are contracted to work with students in practicum settings. In consultation with an advisor, mentors and practicum sites are matched to students’ individual interests and goals. The Nursing Leadership concentration requires 42 units, including a project or thesis. This concentration is offered on a part-time or full-time schedule basis.

Core Requirements (13 units)

Nursing 501 Theoretical Perspectives for Nursing Practice (3)
Nursing 505A Nursing Research and Evaluation for Practice (3)
Nursing 505B Research Seminar and Evidence-Based Practice (3)
Nursing 507 Advanced Decision Making: Nursing Issues Seminar (3)
Nursing 507L Advanced Decision Making: Nursing Issues Lab (1)

Concentration Requirements (22 units)

Nursing 508 Advanced Nursing: Vulnerable Populations (3)
Nursing 508L Advanced Nursing: Vulnerable Populations Lab (1)
Nursing 511 Theoretical Basis of Leadership and Organizations in Nursing (3)
Nursing 513 Nursing Service Economics (3)
Nursing 514 Nursing Service Leadership Practicum I (3)
Nursing 515A, B Nursing Service Leadership Practicum II A, B (3,3)

Electives (6 units)

Two courses in areas supportive of the student’s focus of study are chosen in consultation with the graduate program adviser.

Thesis/Project Option (4 units)

Nursing 595A, B Thesis/Project/Comprehensive Examination Seminar (1,1)
Nursing 597A, B Project (1,1)
OR Nursing 598A, B Thesis (1,1)

Certificate in Instructional Design and Technology

Students in the MSN Nursing Leadership blended model, utilizing distance methodologies concentration, may elect three additional courses (9 units) and gain a certificate in Instructional Design and Technology. This certificate will be offered in collaboration with the Department of Education, requires a separate application and is tailored to prepare nursing leaders with basics in instructional design and technology, instructional approaches, and computer-based design principles.

IDT 520 Instructional Design Issues for Technology-Based Instruction (3)
IDT 525 Instructional Approaches in Learning and Cognition (3)
IDT 530 Planning, Designing, and Evaluating Technology-based Instruction (3)
ACCELERATED RN TO MASTER'S DEGREE PROGRAM (RN TO MSN)

Nursing Leadership Concentration

The Department of Nursing at California State University, Fullerton, attracts motivated and capable nurses committed to improving professional nursing and health care through clinical practice, health education, leadership and management. At this time, the Department offers the Accelerated RN to Master of Science in Nursing (RN to MSN) Program for students wishing to pursue a master’s in nursing leadership. Although students may decide to apply to other concentrations toward the end of their BSN studies, that is an open competitive process and there are no guarantees of admission. Additionally, the added coursework in the other concentrations extends the course of study.

The RN to MSN Program is specifically for registered nurses wishing to advance their careers through an accelerated program of study combining undergraduate (BSN) and graduate (MSN) level courses leading ultimately to a Master of Science Degree in Nursing: Nursing Leadership concentration, and including eligibility for certification in public health nursing in the State of California. Five of the undergraduate nursing courses (nine units total) – Nursing 300, 400/400L, and 450/450L – are waived and replaced by their graduate-level counterparts – Nursing 501, 505A, and 507, 507L – as part of the accelerated program. Accelerated students will complete modified assignments in other nursing courses to ensure they possess the prerequisite knowledge and skills from the waived courses to progress through the program as well as be prepared to take the graduate courses. Course offerings allow for full-time or part-time study.

Admission Procedures

Applications for admission to the RN to MSN Program are accepted only for the fall semester. Admission to the program is contingent upon Nursing Department approval.

Requirements for Progression to the Master’s program:

1. BSN completion program regulations are applicable (see previous page).
2. Completion of all accelerated baccalaureate level course requirements: Nursing 302, 305, 305L, 307, 320, 353, 355, 355L, 357, Sociology 303, Nursing 402, 402L, 452, 452L, six additional units of upper-division General Education with a grade of “C” (2.0) or higher and Nursing 501, 505A, 507, 507L, with a grade of “B”(3.0) or higher.
3. Maintain a GPA of 3.0 or higher.
4. Upon completion of the above-listed BSN degree requirements, students apply to the University to enter the Master of Science in Nursing program and begin the University graduate courses beyond those taken as an undergraduate student. Students who enroll in the MSN through this accelerated program pay the same graduate level fees as all other master’s students.

Requirements for Completion of the Master’s Degree

The following courses are required to complete the program in Nursing Leadership: Nursing 505B, 508, 508L, 511, 513, 514, 515A,B, 595A,B, and 597A,B or 598A,B and six elective units approved by the graduate adviser.

NURSING LEADERSHIP CONCENTRATION: EL-MSN CLINICAL PATHWAY

A pathway to the Master of Science Degree in Nursing, called the entry-level (EL-MSN) pathway, is available for students who are not registered nurses (RNs). Students progress through foundational nursing coursework, graduate coursework for the EL-MSN pathway, and then are awarded a Master of Science degree in Nursing. Once accepted to the EL-MSN pathway, students enroll in foundational nursing courses in the areas of Medical-Surgical, Maternal/Child, Mental Health/Psychiatric, Geriatric, and Community-based nursing. These courses provide the theoretical and clinical experiences necessary to qualify students for RN licensure and include the following: NURS 321, 321L, 322, 323, 324, 402, 402L, 403, 403L, 404, 404L, 405, 405L, 406, 406L, 407, 407L, 410, 410L, 411, and 411L. Following completion of nursing courses (54 units), students are eligible to take the National Council Licensure Examination for RNs (NCLEX-RN). Successful completion of the NCLEX provides students with the license required to practice professional nursing as a RN. Additional graduate courses (46 units) in the major complete the requirements for the MSN degree. Graduates are eligible for certification as public health nurses in the State of California.

Core Requirements (15 units)

Nursing 501 Theoretical Perspectives for Nursing Practice (3)
Nursing 505A Nursing Research and Evaluation for Practice (3)
Nursing 505B Research Seminar and Evidence-Based Practice (3)
Nursing 507 Advanced Decision Making: Nursing Issues Seminar (3)
Nursing 507L Advanced Decision Making: Nursing Issues Lab (3)

Concentration Requirements (27 units)

Nursing 402 Community Health Nursing (3)
Nursing 402L Community Health Nursing Lab (3)
Nursing 508 Advanced Nursing: Vulnerable Populations (3)
Nursing 508L Vulnerable Populations Lab (1)
Nursing 511 Theoretical Basis of Leadership Organization (3)
Nursing 513 Nursing Service Economics (3)
Nursing 514 Nursing Services Administration Practicum I
Nursing 540 Advanced Pathophysiology for Nurses (2)
Nursing 542 Advanced Health Assessment (2)
Nursing 542L Advanced Health Assessment Lab (1)
Nursing 552 Advanced Pharmacology (3)
Thesis/Project Option (4 units)
Nursing 595 A, B Thesis/Project Seminar
Nursing 597 A, B Project
OR Nursing 598 A, B Thesis

NURSE ANESTHETIST CONCENTRATION

In the Nurse Anesthetist concentration, Cal State Fullerton’s Department of Nursing has a strong partnership with the Kaiser Permanente School of Anesthesia. All nurse anesthetist specialty seminars, lectures and lab courses are held at Kaiser Permanente and affiliated clinical sites utilizing state-of-the-art facilities.

The Nurse Anesthetist concentration requires 71 units of full-time study including a project or comprehensive exam. Clinical hours are based on competency guidelines from the Kaiser Permanente School of Anesthesia.

Core Requirements (15 units)
Nursing 501 Theoretical Perspectives for Nursing Practice (3)
Nursing 505A Nursing Research and Evaluation for Practice (3)
Nursing 505B Research Seminar and Evidence-Based Practice (3)
Nursing 507 Advanced Decision Making: Nursing Issues Seminar (3)
Nursing 507L Advanced Decision Making: Nursing Issues Lab (3)

Concentration Requirements (52 units)
Nursing 580 Foundations of Nurse Anesthesia Practice (3)
Nursing 581 Clinical Studies in Nurse Anesthesia (3)
Nursing 582 Foundations of Nurse Anesthesia Practice II (4)
Nursing 584 Principles of Nurse Anesthesia Practice I (3)
Nursing 585L Nurse Anesthesia Practicum I (2)
Nursing 586 Principles of Nurse Anesthesia Practice II (3)
Nursing 587L Nurse Anesthesia Practicum II (5)
Nursing 588 Principles of Nurse Anesthesia III (4)
Nursing 589L Nurse Anesthesia Practicum III (7)
Nursing 590 Principles of Nurse Anesthesia Practice IV (4)
Nursing 591L Nurse Anesthesia Practicum IV (7)
Nursing 593L Nurse Anesthesia Practicum V (7)

Thesis/Project/Comp Option (4 units)
Nursing 595A,B Thesis/Project/Comprehensive Examination Seminar (1,1)
AND Nursing 596A,B Comprehensive Exam (1,1)
OR 597A,B Project (1,1)
OR Nursing 598A,B Thesis (1,1)

SCHOOL NURSING CONCENTRATION

The School Nursing Concentration is part of the graduate program that prepares nurses to work in schools (pre-K through grade 12). The framework meets the requirements of the Commission of Collegiate Nursing Education (CCNE) accreditation guidelines and incorporates the National Association of School Nurses (NASN) Standards of Practice. It includes a credential in School Nurse Services (SNS) and the Special Teaching Authorization in Health (STAH) (both accredited by the California Commission on Teacher Credentialing). The program requires 24-58 total units, depending upon the student's prior degree(s) and credential objective.

Core Requirements
Nursing 501 Theoretical Perspectives for Nursing Practice (3)
Nursing 505A Nursing Research and Evaluation for Practice (3)
Nursing 505B Research Seminar and Evidence-Based Practice (3)
Nursing 507 Advanced Decision Making: Nursing Issues Seminar (3)
Nursing 507L Advanced Decision Making: Nursing Issues Lab (1)
Nursing 508 Advanced Nursing: Vulnerable Populations (3)
Nursing 508L Advanced Nursing: Vulnerable Populations Laboratory (1-2)
Nursing 524 Advanced Health Assessment: Ambulatory Pediatrics (4)
Nursing 526 Health Care of the Young Family (3)
Nursing 529L Health Teaching Lab for School Nurses (1)
Nursing 530 School Nurse Specialist I (3)
Nursing 532 School Nurse Specialist II (3)
Nursing 533L School Nurse Specialist Practicum (3)
Nursing 534L Special Teaching Authorization in Health Practicum – STAH (2)

Collateral Courses Required
Secondary Education 550 Instructional Strategies (3)
Counseling 511 Pre-Practicum (3)
Human Communication Studies 461 Audiology and Audiometry (3)
Health Science 455 Designing Health Education Curricula (3)
Special Education 462 Practices and Procedures in Special Education (3)

Thesis/Project Option
Nursing 595A, B Thesis/Project/Comp Seminar (1,1)
AND Nursing 597A, B Project (1,1)
OR Nursing 598A, B Thesis (1,1)

WOMEN’S HEALTH CARE CONCENTRATION

The Women’s Health Care concentration has two emphases: Nurse Midwifery and Women’s Health Nurse Practitioner. Both emphases require 54 units including a project, thesis or comprehensive exam. The Women’s Health Care and the Family Nurse Practitioner concentration share some common advanced practice specialty core courses. In addition, WHC concentration courses are held at CSU, Fullerton and at clinical sites, with nurse midwives and nurse practitioners, throughout the region.

NURSE MIDWIFERY EMPHASIS
Core Requirements (14 units)
Nursing 501 Theoretical Perspectives for Nursing Practice (3)
Nursing 505A Nursing Research and Evaluation for Practice (3)
Nursing 505B Research Seminar and Evidence-Based Practice (3)
Nursing 507 Advanced Decision Making: Nursing Issues Seminar (3)
Nursing 507L Advanced Decision Making: Nursing Issues Lab (2)

Concentration Requirements (36 units)
Nursing 508 Advanced Nursing: Vulnerable Populations (3)
Nursing 508L Advanced Nursing: Vulnerable Populations Lab (2)
Nursing 540 Advanced Pathophysiology: Clinical Implications for Nurses (2)
Nursing 542 Advanced Health Assessment (2)
Nursing 542L Advance Health Assessment Lab (1)
Nursing 544 Health Promotion/Disease Prevention (2)
Nursing 546 Primary Care of Women I: Family Planning/Gynecology (2)
Nursing 548A Primary Care: Acute Problems I (2)
Nursing 548L Advanced Practice Nurse Clinical Practicum II (3)
Nursing 552 Pharmacology for Advanced Practice Nurses (3)
Nursing 570 Basic Women's Health Assessment and Management I (2)
Nursing 573B Basic Women's Health Care Practicum (4)
Nursing 574 Intermediate Women's Health Assessment and Management I (2)
Nursing 577B Intermediate Women's Health Care Practicum (3)
Nursing 579B Advanced Women's Health Care Practicum (3)

Thesis/Project/Comp Option (4 units)
Nursing 595A,B Thesis/Project/Comp Seminar (1,1)
AND Nursing 596A,B Comprehensive Exam (1,1)
OR Nursing 597A,B Project (1,1)
OR Nursing 598A,B Thesis (1,1)

NURSING COURSES
Courses are designated as NURS in the class schedule.
Note: All clinical nursing courses for the B.S. in Nursing require admission to the university and to the Depart of Nursing as a nursing major. The Department of Nursing application, health care information listed under the “Bachelor of Science in Nursing” text above, and references are also required.

300 Nursing Theories: Basis for Professional Practice (3)
Prerequisite: admission to the B.S. in Nursing. Discussion and comparison of concepts and theories from nursing, humanities and science with emphasis on their significance to the practice of professional nursing. Includes philosophy and conceptual framework of the nursing program and use of theory in the nursing process.

301 Promotion of Optimal Health (3)
Prerequisites: one course from General Education Category III.A.2 and upper-division standing. Advanced health concepts and practices. Common health problems, causative factors and methods for prevention. Preventive and promotive health concepts and practices, integrating physiological, psychosocial, spiritual, cultural and environmental factors that inhibit or facilitate optimal health. Elective for nursing majors. (Same as Health Science 301)

302 Assessment and Planning for Nursing Scholarship (2)
Required as first course in the ADN to BSN program. Comprehensive assessment of personal learning style, social support skills and cognitive and technical nursing skills of first semester BSN students. Initial development program portfolio, including an individualized learning plan that builds on assessment results and personal learning goals. Internet access required. Letter grade or Credit/No Credit.
305 Professional Nursing I (3)
Pre- or corequisites: junior standing, Nursing 300, 302 and consent of instructor. Nursing 305L must be taken concurrently. Professional nursing role, communication and the nursing process. Psycho-social concepts relative to health of the individual. Influence of culture, role, social support and values evaluated. Meets undergraduate writing requirement.

305L Professional Nursing I: Laboratory (2)
Pre- or corequisites: junior standing, Nursing 300, 302 and consent of instructor. Nursing 305 must be taken concurrently. Interaction and socialization into the professional role. Students utilize the nursing process and explore psycho-social-spiritual-cultural risks to health. Competence in critical thinking, evaluation and writing is facilitated. Meets undergraduate writing requirement. (6 hours seminar/lab per week)

307 Health Promotion: Parent-Child Nursing (3)
Prerequisite: admission to the B.S. in Nursing. Theories and issues important in parent-child nursing. Specific nursing interventions useful in promoting health relative to developmental change. Topics include genetic counseling, parent-child bonding, sexuality, adaptation patterns from conception through adolescence and cultural determinants.

320 The Process of Teaching in Nursing (2)
Prerequisites: Nursing 300, 305, 305L. Nursing knowledge and skills in clinical teaching situations with individuals, families and groups. Content includes theories and principles of learning, teaching strategies and methodologies, teaching resources and evaluation of instruction.

321 Health Assessment for Professional Practice (3)
Prerequisites: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Concurrent enrollment in Nursing 321L. Health assessment across the lifespan. Basic knowledge and skills necessary to perform assessments, including interviewing, history taking and foundational physical assessment skills are acquired. Developmental and culturally competent assessment skills and ability to recognize deviations from normal.

321L Health Assessment for Professional Practice Laboratory (1)
Prerequisites: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Concurrent enrollment in Nursing 321. Practice history taking, physical examination techniques and risk identification on peers during supervised campus laboratory sessions. Application of skills and techniques acquired to intervene and reduce risk and/or promote health with individual clients during clinical laboratory.

322 Concepts of Professional Nursing (2)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Overview of professional nursing role within the health care environment, including nursing theory and interpersonal communication. Theory and evidence-based nursing practice. Influence of culture and professional value on the role of the professional nurse.

323 Integrated Pathophysiology and Pharmacology (4)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Normal physiology and anatomy, altered physiologic states and nursing management of selected pathophysiologic disorders and diseases. Core drug knowledge, pharmacotherapeutics, pharmacodynamics and pharmacokinetics. Drug classifications by categories affecting various body systems and disease states.

324 Cultural Concepts Across the Lifespan (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Developmental approach to providing culturally appropriate nursing care. Growth and development and sociocultural factors that influence the health of various cultural groups, and factors that impact the use of health care resources across the lifespan.

350 Nutrition (3)
(Same as Health Science/Kines 350)

353 Alterations in Health Status: Applications in Nursing (4)
Prerequisite: admission to the B.S. in Nursing. Alterations in health status and their applications to nursing practice. Alterations at the cell and system levels, and potential resulting functional changes. Epidemiological approaches and clinical case studies are presented to support nursing assessments and interventions. One or more sections offered online.

355 Professional Nursing II (3)
Prerequisite: Nursing 305, 305L. Corequisite: Nursing 355L. Pre- or corequisite: Nursing 400L. Adult health assessment, including common variations found in children and older adults. Analysis of health data and identification of health risks of specific groups emphasized. Research findings used to support nursing interventions to reduce risk and promote health.

355L Professional Nursing II: Laboratory/Clinical (2)
Prerequisites: Nursing 305, 305L. Corequisite: Nursing 355. Pre- or corequisite: Nursing. Practice history taking, physical examination techniques and risk identification on peers in supervised on-campus setting. Students apply these skills and intervene to reduce risk and/or promote health with individual clients. (6 hours practicum per week)

357 Health Promotion: Adult-Aged Nursing (3)
Prerequisites: Nursing 300, or 305 and 305L, or declared Gerontology minor. Developmental theories of adulthood and the aging process with emphasis on analysis of health behavior of adults. Normative transitions, conflicts of adult life and the nurse’s role in health promotion throughout the adult life cycle are included.

400 Professional Dimensions of Nursing (2)
Prerequisites: Nursing 300, 305, 305L. Corequisite: Nursing 400L. Socioeconomic trends and issues affecting nursing and health care. Bioethics, health care legislation and roles of professional organizations. Nursing leadership tasks in relation to group dynamics, values clarification and ethical decision-making. One or more sections offered online.
400L Professional Dimensions of Nursing: Laboratory (1)
Prerequisites: Nursing 300, 305, 305L. Corequisite: Nursing 400. Understanding group dynamics theory by assuming leader and member roles. Explores actual and potential stressors and analyzes communication patterns. Pending legislation, health planning, professional organizations and community health advocacy groups. One or more sections offered online.

402 Community Health Nursing (3)
Prerequisites: all 300-level nursing courses. Corequisite: Nursing 402L. Community health nursing roles in prevention and health promotion with culturally diverse families and populations in a variety of community settings. Identifying risk and using the nursing process with populations at risk. One or more sections offered online.

402L Community Health Nursing: Clinical (3)
Prerequisites: 300-level nursing courses. Corequisite: Nursing 402. Students apply community health theory in supervised clinical experiences with individuals, families and communities. Clinical experiences in public health settings, including official agencies and other community agencies. (9 hours practicum per week)

403 Foundations of Nursing Practice (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; concurrent enrollment in Nursing 403L. Concepts of physiological integrity; psychosocial integrity, safe, effective care environments and health promotion/maintenance. Focus on beginning competencies required for care of adult and older adult clients with acute and chronic health problems across a variety of practice settings.

403L Foundations of Nursing Practice Laboratory (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; concurrent enrollment in Nursing 403. Provides opportunities to acquire basic nursing skills in simulated and actual clinical settings. Interpersonal communication, safety documentation and selected basic nursing interventions required for clients with acute and chronic health problems.

404 Mental Health Nursing (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Successful completion of Nursing 321, 321L, 403, 403L; concurrent enrollment in Nursing 404L. Integrates theory from nursing, related fields, communication and critical thinking in providing nursing care for multicultural individuals, families, groups and specific populations with mental illness. Providing professional nursing care that promotes mental health and adaptation to mental illness.

404L Mental Health Nursing Laboratory (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L; concurrent enrollment in Nursing 404. Develop interpersonal communication skills and therapeutic use of self. Developing the role of nurse as provider, designer and coordinator of care for individuals, families and community groups with mental health care needs.

405 Management of Medical Surgical Adult and Older Adult Clients (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L; concurrent enrollment in Nursing 405L. Nursing theory for care of adult and older adult clients with medical-surgical health alterations. Diagnostic and therapeutic nursing interventions relevant to medical-surgical health alterations. Nursing process and critical thinking to manage acute and chronic medical-surgical problems.

405L Management of Medical-Surgical Adult and Older Adult Clients Laboratory (4)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, and 403L; concurrent enrollment in Nursing 405. Clinical experiences provide opportunities to practice advanced nursing skills in simulated and actual clinical settings. Emphasizes further development of the nursing role in providing and coordinating care for adult and older adult clients with acute and chronic medical-surgical health alterations.

406 Reproductive Health Nursing (2)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing. Successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L; concurrent enrollment in Nursing 406L. Nursing theory for the care of diverse and multicultural women, newborns and families. Integrating and applying theory from nursing and related fields, standards of clinical practice, evidence-based practice, communication and critical thinking with the nursing process.

406L Reproductive Health Nursing Laboratory (2)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L; concurrent enrollment in Nursing 406. Integrating and applying the nursing process in providing care for multicultural women, neonates and their families. Developing the role of nurse as provider, designer and coordinator of care for women across the lifespan.

407 Child Health Nursing (2)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L, concurrent enrollment in Nursing 407L. Integrating and applying nursing process in providing age-appropriate care and advocating for infants, children and adolescents. Collaboration with the child, family and other members of the health care team to promote and adapt to illness.

407L Child Health Nursing Laboratory (3)
Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L; concurrent enrollment in Nursing 407. Applies the dimensions of health, health care and nursing in addressing the health care needs of infants, children and adolescents, with a focus on health promotion, risk reduction and disease prevention. Clinical experience occurs in pediatric and community health settings.
408L Nursing Externship (4)

Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L. Provides opportunities to gain additional clinical experience while employed in a clinical setting. Under the direct supervision of a registered nurse preceptor, the extern provides direct care to selected patients, consistent with the student’s level of clinical experience. (1 hour seminar, 9 hours clinical externship)

410 Leadership/Management in Professional Nursing (3)

Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L, 406, 406L, 407, 407L; concurrent enrollment in Nursing 410L. Integrating the leadership role with professional nursing. Analyzes theories of leadership, management and organizations; their application to health care agencies is explored. Importance of collaboration, accountability and advocacy in the leadership role.

410L Leadership/Management in Professional Nursing Laboratory (3)

Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L, 406, 406L, 407, 407L; concurrent enrollment in Nursing 410L. Theories and principles of leadership and management are synthesized in a selected clinical area within the health care system. Decision making, critical thinking, client advocacy, collaboration, leadership and functioning as a team member within the health care setting.

411 Management of the Adult With Complex Health Alterations (2)

Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L, 406, 406L, 407, 407L; concurrent enrollment in Nursing 411L. Nursing theory for the care of adult and older adult clients with complex health alterations. Diagnostic and therapeutic nursing interventions relevant to advanced medical-surgical health alterations. Emphasizes nursing process and critical thinking to manage and coordinate care.

411L Management of the Adult with Complex Health Alterations Laboratory (3)

Prerequisite: admission to prelicensure pathway to the bachelor’s or master’s program in Nursing; successful completion of Nursing 321, 321L, 403, 403L, 404, 404L, 405, 405L, 406, 406L, 407, 407L; concurrent enrollment in Nursing 411L. Provides opportunities to design and coordinate advanced medical-surgical nursing care for adult and older adult clients with complex health alterations. Applies concepts of advanced medical-surgical and critical care nursing. Emphasizes critical thinking, organization, leadership and time management skills.

450 Nursing Research (2)

Prerequisites: Nursing 300, statistics course that includes inferential, parametric statistics. Corequisite: Nursing 450L. Examination of concepts and issues related to evidence-based practice. Developing and refining the directed project/research proposal. Proposal includes problem/purpose statements, literature review, measurement tools, work plan, timeline, method and evaluation (analysis/synthesis) plan.
507 Advanced Decision Making: Nursing Issues Seminar (3)
Prerequisite: graduate standing. Corequisite: Nursing 507L. Applies critical thinking and decision making theory to professional issues within the context of ethical/legal and public policy considerations and with multidisciplinary health teams. Students apply content to their specialty area in the lab (NURS 507L). One or more sections may be offered online.

507L Advanced Decision Making: Nursing Issues Lab (1-3)
Corequisite: Nursing 507. Applies critical thinking and decision making theory to professional issues within the context of ethical/legal and public policy considerations and with multidisciplinary health teams. Students apply content to their specialty area in the lab (NURS 507L). One or more sections may be offered online.

508 Advanced Nursing: Vulnerable Populations (3)
Prerequisites: Nursing 501 and 505A. Corequisite: Nursing 508L. Applies epidemiological model to analyze the health risk factors that place populations at risk for health conditions and plan nursing interventions to promote health and prevent disease. One or more sections offered online.

508L Advanced Nursing: Vulnerable Populations Laboratory (1-2)
Corequisite: Nursing 508. Applies content from Nursing 508 to a specific specialty concentration. Using appropriate models and theories to analyze health risk factors that place populations at risk for a variety of health conditions and to plan nursing interventions to promote health and prevent disease. Collaborative skills in working with a multi-disciplinary health team. One or more sections offered online.

511 Theoretical Basis of Leadership and Organizations in Nursing (3)
Prerequisite: admission to the Nursing Leadership concentration or consent of the instructor. Theoretical bases for organizational context, structure and function. Models for leadership within a health care industry that deals with diverse client populations. One or more sections offered online.

513 Nursing Service Economics (3)
Prerequisite: admission to the Nursing Leadership concentration. Application of critical thinking and decision making theory to economic control techniques within the organizational context of complex health care systems. Reviews budgeting terminology and concepts in detail, as well as current trends and regulatory requirements for operations.

514 Nursing Service Leadership Practicum I (3)
Prerequisites: Nursing 513, Corequisite: Nursing 511. Supervised learning experiences in leadership in nursing. Application of organizational and nursing theories and identification of researchable problems in nursing leadership. One or more sections offered online. (1 hour seminar and 8 hours practicum per week.)

515A,B Nursing Service Leadership Practicum II A,B (3,3)
Prerequisite: Nursing 514. Synthesis of theory and practice to develop and utilize techniques for strategic management in nursing service administration. Issues relevant to advanced clinical practice in nursing. (1 hour seminar and 8 hours practicum per week, each semester)

521 Issues in Health Care of the Aged (3)
Prerequisite: Nursing 501, graduate status or consent of instructor. Interrelationships of various issues, trends and theories related to the aging and delivery and utilization of health care. Case studies of older adult to explore selected ethical theories and dilemmas in health care.

522 Implications for Nursing the Aged: Physiological Interventions (3)
Prerequisites: Nursing 501 and 505A (or corequisite) or consent of instructor. Normal aspects of aging with emphasis on common health deviations. Apply selected theories and research relevant to nursing care of the aged. Identification and management of alterations in health status of the aged.

523 Implications for Nursing the Aged: Psychosocial Interventions (3)
Prerequisite: Nursing 521 or consent of instructor. Common psychosocial problems of older adults and nursing intervention strategies to promote and maintain optimal psychosocial functioning. Differentiate between healthy cognitive, affective and interpersonal functioning, and behavior that indicates actual or potential health deviation is the focus of fieldwork.

524 Advanced Health Assessment: Ambulatory Pediatrics (4)
Prerequisite: undergraduate course in Health Assessment and admission to the school nursing program. Knowledge/skills required to conduct a pediatric assessment appropriate to age of child/adolescent and nature of the visit. Includes collection, analysis and application of health/physical assessment data on children within the school environment.

525 Advanced Gerontological Nursing (6)
Prerequisites: Nursing 522 and 523. Synthesis of theory and research in the application to clinical problems of the well, frail and ill elderly. Nursing interventions that advocate for health care of the elderly. Fieldwork offers opportunity for innovative and diverse practice options.

526 Health Care for the Young Family (3)
Prerequisite: Nursing 505A. Provides knowledge and skills needed to identify and provide health promotion/disease prevention information to school staff, parents and their children. Reviewing developmental/behavioral theories and assessment techniques and strategies for health lifestyles.

529L Health Teaching Lab for School Nurses (1)
Prerequisite: Corequisite EDSC 550. Field-based course that meets requirements for observation of health teaching in the classroom as stated in the Special Teaching Authorization in Health (STAH) standards. Students observe and assess health teaching strategies in a variety of classroom settings (preK-12). (3 hours lab per week)
530 School Nurse Specialist I (3)
Advanced theory and practice of school nursing with emphasis on health care provider role of the school nurse with children of varying ages, including those with special needs and learning disabilities.

532 School Nurse Specialist II (3)
Prerequisite: admission to graduate program. Advanced practice role of school nurses focusing on program level issues. Management, coordination, resource utilization, advocacy, health care policy and communication with school staff, educators, administrators, clients and families within school districts.

533L School Nurse Specialist Practicum (3)
Prerequisites: Nursing 530 and 532. Field study applying theory, research and clinical skills related to multifaceted role of the professional school nurse. Planning, coordinating and providing health care in school/community settings. Assessing and managing children’s health care needs.

534L Special Teaching Authorization in Health (STAH) Practicum (2)
Pre/corequisites: HESC 455; EDSC 550; NURS 529L. Apply and evaluate theories and strategies of instruction, curriculum and learning while practicing in role of a health educator in a school/classroom setting with a master teacher. Meets the student teaching requirement for the STAH Credential.

540 Advanced Pathophysiology: Clinical Implications for Nurses (2)
Prerequisite: graduate standing. Principles of normal body functioning, pathophysiologic and psychological changes occurring with altered health across life span. Clinical case studies utilized to demonstrate the pathophysiologic basis for assessment and management of common health problems.

542 Advanced Health Assessment (2)
Prerequisite: graduate nursing standing. Application of theoretical concepts related to comprehensive health assessment of patients across the lifespan. Analyzing, synthesizing and applying comprehensive health assessment data, including the bio-psychosocial, development and environmental needs of patients and families.

542L Advanced Health Assessment Laboratory (1)
Corequisite: Nursing 542. Comprehensive clinical application of advanced health assessment skills and strategies necessary for advanced practice nursing role in a particular area of specialization. (3 hours practicum per week)

544 Health Promotion/Disease Prevention (2)
Prerequisites: graduate standing and consent of instructor. National clinical preventive services guidelines for health promotion, disease prevention, health assessment and screening pertinent to various age groups.

545L Advanced Practice Nurse Clinical Practicum I (2)
Prerequisites: Nursing 542, 542L, 544. Clinical application of theory and research related to the advanced health assessment and health promotion across the lifespan. (6 hours practicum per week)

546 Primary Care of Women I: Family Planning/Gynecology (2)
Prerequisites: Nursing 540, 542, 542L. Primary health care of women by advanced practice nurses from adolescence through adulthood, including assessment, diagnosis prevention, current research, management and education of common gynecologic and family planning health care needs.

548A,B Primary Care: Acute Problems I,II (2,2)
Prerequisites: Nursing 540, 542, 542L. Nursing 548A is prerequisite to 548B. Theory and research related to the most basic and common acute or episodic problems affecting patients and families across the lifespan. Discussion includes health promotion, disease prevention, assessment, differential diagnosis, management and patient/family education and counseling related to these conditions. Concepts of quality health care, resource management and shared-decision making.

548L Advanced Practice Nurse Clinical Practicum II (3)
Corequisite: Nursing 548. Continued clinical field study applying theory, research and developing clinical skills related to the provision of care to pediatric and adult patients and their families, including gynecology and family planning, in increasingly complex clinical situations. (9 hours practicum per week)

552 Pharmacology for Advanced Practice Nurses (3)
Prerequisite: graduate standing or consent of instructor. Advanced course of pharmacology and pharmacotherapeutic content and application relevant to the Advanced Practice Nurse.

554 Primary Care of Women II: Obstetric Health (2)
Corequisite: Nursing 554L. Theory and research related to the obstetrical health care needs of women. Assessment, management and education/counseling needs of women during pregnancy. Social, physiological, legal and ethical issues associated with pre and postnatal care.

554L Advanced Practice Nurse Clinical Practicum III (3)
Corequisite: Nursing 554. Clinical application of theory and research through clinical experiences in selected primary care settings provide students with competencies in assessment, diagnosis, management and education/counseling in selected populations. (9 hours practicum per week)

558 Primary Care of Pediatric Patients (2)
Corequisite: Nursing 558L. Prerequisite: Second year graduate standing. Theory and research-based management of common pediatric health problems encountered in primary care setting focusing on socioeconomic, political, cultural and ethical influences. Population based disease management models are covered.
558L Advanced Practice Nurse Clinical Practicum IV (2)
Corequisite: Nursing 558. Clinical field study applying theory, research and developing clinical skills in selected populations within primary care settings. Developmental needs of clients in relation to family, social and cultural structure. (6 hours practicum per week)

560 Primary Care of Adult, Geriatric and Chronic Health Problems (3)

560L Advanced Practice Nurse Clinical Practicum V (3)
Prerequisite: second-year graduate student. Corequisite: Nursing 560. Clinical practicum applying theory, research and developing clinical skills related to the care of the family with special emphasis on acute and chronic illnesses with complex presentations in primary care settings. Assessment, diagnosis, management, patient/family education, lifestyle modification and counseling strategies. (9 hours practicum per week)

564 Common Procedures in Primary Care (2)
Prerequisite: consent of instructor. Introduces nurse practitioner students to the theoretical basis for common procedures performed in primary care clinical practice. Includes EKG interpretation, x-ray interpretation, minor surgery and orthopedic procedures. Faculty-supervised simulated practice sessions included. Course may be repeated once.

568L Advanced Practice Nurse Clinical Practicum VI (3)
Prerequisite: completion of all other FNP courses and consent of instructor. Culminating clinical experience for family nurse practitioner students and serves as a transition from the student role to the advanced practice nurse. (9 hours practicum per week.)

570 Basic Women's Health Assessment and Management I (2)
Prerequisite: graduate standing with Women's Health Concentration. Reviews theory, pathophysiology, diagnosis and management of ambulatory care for women during childbearing and postpartum/family planning periods in culturally diverse populations. Research findings within the framework of the normalcy of childbearing.

572 Basic Women's Health Assessment and Management II (2)
Prerequisite: graduate standing with Nurse Midwifery Specialty. Corequisite: Nursing 570. Theory, pathophysiology, diagnosis and management of women during labor, birth and the immediate postpartum/newborn.

573A Internship in Basic Midwifery Practice (2)
Prerequisite: graduate standing with Nurse Midwifery specialty. Pre- or corequisite: Nursing 570, 572. Application of basic midwifery knowledge in the clinical setting. Clinical internship of health promotion, diagnosis and management of low risk childbearing women and newborns emphasized. Includes clinical management of women needing gynecologic and primary care.

573B Basic Women's Health Care Practicum (4)
Prerequisite: graduate standing with Nurse Practitioner specialty. Pre- or corequisite: Nursing 570. Application of basic Advanced Practice Nursing knowledge in the clinical setting. Clinical practicum of health promotion, diagnosis and management of low risk childbearing women emphasized. Includes clinical management of women needing gynecologic and primary care. (minimum 12 practicum per week)

574 Intermediate Women's Health Assessment and Management I (2)
Prerequisite: Nursing 570. Theory, research, assessment, pathophysiology, diagnosis and management of complications related to ambulatory health care of women. Reviews domestic violence. Evaluation of research findings.

576 Intermediate Women's Health Assessment and Management II (2)
Prerequisite: graduate standing with Nurse Midwifery Specialty; Nursing 572. Analysis of theory, research, assessment, pathophysiology, diagnosis and management of complications related to health care of women and newborns through labor, birth and the newborn period. Co-management and collaborative management strategies.

577A Internship in Intermediate Nurse Midwifery Practice (2)
Prerequisite: Nursing 570, 572 and 573A. Corequisite: Nursing 574 and 576. Clinical application of knowledge in midwifery practice for childbearing women and newborns with moderate to high risk factors. Co-management and collaborative management. Clinical management of women needing gynecologic and primary care.

577B Intermediate Women's Health Care Practicum (3)
Prerequisite: Nursing 573B. Corequisite: Nursing 574. Clinical application of knowledge in Advanced Practice Nursing for care of women with moderate to high risk conditions in pregnancy. Co-management and collaborative management. Clinical management of women needing gynecologic and primary care. (Minimum 9 hours practicum per week)

579A Advanced Nurse Midwifery Internship (2)
Prerequisite: successful completion of all didactic and clinical courses related to the Nurse Midwifery specialty. This capstone course is the synthesis of clinical knowledge and skill for advanced practice in women's health. Residency incorporates full scope practice and primary care to prepare for independent practice as a nurse-midwife.

579B Advanced Women's Health Care Practicum (3)
Prerequisite: successful completion of all courses related to specialty. This capstone course is the synthesis of clinical knowledge and skill for advanced practice in women's health. Residency incorporates full scope practice and primary care to prepare for independent practice as a women's health care nurse practitioner. (Minimum 9 hours practicum per week)
580 Foundations of Nurse Anesthesia Practice (3)
Prerequisite: admission to the nurse anesthetist concentration. Scientific foundations of anesthesia practice. Integration of neuroanatomical, biological, physical and pharmacological principles will serve as a basis for the assessment and management of the patient undergoing anesthesia.

581 Clinical Studies in Nurse Anesthesia (3)
Prerequisite: admission to the nurse anesthetist concentration. Provides understanding of basic anesthesia theories and applications prior to entry into clinical practice. Perioperative patient assessment, airway management, anesthesia monitoring and treatment modalities.

582 Foundations of Nurse Anesthesia Practice II (4)
Prerequisite: Nursing 580. Corequisite: Nursing 584. Pre- or corequisite: Nursing 505A. Second in a sequence that provides selected scientific foundations of anesthesia practice, focusing on cardiopulmonary and renal systems.

584 Principles of Nurse Anesthesia Practice I (3)
Prerequisite: Nursing 581. Corequisite: Nursing 585L. Pre- or corequisite: Nursing 505A. Pathophysiological basis for anesthesia as related to high risk, special needs populations and specific clinical situations. Case study discussions incorporate anesthesia theory and principles.

585L Nurse Anesthesia Practicum I (2)
Prerequisite: Nursing 581. Corequisite: Nursing 584. Preceptored clinical experience designed to provide clinical application of the foundational principles of anesthesia. (6 hours practicum per week)

586 Principles of Nurse Anesthesia Practice II (3)
Prerequisites: Nursing 584. Corequisite: Nursing 587L. Advanced theory of anesthesia management for specialized patient populations, emphasizing obstetrics, pediatrics, geriatrics and obesity, including principles which underlie competent operative planning, decision making and case management.

587L Nurse Anesthesia Practicum II (5)
Prerequisites: Nursing 585L. Corequisite: Nursing 586. Preceptored clinical experience provides clinical application of increasingly complex clinical situations. (15 hours practicum per week)

588 Principles of Nurse Anesthesia Practice III (4)
Incorporates pathophysiologic basis for anesthesia case management, including pulmonary and cardiothoracic care. Principles of regional anesthesia. Application of current scientific literature is reviewed and emphasized.

589L Nurse Anesthesia Practicum III (7)
Continuing preceptored clinical experience provides clinical application of increasingly complex clinical situations and clinical decision-making in the practice of anesthesia. (21 hours practicum per week)

589 Principles of Nurse Anesthesia Practice IV (4)
Prerequisite: Nursing 588. Corequisite: Nursing 591L. Pathophysiologic basis for anesthesia management, including neurologic, endocrine and gastro-intestinal care. Integrates concepts of pharmacology related to anesthesia and application of current scientific research findings in these populations.

591L Nurse Anesthesia Practicum IV (7)
Prerequisite: Nursing 589L. Corequisite: Nursing 590. Preceptored clinical experience provides clinical application of increasingly complex clinical situations. (21 hours practicum per week)

593L Nurse Anesthesia Practicum V (7)
Prerequisite: Nursing 591L. Corequisite: Nursing 592. Culminating preceptored clinical experience provides clinical practice in all areas of anesthesia management. (21 hours practicum per week)

595A,B Thesis/Project/Comprehensive Examination Seminar (1,1)
Prerequisites: Nursing 505A,B. Corequisites for 595A: Nursing 596A, 597A or 598A as appropriate. Prerequisite for 595B is 595A; corequisites, for 595B: Nursing 596B, 597B or 598B as appropriate. Facilitates completion of thesis research, projects and comprehensive examinations leading to master's degree, with an emphasis on assisting students with logistical and technical requirements at various phases of a research investigation, the conduct of a project or preparation for comprehensive examination. (Minimum 3 hours per week per semester)

596A,B Comprehensive Clinical Practicum (1,1)
Prerequisites: Nursing 505A,B; corequisite, Nursing 595A,B, 596A,B. Low- to high-risk patient assessment and management through case study and skills lab competency. Outcome includes simulated patient evaluation/management and comprehensive examination demonstrating student's application of knowledge and skills. A full-year course over two semesters. (Minimum 3 hours per week per semester)

597A,B Project (1,1)
Prerequisites: Nursing 505B and consent of the instructor; Corequisites: Nursing 595A,B. Nursing 597A is prerequisite to 597B. Identification of specific issues/problems in degree concentration and development and completion of project.

598A,B Thesis (1,1)
Prerequisites: Nursing 505B and consent of the instructor for Nursing 598A; Nursing 598A is a prerequisite to Nursing 598B; Corequisites: Nursing 595 A. Individual research with conferences with instructor, culminating in a thesis.

599 Independent Graduate Study (1-3)
Prerequisite: graduate student status and consent of instructor. Independent inquiry resulting in oral or written report. May be repeated with different content for additional credit.
INTRODUCTION

Philosophy began when people first questioned the accounts poets and priests had handed down about the structure of the world and the meaning of human life. Since then philosophers have helped create and explore virtually every aspect of our cultural life, including science, religion, art and politics. To study philosophy, therefore, is to engage in a classic form of liberal education in which powers of reasoning and conceptual analysis are explicitly developed. The study of philosophy includes: (1) the development of critical thinking and writing skills; (2) the investigation of conceptual problems encountered in the course of reflecting about experience; (3) the assessment of assumptions underlying other sciences and arts; and (4) the exploration of intellectual and cultural history from a broad perspective. Philosophy is not a “high unit” major. It is possible for many students to obtain the benefits of a philosophically based liberal education while also majoring in another discipline. The Philosophy Department also encourages minors, which can be tailored to the student’s individual interests or other fields of study. Majoring or minoring in philosophy is an excellent way of preparing for law school and other careers that involve facility in reasoning, analysis and information processing.

Learning Goals and Student Learning Outcomes

The following goals and learning outcomes have been established for students pursuing a degree in philosophy:

Critical thinking
- Demonstrate a thorough understanding of original texts
- Use sound arguments and strong reasoning to support assertions
- Make careful selection and presentation of evidence and argument to support assertions and (when applicable) include carefully constructed refutations of the opposing view

Critical writing
- Demonstrate good structure, succinct expression of ideas and superb writing skills

Knowledge
- Demonstrate knowledge of specific periods of historical philosophy, specific major currents of the 20th-21st century philosophical investigation and several methodologies employed by philosophers

Social/global awareness
- Exposure to issues of culture, ethnicity and gender
- Cultivate a global perspective
- Examine and critically assess normative standards governing social relations, practices and institutions, including a wide range of human activities dependent upon value judgments

DEPARTMENT CHAIR
Mitchell Avila

DEPARTMENT OFFICE
Humanities 214

DEPARTMENT WEBSITE
http://hss.fullerton.edu/philosophy

PROGRAMS OFFERED
Bachelor of Arts in Philosophy
Concentration in Social, Moral and Legal Philosophy for the Professions
Minor in Philosophy

FACULTY
Mitchell Avila, Heather Bartaly, Matthew Calarco, Amy Coplan, John Davis, Emily S. Lee, JeeLoo Liu, Ryan Nichols, Shari Starrett
Emeriti Faculty: Craig K. Ihara, Merrill Ring, J. Michael Russell

ADVISERS
For advisement about the major or minor in philosophy, please contact Mitchell Avila, Department Chair. For information on the Concentration in Social, Moral and Legal Philosophy for the Professions, please contact John Davis or Mitchell Avila.
AWARDS IN PHILOSOPHY

The Paul C. Hayner Memorial Award, to the outstanding graduating senior in philosophy; the William H. Alamshah Memorial Prize, for the best undergraduate philosophy essay; the Claire and Craig Ihara Award for contribution to the philosophical community.

BACHELOR OF ARTS IN PHILOSOPHY

The Bachelor of Arts in Philosophy requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. Students complete a minimum of 39 units in general philosophy or 39 units in the concentration. The general philosophy program requires the following:

Argumentation and Writing Requirement (3 units)
Philosophy 315 Philosophical Argument and Writing (3)

Required courses in the history of philosophy before 1900 (9 units)
Philosophy 290 History of Philosophy: Greek Philosophy (3)
Philosophy 300 History of Philosophy: Rationalism and Empiricism (3)
Philosophy 301 History of Philosophy: Kant and the 19th Century (3)

Additional history of philosophy requirement (6 units)
Two of the following: Philosophy 291, 323, 343, 350, 379, 380, 381, 383

Other course requirements (3 units each from a and b)
  a. Ethics: Philosophy 345 or 410
  b. Metaphysics, Epistemology: Philosophy 420, 430, 435, 440

Seminar requirement (3 units)
Three units (one course) from Philosophy 447T, 455, 460, 470, 480-490.

Electives (12 units)
Choose 12 units of philosophy courses, no more than six lower-division, which have not been used to fulfill other requirements.

CONCENTRATION IN SOCIAL, MORAL AND LEGAL PHILOSOPHY FOR THE PROFESSIONS

This concentration requires a total of 39 units and prepares students for post-baccalaureate professional studies and eventually a career in their chosen field. Students who complete the Concentration in Social, Moral and Legal Philosophy for the Professions while earning their Bachelor of Arts in Philosophy should be equipped with the intellectual skills (i.e., critical reading and analysis skills) necessary in order to successfully apply to, enter and graduate from competitive professional graduate programs such as law, business and administration.

Argumentation and Writing Requirement (3 units)
Philosophy 315 Philosophical Argument and Writing (3)

Pre-1900 History Sequence (9 units)
Philosophy 290 Greek Philosophy (3)
Philosophy 300 Rationalism and Empiricism (3)
Philosophy 301 Kant and 19th Century (3)

Ethics, Social/Political Philosophy (6 units)
Choose two of the following:
Philosophy 345 Social and Political Philosophy (3)
Philosophy 355 Philosophy of Law (3)
Philosophy 382 Marx and Marxism (3)
Philosophy 410 Ethical Theory (3)

Applied Ethics, Social/Political Philosophy (3 units)
Choose one of the following:
Philosophy 312 Business and Professional Ethics (3)
Philosophy 313 Environmental Ethics (3)
Philosophy 314 Medical Ethics (3)
Philosophy 320 Contemporary Moral Issues (3)
Philosophy 377 Philosophical Approaches to Race, Class and Gender (3)

Core Topics in Philosophy (6 units)
Choose two of the following:
Philosophy 303 Intro to Philosophy of Science (3)
Philosophy 323 Existentialism (3)
Philosophy 348 Philosophy of Religion (3)
Philosophy 380 Analytical Philosophy 1900 to 1950 (3)
Philosophy 381 Analytic Tradition: 1950 to the Present (3)
Philosophy 383 Postmodernism (3)
Philosophy 420 Metaphysics (3)
Philosophy 430 Epistemology (3)
Philosophy 440 Philosophy of Mind (3)
Philosophy 405 Advanced Topics in Applied Legal Reasoning (3)
Philosophy 493 Senior Internship in Ethics and Society (3)

Electives (6 units)
Six units of philosophy courses that have not been used to fulfill other requirements. No more than six lower-division units may count toward electives in the major.

MINOR IN PHILOSOPHY

Students in other disciplines often find that a background in philosophy enriches their university experience and enhances work done in other fields in preparation for specific careers. The minor in philosophy requires 21 units in philosophy, at least 12 of which must be upper division. Up to nine units taken in fulfillment of general education requirements may be counted toward the minor. The Department of Philosophy offers two ways of pursuing the minor. The Alternative B minor is especially appropriate for students preparing for professional degrees in law or medicine.

Alternative A:
Among the 21 units, at least six from the following courses: Philosophy 290, 291, 300, 301; and either a seminar or three units of Philosophy 499.
Alternative B:

Among the 21 units, at least 15 to be chosen from philosophy courses correlative to the student’s major or intended post-baccalaureate field, as approved by the philosophy adviser.

RECOMMENDED COURSEWORK FOR PHILOSOPHY MAJORS

A program in philosophy profits greatly from the study of psychology, the natural and social sciences, and literature. Students are advised to supplement their studies in philosophy with coursework offered in these fields and in fields closely related to their philosophical interests.

Students who are planning to attend graduate school in philosophy are urged to acquire proficiency in a foreign language, and to include in their programs as many of the following as possible:

- Philosophy 303 Introduction to the Philosophy of Science (3)
- Philosophy 345 Social and Political Philosophy (3)
- Philosophy 368 First Course in Symbolic Logic (3)
- Philosophy 375 Introduction to the Philosophy of Language (3)
- Philosophy 380 Analytic Philosophy (3)
- Philosophy 410 Ethical Theory (3)
- Philosophy 420 Metaphysics (3)
- Philosophy 430 Epistemology (3)
- Philosophy 440 Philosophy of Mind (3)
- Philosophy 455 Seminar in Values (3)

Students interested in pursuing admission to law school are advised to include in their programs as many of the following as possible:

- Philosophy 312 Business and Professional Ethics (3)
- Philosophy 313 Environmental Ethics (3)
- Philosophy 314 Medical Ethics (3)
- Philosophy 345 Social and Political Philosophy (3)
- Philosophy 355 Philosophy of Law (3)
- Philosophy 368 First Course in Symbolic Logic (3)
- Philosophy 410 Ethical Theory (3)
- Philosophy 455 Seminar in Values (3)

TRANSFER CREDIT

Work completed in philosophy at other institutions may be counted toward the major, subject to the rules of the university and the following departmental rules: (1) only seminars can fulfill the seminar requirement; (2) only upper-division work can fulfill upper-division requirements; (3) in no case can more than six units of lower-division work taken at another institution count toward the major requirement of 39 units. Six units of philosophy taken at another university may be counted toward the minor.

CREDENTIAL INFORMATION

The Bachelor’s Degree in Philosophy may be effectively combined with subject matter studies necessary for the Multiple Subject Teaching Credential (K-8). Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

PHILOSOPHY COURSES

Courses are designated as PHIL in the class schedule.

100 Introduction to Philosophy (3)

Nature, methods and some of the main problems of philosophy. Primarily for freshmen and sophomores. Not a prerequisite for advanced courses. One or more sections offered online.

101 Meaning, Purpose and the Good Life (3)

Introduction to Western and Eastern approaches to perennial topics in philosophy concerning human flourishing and the nature of persons. Questions considered include, “What is happiness?” “What is the good life?” “Does life have meaning and purpose?” and “What is a person?”

105 Critical Thinking (3)

Development of non-mathematical critical reasoning skills, including recognition of arguments, argument evaluation and construction of arguments.

106 Introduction to Logic (3)

Logical structure of language and correct reasoning: deduction, induction, scientific reasoning and informal fallacies.

110 Religions of the World (3)

(Same as Comparative Religion 110)

120 Introduction to Ethics (3)

Problems of human conduct and moral evaluation: standards for moral assessment of conduct and persons; morality and its relation to mores, social demands and personal commitments.

290 History of Philosophy: Greek Philosophy (3)

Origins of Western philosophy and its development through Socrates, Plato and Aristotle.

291 History of Philosophy: Medieval Philosophy (3)

Hellenistic philosophy and such figures as Plotinus, Augustine, Thomas Aquinas, Duns Scotus and William of Ockham.
300 History of Philosophy: Rationalism and Empiricism (3)
   Prerequisite: completion of General Education (G.E.) Category III.B.2. Rationalism of Descartes, Spinoza and Leibniz, and the empiricism of Locke, Berkeley and Hume.

301 History of Philosophy: Kant and the 19th Century (3)
   Prerequisite: Phil 300. Rationalism and empiricism as a background to Kant. Revolutionary aspects of Kant’s critical philosophy. Subsequent trends in 19th century philosophy, emphasizing such figures as Hegel, Schopenhauer, Marx, Mill, Kierkegaard and Nietzsche.

302 Introduction to Women’s Studies (3)
   (Same as Women’s Studies 302)

303 Introduction to the Philosophy of Science (3)
   Prerequisite: general education physical or biological science requirement. Logical and methodological features of scientific inquiry; nature of theories and interpretation of theoretical terms; scientific progress; impact of science on society and of society on science.

311 Aesthetics: Philosophy of Art and Beauty (3)
   Prerequisite: completion of G.E. Category III.B.1 or III.B.2. Conditions and aims of art and of aesthetic experience.

312 Business and Professional Ethics (3)
   Prerequisite: upper-division standing. Nature and limits of the moral rights and responsibilities of business and the professions (including law, medicine, science, engineering, journalism, management and teaching).

313 Environmental Ethics (3)
   Prerequisite: completion of G. E. Category III.B.2 or III.C.1. Conceptual and moral foundations of environmental ethics, focusing on ecosystem and wildlife conservation policies, animal rights, a land ethic, competing policy analyses and obligations to future generations.

314 Medical Ethics (3)
   Prerequisite: completion of G. E. Category III.B.2. Ethical issues raised by recent technical developments in medicine and of the moral rights and responsibilities of patients and health-care professionals.

315 Philosophical Argument and Writing (3)
   Prerequisite: three units of philosophy. Philosophical concepts, distinctions and methods are used to teach philosophical and argumentative writing that is clear, critical, expressive and precise. Designed to satisfy the classroom portion of the upper-division writing requirement for philosophy majors.

316 Research Ethics (3)
   Prerequisite: Phil 120 or completion of the G. E. Category III.A. Ethical principles and problems implicit in the conduct of scientific research, with special attention to issues of scientific integrity, fraud, deception, data accuracy, authorship credit and use of research funds, especially when animal or human subjects are used.

320 Contemporary Moral Issues (3)
   Prerequisite: completion of G. E. Category III.B.2. Application of ethical and social/political theories to contemporary moral problems. Topics selected from current issues in law, business, medicine, sexual morality and gender/multicultural studies, including such topics as abortion, racism, crime, punishment, welfare, domestic violence and pornography.

323 Existentialism (3)
   Introduction to existentialist perspectives on freedom, meaning, responsibility, authenticity and self-deception. Typically includes discussion of Kierkegaard, Nietzsche, Heidegger and Sartre.

324 Existential Group (3)
   How themes in the writings of existentialist philosophers pertain to the lifestyles, actions and feelings of the class participants.

325 Philosophy of Sex and Love (3)

333 Evolution and Creation (3)
   Prerequisites: completion of G. E. Categories III.A.2.c and III.B.2. Interdisciplinary study of evolutionary biology’s impact on culture in context of religious doctrines of creation. Evolutionary theory and religious and philosophical reactions from Darwin to the present, including relevant educational and legal contexts.

341 Assumptions of Psychotherapy (3)
   Prerequisites: completion of G. E. Categories III.B.2 and III.C.1. Philosophical concepts and assumptions pertinent to the theory of psychotherapy, such as the Cartesian, the mechanistic and the deterministic assumptions of Freud.

343 Philosophy of Feminism (3)
   Prerequisite: three units of philosophy or three units of women’s studies. Critical examination of philosophical issues connected with “second-wave” U.S. feminism. Alternative feminist theories, goals and reconstruction of traditional areas of philosophy. (Same as Women’s Studies 343).

345 Social and Political Philosophy (3)
   Prerequisite: three units of philosophy. Critical examination of individualism, community, freedom, authority, justice, human rights and alienation, from the perspective of social and political theory.

348 Philosophy of Religion (3)
   Role of philosophy in shaping theological doctrine, in critically evaluating religious experience, in arguing for or against the existence of God and in considering the problem of evil. (Same as Comparative Religion 348)
349 Philosophy, Literature and Cinema (3)
Critical examination into the aesthetics of literature and film, with emphasis on how storytelling deepens our imagination and understanding of identity, culture, society and values through use of word and image.

350 Asian Philosophy (3)
Prerequisite: completion of G. E. Category III.B.2. Asian philosophies such as Taoism, Confucianism and Buddhism (especially Zen): world views, conceptions of human nature and the good life. May also include applications to martial and non-martial arts. Comparisons with Western philosophies, religions and values.

352 Philosophy of Asian Martial Arts (3)
Prerequisite: three units of philosophy or appropriate prior instruction in the martial arts. Philosophical examination of Asian martial arts and how they relate to Taoism, Buddhism, Confucianism, Shinto and Zen. Samurai ideals compared to those of the warrior traditions of the Middle Ages and Homeric Greece.

354T Topics in Buddhism (3)
(Same as Comparative Religion 354T)

355 Philosophy of Law (3)
Philosophical issues underlying the law, including the nature and justification of law, its relationship to morality and the limits of free speech, criminal punishment, legal responsibility and affirmative action.

356 First Course in Symbolic Logic (3)
Prerequisite: entry-level mathematics examination. Recognition and construction of correct deductions in the sentential logic and the first-order predicate calculus. (Same as Math 368)

375 Introduction to the Philosophy of Language (3)
Prerequisite: six units of philosophy or six units of linguistics or three units of each. Philosophical issues about language, including topics such as meaning, reference, predication and truth. (Same as Linguistics 375)

377 Philosophical Approaches to Race, Class and Gender (3)
Prerequisite: one upper-division philosophy course, or course focused on race, class, or gender. Philosophical and interdisciplinary analyses of race, class and gender. Class time divided between assessment of influential theories and writers and development of Internet and interactive research.

379 American Philosophy (3)
Prerequisite: completion of G. E. Category II.B.2. American philosophy, beginning with Whitman, Emerson and Thoreau on transcendentalism and nature philosophy, with particular emphasis on the pragmatism of Pierce, Dewey, James and recent developments of neo-pragmatists Quine and Rorty.

380 Analytic Philosophy: 1900 to 1950 (3)
Prerequisite: six units in philosophy. Rise and development of the analytic movement in 20th-century philosophy. Works of such philosophers as Moore, Russell, Wittgenstein and Carnap will be studied.

381 The Analytic Tradition: 1950 to the Present (3)
Prerequisite: six units of philosophy or equivalent. Character and development of post-war Anglo-American philosophy, including the works of such thinkers as the later Wittgenstein, Quine, Davidson, Rorty and Putnam.

382 Marx and Marxism (3)
Marx and his followers in philosophical perspective. Theories of human nature, society and intellectual activity; conceptual tools for the analysis of social phenomena; sources; and followers, both critical and dogmatic.

383 Postmodernism (3)
Prerequisite: Philosophy 301 or 323, or equivalent. Such modern and post-modern movements as phenomenology, hermeneutics, critical theory, post-structuralism, deconstruction, the Frankfurt school and French feminism; influences of these movements on political, literary and psychoanalytic theory.

384 Philosophy of Biology (3)
Prerequisite: completion of G. E. requirements in Biological Science. Conceptual foundations of biological science and especially of evolutionary theory. Applicability of such concepts as natural law, theory reduction, emergence and teleology to the investigation of living things from the molecular to the ecological level.

399 Directed Study (1-3)
Prerequisite: approval of department. Supervised individual study as an elective. May be repeated for credit with different content. No more than three units may be taken with any one adviser in any one semester.

400 Ethical and Professional Issues in Human Services (3)
(Same as Human Services 400)

401 Knowledge in the Arts and Sciences (3)
(Same as Liberal Studies 401)

405 Advanced Topics in Applied Legal Reasoning (3)
Prerequisites: Phil 105, 106 or 368. Advanced study of argumentation and critical thinking methods, and their application to applied topics in philosophy, including legal ethics and legal reasoning.

410 Ethical Theory (3)
Prerequisite: Phil 290 or 300 or 315. Major ethical theories as advanced by such authors as Aristotle, Kant, Mill and Rawls.
416 Advanced Research Ethics (3)
Prerequisite: Phil 320. For graduate students engaged in research. Ethical principles and problems implicit in the conduct of research, with special attention to issues of scientific integrity, fraud, deception, data accuracy, authorship credit and use of research funds.

420 Metaphysics (3)
Prerequisite: Phil 290 or 300 or 315. Metaphysics and metaphysical issues such as reality, universals, space, time, substance, identity and difference, causality, permanence and change, freedom and determinism, minds and bodies.

430 Epistemology (3)
Prerequisite: Phil 290 or 300 or 315. Nature of knowledge, belief, certainty, truth, perception, and the a priori; examinations of skepticism, traditional responses to skepticism and the foundations of knowledge.

435 Advanced Topics in Philosophy of Language (3)
Prerequisite: Phil 290 or 300 or Phil/Ling 375. Key problems in the philosophy of language such as the nature of language, function of language in communication, meaning and reference of proper names, and the connection between thought and language. Not available for graduate degree credit.

440 Philosophy of Mind (3)
Prerequisite: Phil 290 or 300 or 315. Concept of mind, and such related issues as the mind-body relation, behavior, consciousness, voluntary action, weakness of will and our knowledge of other minds.

447T Seminar in Selected Problems (3)
Prerequisite: Phil 315 and six units of upper-level philosophy. Intensive study of one philosophical concern, such as an individual philosopher or topic. May be repeated with different content for additional credit.

448 Death, Aging and Meaning (3)
Prerequisite: Phil 315 and six units of upper-level philosophy. Various thinkers regard comprehending one’s own death as a means to making sense of one’s life. Combines intellectual inquiry and personal exploration into assessing death, aging and living meaningfully.

455 Seminar in Values (3)
Prerequisite: Phil 315 and six units of upper-level philosophy. Valuation or some important form of value: ethical, aesthetic, political. May be repeated with different content for additional credit.

470 Seminar in Metaphysics and Epistemology (3)
Prerequisite: Phil 315 and six units of upper-level philosophy. Topics covered include metaphysics and epistemology such as reality, substance, mind, action, cause, knowledge and truth.

480 Seminar in the History of Philosophy (3)
Prerequisite: Phil 315 and six units of upper-level philosophy. Course covers some important work, figure, school or problem in the history of philosophy before 1900.

490 Seminar in Contemporary Philosophy (3)
Prerequisite: Phil 315 and six units of upper-level philosophy. Issues raised by such 20th-century philosophers as Russell, Moore, Wittgenstein, Austin, Quine, Husserl, Heidegger, Merleau-Ponty or Foucault.

493 Senior Internship in Ethics and Society (3)
Prerequisite: six units of philosophy in ethics and/or social/political philosophy. Supervised internship in professional setting. Required course project on philosophical and ethical issues.

499 Independent Study (1-3)
Prerequisite: approval of department. Develop competency in research. May be repeated for credit. No more than three units may be taken with any one adviser in any one semester.
INTRODUCTION

Physics is the natural science that deals with the properties and interactions of matter and radiation. As such, physics provides the fundamental basis for all other sciences, and for applied science fields such as engineering and the health sciences. Many physicists engage in research designed to expand the frontiers of physical knowledge; others engage in the application of physics concepts in industry and in private and government laboratories.

The physics major program can provide the education necessary for the student to continue studies at the graduate level that, in turn, lead to the master’s and doctoral degrees. Alternatively, the physics major program can provide the education necessary for the student to work immediately upon graduation with the bachelor’s degree, either in industry or government labs, in applied physics fields, or in teaching at the secondary school level. Our optional emphasis in business provides students with experience in starting or managing a technology-oriented business.

Students are encouraged to obtain research experience by working with faculty in their ongoing research efforts. Independent Study provides practical work experience that integrates classroom studies with the needs and methods of modern industrial science.

BACHELOR OF SCIENCE IN PHYSICS

The Bachelor of Science in Physics requires a minimum of 120 units that includes courses for the major, General Education, all university requirements, and free electives.

**Lower Division (32-34 units)**

- General Chemistry (Chem 120A, 125) (8)
- Mathematics (Math 150A,B and 250A) (12)
- Fundamental Physics (Physics 225, 226, 227 and 225L, 226L, 227L) (12)

*Note:* Students may take Chemistry 120B in place of Chemistry 125.

**Upper Division (21 units)**

- Physics 300 Survey of Mathematical Physics (3)
- Physics 310 Thermodynamics, Kinetic Theory and Statistical Physics (3)
- Physics 320 Classical Mechanics (4)
- Physics 330 Electromagnetic Theory (4)
- Physics 340 Modern Physics (4)
- Physics 380 Methods of Experimental Physics (3)

**Upper-Division Physics Electives (14 units)**

The Bachelor of Science in Physics requires 14 units of upper-division physics electives and must include one laboratory course.

For students completing a minor or second major in mathematics, another science, engineering or computer science, the upper-division physics elective requirement is 12 units.
Upper-Division Science and Engineering Electives (3 units)
   Additional upper-division courses in mathematics, science, engineering and/or computer science approved by the department.

Upper-Division Writing Requirement (3 units)
   English 301 Advanced College Writing
   OR English 360 Scientific and Technical Writing
   OR Business Admin 301 Advanced Business Communications
   (for students pursuing the emphasis in business only)
   OR Chemistry 340 Writing for the Chemical Sciences
   OR Mathematics 380 History of Mathematics

Other Requirements
   Each course in physics, mathematics, chemistry and English that is required for the major must be completed with grade of "C" (2.0) or better.
   Formal academic advisement is required for all physics majors at least once every academic year.

EMPHASIS IN BUSINESS
   This emphasis provides the fundamental background in business needed by physics majors who are interested either in starting a technology-related business or in joining the management staff of small to medium size technology-related businesses. Students who pursue this program do not take Physics 227L. and substitute Accounting 201A Financial Accounting (3) for Chemistry 125 in lower-division major requirements, and complete the following 21 units in physics and business electives in place of the usual upper-division physics and science/engineering elective.
   Finance 320 Business Finance (3)
   Management 340 Organizational Behavior (3)
   Management 465A New Venture Creation & Funding (3)
   Management 465B New Venture Launch (3)
   OR Management 495 Internship (3)
   Marketing 351 Principles of Marketing (3)
   Physics 481 Experimental Physics (3)
   OR Physics 482 Modern Optics Laboratory (3)
   Business Admin 301 Advanced Business Communication (3)
   Note: Business Admin 301 satisfies the upper-division writing requirement.

MINOR IN PHYSICS

Lower Division (12 units)
   Fundamental Physics (Physics 225, 226, 227 and 225L, 226L, 227L)

Upper Division (9 units)

Upper-Division Experimental Physics (3)
   Additional upper-division units in physics, selected in consultation with the department academic adviser with approval by the adviser and the department chair, (6).

TEACHING CREDENTIAL
   The Bachelor's Degree in Physics may be effectively combined with subject matter studies necessary for the Single Subject Teaching Credential in science. Science teachers are in great demand, and candidates may qualify for scholarships and paid teaching internships while completing their credential. Undergraduates are encouraged to contact the Center for Careers in Teaching (657-278-7130, www.fullerton.edu/cct) and the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied/) for early advisement and to plan efficient course selections for general education, the major and credential program coursework. Postbaccalaureate and graduate students should contact the Science Education Programs Office (657-278-2307, http://nsm.fullerton.edu/scied/). Additional information is found under Science Education Programs in the University Catalog as well as at http://mast.wikispaces.com.

MASTER OF SCIENCE IN PHYSICS
   The Master of Science in Physics provides excellent preparation for applied research, development and engineering positions in industry or government. The program also is excellent preparation for teaching positions at the secondary school and community college level. In addition, the Master of Science degree provides an excellent foundation for further graduate study in physics or related fields such as bio-physics, geophysics or engineering.

Admission Requirements
   Students must comply with all university admission requirements. Those seeking admission to the master’s program in physics must have: (1) a degree from an accredited college or university with a major in physics or a closely related field (students with majors other than physics may be admitted with deficiencies); and (2) a grade-point average of 2.75 for upper-division courses in the physics major. For students with undergraduate degrees in engineering, mathematics or other physical sciences, a GPA of 3.0 in upper-division major courses is required. In addition to the GPA requirements, all applicants are required to: (1) take the physics portion of the Graduate Record Exam (GRE) either previously or within a year of application (the GRE requirement can be waived for physics majors who enter with a GPA of 3.6 or higher); (2) submit a one-page, 500-word maximum, typed statement of purpose, explaining the student’s interest in taking a higher degree in physics; and (3) submit three letters of recommendation.
   International student applicants are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 or higher for the computer test and 213 for the paper test.

The deadlines for completing online applications are March 1 for the fall semester and October 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, it is important to note that deadlines may be changed based upon enrollment projections.
Required Core Course (12 units)
Physics 510 Mathematical Physics (3)
Physics 520 Analytical Mechanics (3)
Physics 530A Electromagnetic Theory I (3)
Physics 555A Quantum Physics I (3)

Additional 500-Level Requirements (6 units)
\textit{Plan A} (comprehensive exam) requires any two of the following courses:
Physics 530B Electromagnetic Theory II (3)
Physics 555B Quantum Physics II (3)
Physics 516 Statistical Mechanics and Thermodynamics (3)
Physics 554 Solid State Physics (3)
\textit{Plan B} (Physics 598 Thesis) requires one course chosen from Physics 530B, 555B, 516 or 554, plus:
Physics 599 Independent Graduate Research (3)
\textit{Plan C} (Physics 597 Project) requires one course chosen from Physics 530B, 555B, 516 or 554, plus:
Physics 599 Independent Graduate Research (3)

Electives (8-12 units)
Electives are chosen in consultation with the graduate adviser. Electives may be chosen from any 400- or 500-level physics course with the exception of any courses which were used to satisfy baccalaureate degree requirements. In cases where the research objectives or career goals are interdisciplinary in nature, courses may be chosen in other fields (e.g., mathematics, chemistry, engineering, biology, geological science, science/teacher education).

Project, Thesis or Comprehensive Exam (0-4 units)
Physics 597 Project (1-3)
OR Physics 598 Thesis (1-6)
OR Comprehensive Exam

PHYSICS COURSES
Courses are designated as PHYS in the class schedule.
A grade of “C” (2.0) or better is required in all prerequisite courses. Prerequisite requirements with exception of the grade requirement may be waived by the instructor of the course if the instructor is satisfied that the student is qualified to undertake the course.

101 Survey of Physics (3)
Basic concepts of physics for the non-science major. Physical concepts in real-world contexts such as global warming. How our ideas about motion, energy, heat and temperature, light and color, electricity, and atoms form a framework for understanding the natural world.

101L Survey of Physics Laboratory (1)
Corequisite: Physics 101. Experiments that demonstrate important concepts in astronomy and physics. For non-science majors.

102 Physical Science for Future Elementary Teachers (3)
Designed especially for the prospective elementary teacher, this activity-based course examines physical science concepts in real-world contexts such as global warming, kitchen science and the automobile. Lecture and laboratory is combined into a single unified learning experience. (Same as Chemistry 102)

115 Introductory Physics (4)
Prerequisites: high school algebra, geometry, and intermediate algebra. Development of problem solving skills in basic physics. For students with limited background in physics who plan to take additional physics courses. Does not fulfill physics requirements for majors or minors in the physical or biological sciences. (3 hours lecture, 1 hour recitation)

120 Introduction to Astronomy (3)
Prerequisite: high school algebra recommended. Celestial motion, the solar system, galactic structure, theories of the origin of the universe and the solar system.

211 Elementary Physics (3)
Corequisites: Mathematics 130 or 150A, Physics 211L. Introduction to mechanics and thermodynamics. Designed for life and health science majors.

211L Elementary Physics: Laboratory (1)
Corequisite: enrollment in the corresponding 211 lecture. Laboratory 211. (3 hours laboratory). Instructional fee required.

212 Elementary Physics (3)
Prerequisite: Physics 211 with a grade of “C” (2.0) or better. Corequisite: Physics 212L. Introduction to electricity and magnetism, wave motion and optics. Designed for life and health science majors.

212L Elementary Physics: Laboratory (1)
Corequisite: enrollment in the corresponding 212 lecture. (3 hours laboratory). Laboratory for 212. Instructional fee required.

225 Fundamental Physics: Mechanics (3)
Prerequisite: Mathematics 150A. Corequisite: Physics 225L. Classical Newtonian mechanics; linear and circular motion; energy; linear/angular momentum; systems of particles; rigid body motion; wave motion and sound.

225L Fundamental Physics: Laboratory (1)
Corequisite: enrollment in 225 lecture (3 hours laboratory). Laboratory for Physics 225. Instructional fee required.

226 Fundamental Physics: Electricity and Magnetism (3)
Prerequisites: Mathematics 150B and Physics 225 or equivalent; concurrent enrollment in Physics 226L required. Electrostatics, electric potential, capacitance, dielectrics, electrical circuits, resistance, emf, electromagnetic induction, magnetism and magnetic materials, and introduction to Maxwell’s equations.

226L Fundamental Physics: Laboratory (1)
Corequisite: enrollment in 226 lecture (3 hours laboratory). Laboratory for Physics 226. Instructional fee required.
227 Fundamental Physics: Waves, Optics, and Modern Physics (3 or 1)
Prerequisite: Physics 226 with a grade of "C" (2.0) or better, or equivalent. Corequisite: enrollment in Physics 227L laboratory except for Biochemistry, Chemistry and Mechanical Engineering majors who may enroll for one unit credit (optics component). All others must enroll for three units credit. Geometrical and physical optics, wave phenomena; quantum physics, including the photoelectric effect, line spectra and the Bohr atom; the wave nature of matter, Schroedinger’s equation and solutions; the Uncertainty Principle; special theory of relativity.

227L Fundamental Physics: Laboratory (1)
Corequisite: Enrollment in 227 lecture (3 hours laboratory). Laboratory for Physics 227. Instructional fee required.

300 Survey of Mathematical Physics (3)
Prerequisite: Mathematics 250A. Mathematical techniques required for upper-division physics courses, including differential vector operators, complex variables, partial and ordinary differential equations, special functions, Fourier transforms and series, matrices and operators, probability and statistics.

301 Energy and the Environment (3)
Prerequisites: completion of general education requirement in physical science or earth and astronomical science. Basic physical principles applied to the generation and use of energy. Conventional and alternative energy sources. Environmental consequences of energy use, greenhouse effect, global warming. Energy conservation principles.

310 Thermodynamics, Kinetic Theory, and Statistical Physics (3)
Prerequisites: Physics 227. Laws of thermodynamics with physical, chemical and engineering applications; kinetic theory of gases. Introduction to statistical physics with reexamination of laws of thermodynamics.

315 Computational Physics (3)
Prerequisite: Physics 227. Previous computing experience recommended. Basic numerical methods in physics. Applications may include curve fitting and minimization, numerical simulation of classical particles, waves and Fourier analysis, quantum square well, Monte Carlo methods and diffusion. Hands-on computing with high-level languages, graphics and symbolic mathematics. (1 hour lecture, 4 hours activity)

320 Classical Mechanics (4)
Prerequisites: Physics 227 and Physics 300. Classical mechanics and associated mathematical and numerical techniques: Newtonian dynamics; Lagrangian and Hamiltonian dynamics.

330 Electromagnetic Theory (4)
Prerequisites: Physics 227 and 300. Applications of vector calculus and Maxwell’s equations to the propagation of EM waves in dielectrics, plasmas, and conductors. Selected topics in radiation, diffraction, and Eigen function expansions of static and waveguide fields.

340 Modern Physics (4)
Prerequisites: Physics 227 and 300. Modern physical theories, their experimental foundations and applications: special relativity; quantum physics; introduction to solid state physics.

380 Methods of Experimental Physics (3)
Prerequisite: Physics 226. Experiments using analog, digital, and integrated circuits, including filtering circuits, diodes, transistor amplifiers, operational amplifiers, triggers, and digital logic. Introduction to automated experimentation. (1 hour lecture, 6 hours laboratory). Instructional fee required.

411 Modern Optics (3)
Prerequisites: Physics 300, 330 or 340. Wave propagation. Fourier optics, introduction to spatial filtering and image enhancement, lasers, analytical ray tracing, matrix methods in optics.

414 Physics of the Solar System (3)
Prerequisites: Physics 227 and 300. Physics 310 recommended. Solar system physics, including physical principles underlying current experiments in planetary science and space physics. Solar physics; planetary dynamics; experimental probes of planetary surfaces, interiors and atmospheres; physical constraints on theories of the solar system origin.

416 Thermal and Statistical Physics (3)
Prerequisites: Physics 300 and 310. Disciplines of thermodynamics statistical mechanics and kinetic theory (and their applications); their unifying microscopic foundation.

454 Introduction to the Solid State of Matter (3)
Prerequisites: Physics 300 and 340. Physical properties of matter in the solid state, as explained by atomic theory. Crystal structure, thermal, electric and magnetic properties of metals, semi-conductors, band theory and solid state devices.

455 Introduction to Quantum Physics (3)
Prerequisites: Physics 300 and 340. Concepts and theory of quantum physics. Early quantum theories, the Schroedinger equation, Eigenvalue equations, operators, commutation properties, applications to simple quantum systems, angular momentum.

460T Advanced Topics in Contemporary Physics (3)
Prerequisites: upper-division standing in physics and consent of instructor and department chair. Advanced lecture course covering a field of physics of current interest not covered in other courses, such as plasma physics, superconductivity, solid state devices, fiber optics and photonics, astrophysics, subatomic physics. May be repeated for credit with a different topic.

476 Atomic/Molecular Physics (3)
Prerequisite: Physics 300 and 340. Theory of atoms and small molecules including perturbation methods. Topics include the interaction of atoms and molecules with electric and magnetic fields and electromagnetic radiation, angular momentum coupling, anti-symmetrization, and the spectroscopy of atoms and simple diatomic methods.
481 Experimental Physics (3)
Prerequisite: Physics 300 and 380. Techniques and methods of experimental physics including: use of sensors, transducers, time series, power spectra, phase sensitive detection, computer interfacing and signal conditioning. Experiments cover several areas of physics. (1 hour lecture, 6 hours laboratory). Instructional fee required.

482 Modern Optics Laboratory (3)
Prerequisites: Physics 340, 380 and 411 recommended. Experiments in optics, including Fourier optics, holography, fiber optics, diffraction, interferometry, laser physics, light scattering and optical detection, including photon counting and photographic techniques. (1 hour lecture, 6 hours laboratory). Instructional fee required.

495 Internship (1-3)
Prerequisites: junior or senior standing in physics and consent of the chair. Professional physics work in industry or government to provide an in-depth experience. Written report required. May be repeated once for credit.

496 Student-to-Student Tutorials (1-3)
Prerequisites: upper-division standing and consent of chair. Learn through teaching, increase mastery of subject matter, develop awareness of teaching problems and competence in teaching techniques. Consult “Student-to-Student Tutorials” in this catalog for more complete course description.

499 Independent Study (1-3)
Prerequisite: approval of study plan by department chair and instructor. Topic in physics, selected in consultation with and completed under the supervision of the instructor. May be repeated for credit to a maximum of six units.

510 Mathematical Physics (3)
Prerequisite: Physics 300. Advanced techniques in mathematical physics: calculus of variation, coordinate transformations, tensor analysis, special functions, series solutions of differential equations, orthogonal functions, partial differential equations, numerical techniques for the solution of differential equations, complex variables, integral transforms, probability, Monte Carlo methods.

516 Statistical Mechanics and Thermodynamics (3)

520 Analytical Mechanics (3)
Prerequisites: Physics 330 and 510. Advanced techniques for solution of problems in classical mechanics: Lagrangian and Hamiltonian formulations of the equations of motion, variation techniques, conservation theorems, canonical transformations, Hamilton-Jacobi theory, numerical techniques, selected applications.

530A Electromagnetic Theory I (3)

530B Electromagnetic Theory II (3)
Prerequisites: Physics 510 and 530A. Advanced electromagnetic theory: wave guides and cavities, radiating systems, scattering, diffraction, relativistic effects, collisions between charged particles, radiation from moving charges, multipole fields, radiation damping, absorption and radiation by sound systems.

554 Solid State Physics (3)
Prerequisites: Physics 510 and 555A. Fundamental physics of matter in solid state systems. Crystal structure, metals (Drude theory, Sommerfeld theory, band structure, semiclassical model of electron dynamics, magnetic properties, phonons in metals); semiconductors and superconductors; experimental techniques.

555A Quantum Physics I (3)

555B Quantum Physics II (3)
Prerequisites: Physics 510 and 555A. Advanced topics in quantum physics: scattering theory, electron spin, perturbation theory and applications, approximation methods for time dependent problems, systems of identical particles.

560T Advanced Topics in Contemporary Physics (3)
Prerequisites: Physics 510 and consent of the instructor. Current advances and research topics in physics, including atomic physics, quantum electrodynamics, fiber optics/ photonics. May be repeated once for credit with a different topic.

597 Project (1-3)
Planning, preparation, and completion of a project in partial fulfillment of the requirements for the master's degree. Credit to be obtained only upon formal completion of a project paper approved by the department graduate committee.

598 Thesis (1-6)
Planning, preparation and completion of an acceptable thesis in partial fulfillment of the requirements for the master's degree. Credit to be obtained only upon formal submission of thesis.

599 Independent Graduate Research (1-3)
Prerequisite: written approval of study plan by department committee and by instructor. Open only to graduate students and only with consent of a faculty member. May be repeated for credit.
INTRODUCTION

Political science is the study of people’s behavior as it relates to power and public organizations. The discipline is normally divided into six subfields:

- Political philosophy, which deals with normative questions about how power should be used and distributed, rights and obligations, the nature of justice and the ideal state
- American politics, which is concerned with campaigns and elections, parties, elected executives, legislative processes and issues of public policy
- Public administration, the role played by public employees in policy making, planning, personnel management, taxation and finance, and in responding to the needs and problems of communities and the nation
- Public law, which involves the judicial process, civil rights and liberties, and the significance of such terms as equal opportunity and due process in the United States
- Comparative government, which raises the same questions of politics, administration and law about other countries, and moves toward conclusions based on comparisons between them
- International politics, which is concerned with relations between the states and other international actors, such as multinational corporations and the United Nations and with the underlying realities of power, based on resources, wealth, military preparedness and national security

A major in political science prepares students for law school, government employment on the local, state and national levels, foreign service, teaching, business, journalism, or leadership in civic and political activities.

For pre-law students, the department provides a series of law-related courses numbered in the 370 and 470 series (see course descriptions). There is a pre-law adviser and an active Pre-law Society that enables students to make close and direct contact with the work of attorneys, judges, etc. The department is closely tied to the College Legal Clinic, which provides free legal advice for students and others who cannot afford the usual costs.

INTERNSHIPS

The department offers a variety of internships. Each one involves students working in an agency or political organization, and meeting on campus to discuss and analyze their experiences. All students are encouraged to serve an internship. Students may repeat an internship or serve two internships. Internship courses are numbered 298, 491, 492, 497 and 498 (see course descriptions).

POLITICAL SCIENCE HONORS PROGRAM

The department honors program provides an enriched learning experience for a selected group of students and encourages closer interaction between these students and faculty members in specialized fields of interest. Eligibility requires senior standing, a
major in political science, 3.0 overall grade point average and 3.25 grade point average in all political science coursework, plus recommendation for admission to the program from a faculty member in the department.

**CREDENTIAL INFORMATION**

The Bachelor’s Degree in political science may be effectively combined with subject matter studies necessary for the single subject teaching credential in social studies. Undergraduates are encouraged to work with the department adviser and/or the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation and orientation and then contact the department credential adviser.

**BACHELOR OF ARTS IN POLITICAL SCIENCE**

**Basic Requirements**

The Bachelor of Arts in Political Science requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. The major consists of 48 units: 39 units in Political Science and 9 upper-division units in related disciplines such as American studies, anthropology, criminal justice, economics, geography, history, philosophy, psychology, sociology and statistics. Work in related fields must be approved in writing by one of the department’s undergraduate advisers or the chair. Political Science 100, a graduation requirement for all students, is not part of the major, but is a prerequisite to further work in political science. No more than 12 units total may be in the lower division. In addition, nine additional adviser-approved upper-division units are required in related disciplines, such as American studies, anthropology, criminal justice, economics, geography, history, philosophy, psychology, sociology and statistics.

The following requirements apply to majors.

**Introductory Requirements (3 units)**

- Political Science 200 Introduction to the Study of Politics (3)
  - OR Political Science 201 Methods and Skills in Political Science (3)
  - OR department-approved substitute

**Political Philosophy Requirement (3 units)**

- Political Science 340 Political Philosophy (3)

**Breadth Requirements (12 units)**

Choose four of the following five:

- Political Science 310 Political Behavior and Motivation (3)
  - OR Political Science 315 Politics and Policy Making in America (3)
- Political Science 320 Introduction to Public Management and Policy (3)
- Political Science 330 Politics in Nation-States (3)
- Political Science 350 World Politics in the 21st Century (3)
  - OR Political Science 352 American Foreign Policy (3)
- Political Science 375 Law, Politics and Society (3)

**Research Methods Requirement (3 units)**

Choose one of the following:

- Political Science 321 Research in Public Management (3)
- Political Science 376 Legal Tools for Political Research (3)
- Political Science 407 Polls, Statistics and Political Interpretation (3)

**Related Fields (9 upper-division units)**

Students must complete nine approved units in related disciplines. The department maintains a list of pre-approved courses that students can obtain from an adviser, the department office or their Titan Degree Audit (TDA). Students who wish to use other courses from related disciplines should obtain the approval of a department adviser.

**Upper-Division Writing Requirement**

Political Science majors fulfill the university’s upper-division writing requirement by completing two upper-division classes specially approved for this purpose. Please check with the department office for a current list of qualifying classes.

**Electives for the Major (18 units)**

Choose six other courses in political science sufficient to achieve a total of 39 units. The upper-division writing requirement is normally fulfilled by choosing appropriate electives.

**MINOR IN INTERNATIONAL POLITICS**

The minor consists of 18 units, of which 12 must be in political science. Twelve units must apply exclusively to the minor. Political Science 100, 200, 330 and 350 are required. The remaining units must be taken from Political Science 352 or 457, Communications 426, Economics 330, Economics 335, History 485 and Political Science 331, 431T, 434, 438, 451T, 456, 461, or 476. Students who wish to specialize in a specific geographical area are encouraged to investigate the possibility of taking related units in anthropology, economics, foreign languages, geography, history and literature, etc.

**International Learning Opportunities in Political Science**

The major in political science requires the completion of courses that focus upon international relations and non-American governments, and such materials also appear in other courses. For example, learning about American political processes can be made sharper through comparisons with other nations and with the international system. Interested students may also minor in International Politics.

In addition, the department warmly encourages students to study abroad. Typically, students find it convenient to fit course credits earned at a foreign university to the CSUF major or minor in political science. An adviser can help to identify how best to do this.

**MINOR IN LAW POLITICS AND SOCIETY**

The minor requires 18 units. Course requirements include Political Science 375 Law, Politics and Society (3 units) and 15 units of electives. From the following list, students take at least one course from at least three different departments, and no more than three courses from any one department. All courses listed carry three semester units of credit:
MINOR IN POLITICAL SCIENCE

The minor is composed of 18 units in political science courses, 12 of which are upper-division political science courses. Political Science 100, a graduation requirement, counts toward the minor. Twelve units must apply exclusively to the minor.

MAJOR OF ARTS IN POLITICAL SCIENCE

The degree is designed both to enlarge and deepen the competence of political science students. It is especially planned for the professional improvement and advancement of high school and community college teachers, government employees and military personnel. It also prepares students for entering a doctoral program in political science or for law school. The M.A. program provides training and preparation for journalists, special librarians and research staff and for all people active in civic affairs and political life.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted.

In addition to the university requirements, acceptance into the major requires a grade-point average of 3.0 in the major field and in all political science courses. If the major is not in one of the social sciences, the GPA requirement also applies to upper-division social science courses taken. If a student’s GPA does not meet these criteria, the student may appeal to the department’s graduate committee for a waiver.

Normally, admission to the master’s program requires that a student possess a bachelor’s degree in political science, a minor in political science or a major in an allied social science field with a minimum of 15 units of political science courses. For those without such a background, the M.A. Coordinator may require the applicant to take a group of upper-division political science courses at the 300 and/or 400 level (not more than nine units of which will be at the 300 level) prior to admission to the program. This requirement is to assure that the student will be prepared for graduate-level work in the discipline of political science.

In addition to the above requirements, applicants need to submit a writing sample to the M.A. Political Science Coordinator.

Graduate Standing: Classified

A student admitted to conditionally classified status may apply for classified standing, which requires development of an approved study plan prior to completion of nine units. Refer to the “Graduate Regulations” section of this catalog for further information on classified standing and general study plan requirements.

STUDY PLAN

Each candidate for a degree should, in consultation with the graduate adviser, arrange for the appointment of a graduate committee, composed of three faculty members, one of whom will serve as chair. This committee will approve the study plan, conduct the examination(s) and supervise the thesis if the student chooses that option.

As a requirement for admission to classified standing, the student, in cooperation with the graduate program adviser, must develop a study plan of 30 units of coursework:

1. 15 units of required seminar work in political science. Students are required to take a minimum of one seminar each semester until completion of the entire sequence.

Scope and Theory of Political Science

Political Science 540 Seminar Readings in Political Philosophy (3)
Political Science 541 Seminar in Contemporary Political Theory (3)

American Politics/Public Affairs

Political Science 511 Seminar in American Politics (3)
Political Science 519 State and Local Government (3)

OR Political Science 509 Administrative Organization and Process (3)
OR Political Science 525 Seminar in Metropolitan Area Government (3)
OR Political Science 528 Seminar in Public Administration and Policy (3)

Cross-National Politics

Political Science 530 Seminar in Cross-National Politics (3)
OR Political Science 551 Seminar in Theories of International Relations (3)

2. Adviser-approved 400- and 500-level elective coursework in political science (9-15 units). These will normally be classes in a student’s chosen area of specialization. They may include, where appropriate, 599 Independent Graduate Research (6 units maximum).

No more than nine units taken prior to classified standing may be applied to a student’s study plan. No more than nine units taken at another institution may be transferred, and these must be approved by the adviser, committee and Office of Graduate Studies.

3. Culminating Experience (0-6)

Political Science 597 Project (3-6)
OR Political Science 598 Thesis (3-6)
OR Comprehensive Exam (0)
Research Skills
Each candidate must demonstrate one of the following:
1. Reading knowledge of a foreign language. Students must complete this requirement by passing an examination.
2. Proficiency in quantitative research skills, including data analysis and research design as demonstrated by successful completion of Political Science 407 Polls, Statistics and Political Interpretation, or its equivalent.

Culminating Experience Requirements for the M.A. in Political Science
Students select one of the following three options to complete the program, after consulting with the program adviser.
1. Comprehensive written and oral exams in: (a) the scope and theory of political science; (b) American politics/public affairs; and (c) cross-national politics. All three sections must be successfully completed or the entire examination must be retaken. The examination has a written and an oral component. A student who does not pass the written portion is ineligible to take the oral component. The examinations may be retaken only once after an initial failure.
2. A thesis completed in accord with university regulations on theses, to include an oral defense. This option may be especially desirable for students planning on further graduate work at the doctoral level. Students selecting this option may take up to six units in thesis credit.
3. Completion and oral defense of a project, including a required oral defense and possible class presentations depending on the project topic. Students selecting this option may take up to six units of credit associated with completion of the project. The project option is intended for students interested in community college teaching or in working in practical politics.

For advisement and further information, consult the M.A. in Political Science adviser.

POLITICAL SCIENCE COURSES
Courses are designated as POSC in the class schedule. Political Science 100 or its equivalent is the prerequisite for all upper-division political science courses. Prerequisites may be waived only with consent of instructor.

100 American Government (3)
People, their politics, and power; contemporary issues, changing political styles and processes, institution and underlying values of the American political system. Satisfies state requirements in U.S. Constitution and California State and local government. One or more sections offered online.

200 Introduction to the Study of Politics (3)
Introduction to the study of politics in general, not simply American politics. Explores the many faces of politics all over the world, examining its relationship to morality, culture, economics, justice and international affairs both theoretically and practically.

201 Methods and Skills in Political Science (3)
Pre-corequisite: Poli Sci 100. Basic skills and methods for Political Science majors, including framing and clarifying research questions, using and assessing research resources, and the use and assessment of qualitative and quantitative methods of research.

298 Political Externship (3)
Politics for the non-major or beginning political science student. Work in campaigns or offices of elected public officials; supervision by faculty and cooperating agency; seminars and individual conferences. May be repeated once.

300 Contemporary Issues in California Government and Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. Political process in state and local institutions; crisis in the cities, flight to the suburbs and race relations. Comparisons will be made with other states and their subdivisions. Satisfies state requirement in California state and local government.

309 Introduction to Metropolitan Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. Inner city and suburbia. Political processes: power in the city, the urban-suburban relationship, political fragmentation and the national government in urban areas.

310 Political Behavior and Motivation (3)
Prerequisite: Poli Sci 100 or its equivalent. Analyzes issues and divisions in American politics. Focus on race, class, ideology and party.

312 Contemporary Issues in Conflict (3)
Prerequisite: Poli Sci 100 or its equivalent. Through opinionated debate and discussion between two professors with opposing viewpoints, explore current conflicts in federal and state elections, as well as other public issues. Open discussion encouraged.

315 Politics and Policy Making in America (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of General Education (G.E.) Category III.C.1. Federal domestic policy making. Structure, functions and relationships among American national institutions, including executive, legislative and judicial branches, media, political parties and pressure groups.

317 Black Politics (3)
(Same as Afro-Ethnic 317)

320 Introduction to Public Management and Policy (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of G. E. Category III.C.1. Introduction to the field of public administration. Current trends and problems of public sector agencies in such areas as organization behavior, public budgeting, personnel, planning and policy making. Emphasized examples and cases from the Criminal Justice field. (Same as Criminal Justice 320)
321 Research in Public Management (3)
Prerequisite: Poli Sci 100 or its equivalent and Poli Sci 320 (may be taken concurrently). Research concepts, computer applications and information management applied to public administration and policy analysis. Instructional fee.

322 Leadership for Public Service (3)
Prerequisites: Poli Sci 100 or its equivalent, Poli Sci 200, or other course that fulfills G.E. Category III.C.1. Conceptions of leadership as applied in governmental and nonprofit sectors. Types of leader; tools for leaders; leadership in public policy-making settings. Includes student project and extend leadership concepts; participation in CSUF Student Leadership Institute or similar activity. (Same as Criminal Justice 322)

330 Politics in Nation-States (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of G.E. Category III.C.1. Compares patterns of political behavior and interaction in various political systems.

331 Third World Politics Through Literature (3)
Prerequisite: Poli Sci 100 or its equivalent. Comparative political life and circumstances of developing countries as depicted in their literature. In this literature we see the political problems, cultural underpinnings and governmental structures as they affect Third World peoples in their struggle to survive and grow.

340 Political Philosophy (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of the G.E. Category III.B.2. Major thinkers in the Western tradition of political philosophy from Plato to the present; the principal concepts and theories.

350 World Politics in the 21st Century (3)
Prerequisites: Poli Sci 100 or its equivalent. Political relationships among governments and other participants within the global system: internal and external factors influencing foreign policies of the great powers, their allies and minor powers; role of non-state actors such as the United Nations, multinational corporations and liberation movements.

352 American Foreign Policy (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of G.E. Category III.C.1. United States foreign policy since World War II. Institutions and bureaucracies of foreign policy decision making, military and national security policy, domestic sources of foreign policy.

361 Model United Nations (3)
Prerequisites: Poli Sci 100 or its equivalent and prior MUN experience. A practical decision-making course where students participate in the national MUN conference in New York and others in California. Current politics in the UN and delegate preparation with emphasis on the art of lobbying, negotiation, bargaining and diplomacy.

375 Law, Politics and Society (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of G.E. Category III.C.1. Law as emergent from political processes, rooted within social norms and communities. Law as a feature of the modern state, a tool for seeking advantage, domination and/or liberation. An overview of legislative, judicial, administrative and other political processes that produce law.

376 Legal Tools for Political Research (3)
Prerequisites: Poli Sci 100 or its equivalent and Political Science 375 (may be taken concurrently). Research concepts, techniques and legal tools applied to an individual research project in public law. Useful pre-law course.

381 Religion and Politics in the United States (3)
(Same as Comp Religion 381)

403 Politics and Policy in Sacramento (3)
Prerequisites: Poli Sci 100 or its equivalent and completion of G.E. Category III.C.1. Nature of policy making in California’s state capital. Persistent policy themes and constraints; current issues in education policy. Required three-day trip to Sacramento for seminars and policy briefings. Class times prior to Sacramento visit may vary.

404 Capital Punishment (3)
(Same as Criminal Justice 404)

405 Campaigns and Elections (3)
Prerequisite: Poli Sci 100 or its equivalent. Modern political campaigns in America focusing on new types of candidates and electoral organizations; money, media and consultants; and methods of predicting and interpreting election results.

407 Polls, Statistics and Political Interpretation (3)
Prerequisite: Poli Sci 100 or its equivalent. Quantitative research methods in political science. Introduction to research design and statistical measures employed in analyzing social science research data.

408 The Politics of Los Angeles (3)
Prerequisite: Poli Sci 100 or its equivalent. Politics in Los Angeles, with special attention to race, class, ethnicity and power. Comparative view places Los Angeles in big-city politics and in global perspective.

410 Political Parties (3)
Prerequisite: Poli Sci 100 or its equivalent. Structure and methods by which the political parties operate in the American political system with some comparisons to their structure and operation in other democratic societies.

411 Art of Administration (3)
Prerequisite: Poli Sci 100 or its equivalent. Public administration as “art” rather than “science.” Administrative novels and other fictional literature, and other audio-visual media.
412 Practicing Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. Politics as practiced and understood by practitioners of the art. A seminar that features guest lecturers and focuses on electoral politics.

416 Presidents and the Presidency (3)
Prerequisite: Poli Sci 100 or its equivalent. Presidential power, the resources on which that power is based and the limitations on the use of that power. Relations between the President and Congress, the bureaucracy, the press and the public.

417 Film and Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. American politics from the 1920s to the present as seen through eyes of film-makers. Besides viewing films, students will read material relevant to films and write several papers linking film themes to the literature of American politics.

421 Government and the Economy (3)

422 Human Resources Management (3)
Prerequisite: Poli Sci 320. Civil service and the merit system; recruitment procedures and examinations; position classification, salary structures, retirement plans, in-service training, employee organizations and personnel supervision. Examples and cases from the Criminal Justice field emphasized. Emphasis on themes and topics from Criminal Justice. (Same as Criminal Justice 422)

423 Gender Issues in Public Management (3)
Prerequisite: Poli Sci 320. Disparities in public employment related to gender, including leadership, mentoring, recruitment, training, decision-making and discrimination. Attention to topics of current interest, including "sticky floors and glass ceilings," comparable worth and diversity.

427 Policy-Making: Urban/Metropolitan Issues (3)
Prerequisite: Poli Sci 100 or its equivalent. Policy issues and alternatives in urban and metropolitan problem areas, such as law enforcement, transportation, housing or poverty.

431T Government and Politics of a Selected Area (3)
Prerequisite: Poli Sci 100 or its equivalent. A systematic analysis of individual nation-states set against the backdrop of history, culture and economic circumstances in each case. May be repeated for credit.

434 The Asia-Pacific in World Affairs (3)
Prerequisite: Poli Sci 100 or its equivalent. Comparison of the politics of Japan and China illuminates both similarities and differences in the premises, processes and policies of these two Asian giants.

437 Latin American Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. Systematic analysis of government and politics in selected Latin American states. Considers democratization, state structures, relation of politics to economics and alternative theories and approaches to comparative political analysis as applied to a region marked by ethnic and racial diversity.

438 Western European Democracies (3)
Prerequisite: Poli Sci 100 or its equivalent. Comparative study of the government and politics of Western European democracies, including their cooperation within the European Union. Domestic as well as foreign policies will be analyzed.

442T Problems in Political Philosophy (3)
Prerequisite: Poli Sci 340 or 341 or its equivalent. Current issues and problems in political philosophy in the context of major global events and trends. See department for exact title and topics in a given semester. May be repeated for credit.

445 Globalization, Justice and Democracy (3)

446 Corruption, Ethics and Public Policy (3)
Prerequisite: Poli Sci 100 or its equivalent. Ethical problems that face persons in the public service. Focuses on practical decision-making.

448 Media and Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. Structure and influence of the media in campaigns and government. Key topics include: the relationship between media and politicians; the use of campaign advertising; and the stature and limits of investigative journalism.

451T Problems in International Politics (3)
Prerequisite: Poli Sci 100 or its equivalent. Selected problems in contemporary world politics. Topics include international responses to terrorism, China in international affairs, U.S. grand strategy after the Cold War and 9/11. May be repeated for credit.

456 The National Security Establishment (3)
Prerequisite: Poli Sci 100 or its equivalent. Conflicting theories of national security, the functions of defense and intelligence bureaucracies in foreign and domestic policy making, problems of arms control and the dangers to democratic values and institutions posed by the technology of national security.

457 Politics of International Economics (3)
Prerequisite: Poli Sci 100 or its equivalent. Link between economics and international politics. Political economy of free trade and imperialism, of neo-colonialism and foreign aid.
460 The Chicano and Politics (3)
   (Same as Chicanas/o 460)

461 The United Nations and International Organizations (3)
   Prerequisite: Poli Sci 100 or its equivalent. Structure, functions and political processes of the United Nations, various specialized organizations such as the World Bank and regional organizations such as the European Community.

472 The Judicial Process (3)
   Prerequisite: Criminal Justice 300 or Poli Sci 375. Nature, functions and roles of courts. Roles of major participants in the American legal system, including judges, attorneys and citizens. Administration of justice as a system. (Same as Criminal Justice 472)

473 Introduction to Constitutional Law (3)
   Prerequisite: Poli Sci 100 or its equivalent. Role of the courts, presidency, Congress and states within the U.S. constitutional system. Topics include judicial review, presidential impoundment and impeachment, presidential foreign and military powers, regulation of the economy and public morals and congressional investigations.

474 Civil Liberties (3)
   Prerequisite: Poli Sci 100 or its equivalent. Political analysis of case studies in constitutional rights and liberties with particular attention to relationships between the individual and government under the Bill of Rights and the 14th Amendment. Topics include economic regulation, criminal justice, privacy, gender and racial discrimination.

475 Administrative Law (3)
   Prerequisite: Poli Sci 100 or its equivalent. Law as it affects public officials and agencies in their relations with private citizens and the business community. Case materials and regulatory practices.

476 International Law (3)
   Prerequisite: Poli Sci 100 or its equivalent. Introduces the fundamentals or building blocks of international law and covers other selected topics that are traditionally identified as part of public international law.

478 Urban Planning Principles (3)
   (Same as Geography 478)

484 Urban Planning Methods (3)
   (Same as Geography 484)

485 Women and Politics (3)
   Prerequisite: Poli Sci 100 or its equivalent. Changing political environment and women's role in elected, appointed and other public agencies; issues of particular concern to women, including family issues, comparable worth and other economic issues and political participation. Not applicable for graduate degree credit. (Same as Women's Studies 485)

492 Prelaw Internship (3)
   Prerequisite: Poli Sci 100 or its equivalent. Acquaints students with the legal profession. A supervised working commitment of eight hours weekly with an assigned individual or organization. (Same as Criminal Justice 492)

493 Teaching Internship (3)
   Prerequisites: completion of 27 units of Political Science. Integrative overview of American government or of the discipline of Political Science. Classroom instructional activities in freshman and sophomore introductory classes under faculty supervision. Designed for students interested in teaching government/political science.

494 Honors Tutorial in Politics (1)
   Prerequisites: Poli Sci 100 or its equivalent, senior standing and admission to Honors in Political Science. This is the core course for the Honors in Political Science program. Attendance at presentations by political scientists and critiques thereof. The culminating research for the Honors work will be presented in the tutorial.

497 Internship in Public Administration (3)
   Prerequisites: Political Science 320 or 509. Students work 12-20 hours per week as supervised interns in a public agency. Supervision by the faculty and cooperating agency. In addition, a weekly seminar.

498 Internship in Politics (3)
   Prerequisites: Poli Sci 100 or its equivalent, political science concentration and consent of instructor. Students work 8-12 hours per week with elected officials or candidates for elective office. Individual supervision by the faculty and cooperating individuals. Interns meet with instructor by arrangement. May be repeated for credit.

499 Independent Study (1-3)
   Prerequisite: open to advanced students in political science with consent of department chair.

503 Aging and Public Policy (3)
   (Same as Gerontology 503 and Sociology 503)

509 Administrative Organization and Process (3)
   For graduate students in public administration who have not had an introductory course in public administration. Organizational theory and practice, decision-making, systems analysis, performance evaluation and administrative improvement.

511 Seminar in American Politics (3)
   Prerequisite: consent of instructor. The political process in the United States.

519 State and Local Government (3)
   Structure, processes, functions and interrelationships of state and local governments in American society. State, county, municipal and special district government in California as compared with other states.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisite/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>521</td>
<td>Seminar in Public Administration Theory (3)</td>
<td>Concepts, models and ideologies of public administration within the larger political system. Course restricted to students in their final six units of graduate work.</td>
</tr>
<tr>
<td>522</td>
<td>Seminar in Public Personnel Administration (3)</td>
<td>Topics in public personnel administration.</td>
</tr>
<tr>
<td>523</td>
<td>Administrative Research and Analysis (3)</td>
<td>Conceptual methods employed in administrative research and analysis: Organization and procedure of surveys, performance evaluation, social impact assessment, computer data analysis and report writing.</td>
</tr>
<tr>
<td>525</td>
<td>Seminar in Metropolitan Area Government (3)</td>
<td>Prerequisites: a course in basic statistics and Poli Sci 320 or 509. Political and policy issues facing metropolitan America, and the capacity of governmental institutions to handle urban problems.</td>
</tr>
<tr>
<td>526</td>
<td>Administration and Systems Management (3)</td>
<td>(Same as Gerontology 526).</td>
</tr>
<tr>
<td>528</td>
<td>Seminar in Public Administration and Policy (3)</td>
<td>Interplay between public policy and program administration in federal government. Discussion of administrators’ role in policy development, administrative discretion in implementing policy, use of political resources by administrators.</td>
</tr>
<tr>
<td>529</td>
<td>Seminar in Public Management Analysis (3)</td>
<td>Application of quantitative techniques to management and planning of public organizations. Topics include network analysis, capacity management, management information systems, productivity measurement, forecasting, cost-benefit analysis, simulation and marketing.</td>
</tr>
<tr>
<td>530</td>
<td>Seminar in Cross-National Politics (3)</td>
<td>Integration of international relations and comparative politics, emphasizing the interdependence of nations and non-state actors in the world political system.</td>
</tr>
<tr>
<td>534</td>
<td>POLITICAL SCIENCE</td>
<td></td>
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<tr>
<td>540</td>
<td>Seminar in Political Philosophies (3)</td>
<td>Foundations of contemporary political science through readings in the classics of political philosophy.</td>
</tr>
<tr>
<td>541</td>
<td>Seminar in Contemporary Political Theory (3)</td>
<td>Analysis of contemporary trends in the study of politics. Emphasizes behavioral political science, criticisms of it and current empirical approaches to the study of politics.</td>
</tr>
<tr>
<td>551</td>
<td>Seminar in Theories of International Relations (3)</td>
<td>Prerequisite: graduate student status. Introduction to theories of international relations, including theories of the balance of power, deterrence, arms races, alliances, international organizations, globalization and human rights.</td>
</tr>
<tr>
<td>560</td>
<td>Seminar in Administration of Justice (3)</td>
<td>Development and evaluation of judicial and police administration. Analyzes criminal justice policies, identification of researchable issues and examination of empirical research in the field. Unique properties of criminal justice management compared with public management generally.</td>
</tr>
<tr>
<td>571</td>
<td>Seminar in Public Finance (3)</td>
<td>Prerequisite: Poli Sci 509. Surveys state and local budgeting and taxes. Local financial management and cost benefit analysis. Emphasizes local government in Southern California.</td>
</tr>
<tr>
<td>572</td>
<td>Seminar in Public Sector Human Resource Management (3)</td>
<td>Students who have taken Poli Sci 422 for credit on study plan may not also take this course as part of study plan. Political and legal environments of public personnel management, the general and career civil services and political appointment system and introduces students to such personnel functions as selection, position classification, performance evaluation and compensation.</td>
</tr>
<tr>
<td>573</td>
<td>Emergency Management in Public Administration (3)</td>
<td>Comprehensive review of the state-of-the-art in prevention, warning, evacuation, rescue and recovery systems. Development of public policy relating to land use planning, recovery and issues of liability; intergovernmental relations and effective planning.</td>
</tr>
<tr>
<td>582</td>
<td>Organizational Development and Change (3)</td>
<td>Prerequisite: Poli Sci 509 or 526. Perspectives and theories on organization change and development. Students will be introduced to a variety of concept skills and tools necessary to achieve organizational goals, deal with change and become a successful change agent. (Same as Management 582).</td>
</tr>
<tr>
<td>580</td>
<td>Selected Topics in Political Science (3)</td>
<td>Detailed examination of a selected new or developing area of political science. Emphasizes relevant literature and preparation and presentation of research papers. May be repeated for credit when covering a different topic.</td>
</tr>
<tr>
<td>590T</td>
<td>Project (3-6)</td>
<td>Prerequisites: consent of instructor and graduate adviser. Culminating experience option for graduate students involving a significant undertaking focusing on applied work related to the student’s interests, to be based on a combination of written work, creation of appropriate professional materials and presentations, to include a formal oral defense. May be repeated for maximum of 6 credit units.</td>
</tr>
<tr>
<td>597</td>
<td>Thesis (3-6)</td>
<td>Prerequisite: consent of instructor.</td>
</tr>
<tr>
<td>598</td>
<td>Independent Graduate Research (1-3)</td>
<td>Prerequisite: consent of department chair. To be taken only after or concurrent with the completion of the required 15 units of graduate seminars.</td>
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</tbody>
</table>
INTRODUCTION

Psychology is a science whose central theme is the study of behavior. Psychology involves studying how we interact with one another and our environment. Psychology is practical; it is concerned with improving our quality of life. To achieve these ends, psychologists work in a broad range of research and applied settings. The psychology major is designed to provide each student with a comprehensive overview of the main fields of psychology and the methods used in psychological research. The major is also designed to assist the student in selecting elective courses that can form a concentration in an area of the student’s interest. These specialty areas might include clinical/community, social, developmental/child/aging, industrial/organizational, learning/cognitive, biopsychology/health psychology and legal/forensic psychology. The major provides a basis for careers in a variety of psychology-related occupations, such as mental health agencies, hospitals, schools, businesses and public organizations. The major also prepares students for graduate training in fields such as psychological research; clinical psychology; marriage, family therapy; teaching; social work; law; business and management; and public administration. The Psychology Department has its own web pages (http://hss.fullerton.edu/psychology) that introduce you to faculty members, describe courses and answer your questions. You may also call the Psychology Department at 657-278-3514.

All students who declare psychology as their major should meet with one of the undergraduate advisement coordinators (Humanities 830J, 657-278-3102) during their first semester to develop a study plan. Students should also obtain a copy of the Psychology Department Student Handbook and Careers for Psychology Majors from the department office. Early consultation with an adviser is especially important for those interested in pursuing graduate training, careers in psychology or related fields, teaching credentials or a double major or minor.

Community College Transfer Students: A maximum of nine lower-division units of psychology courses may be applied toward the 41 units required for the psychology major. The nine units must fit the course description requirements listed in this catalog for Psychology 101, 201 and 202. Additional lower-division units taken in psychology at a community college and approved by the university may be used for university credit for graduation.

TEACHING CREDENTIAL INFORMATION

The bachelor’s degree in psychology may be effectively combined with subject matter studies necessary for the multiple subject teaching credential (K-8). Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. With careful planning, it may be possible to enter the credential program in the senior year of the bachelor’s degree. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation.

DEPARTMENT CHAIR
Jack Mearns

DEPARTMENT OFFICE
Humanities 830M

DEPARTMENT WEBSITE
http://hss.fullerton.edu/psychology

ADVISEMENT OFFICE
Humanities 830J

OFFICE OF GRADUATE DEGREES AND UNDERGRADUATE PROGRAMS
Humanities 835N

PROGRAMS OFFERED
Bachelor of Arts in Psychology
Minor in Psychology
Master of Arts in Psychology
Master of Science in Psychology (Clinical)

FACULTY
Kristin Beals, Michael Birnbaum, Melinda Blackman, Iris Blandon-Gitlin, Barbara Cherry, Russ Espinoza, David Gerkens, Aaron Goetz, Allen Gottfried, Jinni Harrigan, Richard Lippa, William Marelich, Jack Mearns, Mindy Mechanic, Steven Miller, Eriko Miyahara, Lisa Mori, Douglas Navarick, Jessie Peissig, Nancy Ryba, Christine Scher, Nancy Segal, Susan Sy, Jennifer Trevitt, Laura Zettel-Watson

ADVISERS
Undergraduate: Kristin Beals, Melinda Blackman, Eriko Miyahara, Christine Scher, Joanne Stohs
MA Coordinator: Melinda Blackman
MS Coordinator: Christine Scher
**BACHELOR OF ARTS IN PSYCHOLOGY**

The Bachelor of Arts in Psychology requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives.

**Lower Division (9 units)**
- Psychology 101 Introductory Psychology (3)
- Psychology 201 Elementary Statistics (3)
- Psychology 202 Research Methods in Psychology (3)

**Upper Division (32 units)**

*Required Courses (26 units)*

Two of the following experimental psychology courses (6 units):
- Psychology 302 Learning and Memory (3)
- Psychology 303 Sensation and Perception (3)
- Psychology 304 Comparative Animal Behavior (3)
- Psychology 305 Cognitive Psychology (3)
- Psychology 306 Biopsychology (3)

One of the following laboratory classes (2 units):
- Psychology 302L Laboratory in Learning and Memory (2)
- Psychology 303L Laboratory in Sensation and Perception (2)
- Psychology 304L Laboratory in Comparative Animal Behavior (2)
- Psychology 305L Laboratory in Cognitive Psychology (2)
- Psychology 306L Laboratory in Biopsychology (2)

Two of the following (6 units):
- Psychology 331 Psychology of Personality (3)
- Psychology 341 Abnormal Psychology (3)
- Psychology 351 Social Psychology (3)
- Psychology 361 Developmental Psychology (3)

One of the following (3 units):
- Psychology 311 Educational Psychology (3)
- Psychology 317 Legal Psychology (3)
- Psychology 362 Psychology of Aging (3)
- Psychology 391 Industrial/Organizational Psychology (3)

All of the following (9 units):
- Psychology 300 Computer Applications in Psychology (3)
- Psychology 461 Psychological Testing (3)
- Psychology 495 Field Placement in Psychology (3)

**Elective 300- and 400-Level Courses (6 units)**

To correspond to your career goals and interests, a wide range of 300- and 400-level elective courses is available. These elective courses should be selected in consultation with a psychology department academic adviser.

One 300- or 400-level elective in Psychology (3)
One 400-level elective, excluding Psychology 461, 495, and 496 (3)

**Special Requirements**

Each course counted toward the major must be completed with a grade of “C” (2.0) or higher. In addition, the overall minimum GPA must be 2.0 or greater for all units attempted in Psychology courses whether the course is counted toward the major or not; whether upper or lower division; or whether taken at Cal State Fullerton or elsewhere. No more than a total of three units of either Directed Empirical Research (Psychology 498) or Directed Library Research (Psychology 499) may be applied toward the major. No more than three units of Field Placement (Psychology 495) may be applied toward the major. Student-to-Student Tutorial (Psychology 496) may not be used toward the major, but three units of this course may be counted toward units to graduate from the university. A minimum of 21 units counted toward the major must have been completed in psychology at CSUF.

**Upper-Division Writing Requirement**

To satisfy the course component of the University’s Upper-Division Writing Requirement, psychology majors must complete with at least a “C” (2.0), three courses totaling eight units. These same courses satisfy a portion of the requirements for the major.

Two of the following lecture/discussion courses:
- Psychology 302 Learning and Memory (3)
- Psychology 303 Sensation and Perception (3)
- Psychology 304 Comparative Animal Behavior (3)
- Psychology 305 Cognitive Psychology (3)
- Psychology 306 Biopsychology (3)

One of the following lab courses:
- Psychology 302L Laboratory in Learning and Memory (2)
- Psychology 303L Laboratory in Sensation and Perception (2)
- Psychology 304L Laboratory in Comparative Animal Behavior (2)
- Psychology 305L Laboratory in Cognitive Psychology (2)
- Psychology 306L Laboratory in Biopsychology (2)

**MINOR IN PSYCHOLOGY**

**Lower Division (9 units)**
- Psychology 101 Introductory Psychology (3)
- Psychology 201 Elementary Statistics (3)
- Psychology 202 Research Methods in Psychology (3)

**Upper Division (6 units)**

One of the following (3 units):
- Psychology 302 Learning and Memory (3)
- Psychology 303 Sensation and Perception (3)
- Psychology 304 Comparative Animal Behavior (3)
- Psychology 305 Cognitive Psychology (3)
- Psychology 306 Biopsychology (3)
One of the following (3 units):
Psychology 331 Psychology of Personality (3)
Psychology 341 Abnormal Psychology (3)
Psychology 351 Social Psychology (3)
Psychology 361 Developmental Psychology (3)

Electives (6 units)

*Students who complete Psychology 201, or who have completed an articulated community college equivalent, take 6 units of upper-division electives. Alternatively, students may substitute for Psychology 201 a similar course in their major that is approved by the Psychology Department and take 9 units of upper-division electives.

Special Requirements

Each course counted toward the minor must be completed with a grade of “C” (2.0) or higher. No more than a total of three units of either Directed Empirical Research (Psychology 498) or Directed Library Research (Psychology 499) may be applied toward the minor. Student-to-Student Tutorial (Psychology 496) may not be used toward the minor, but three units of this course may be counted toward units to graduate from the university. A minimum of 12 units counted toward the minor must have been completed in psychology at CSUF.

Other Minors

The Psychology Department participates in minors in Criminal Justice, Child and Adolescent Studies, Gerontology, Human Services and Women's Studies. Some coursework may be applied to both the Psychology major and the minor. Twelve units in a minor must be distinct and different from those in the Psychology major, so, in a 21-unit minor, nine units of Psychology may be double counted to satisfy requirements in both the major and the minor.

MASTER OF ARTS IN PSYCHOLOGY

The degree program provides advanced coursework and research training in core areas of psychology. Completion of the M.A. can facilitate application to doctoral programs and provide skills important to careers in education, research, the health professions and industry.

Admission to Graduate Standing: Classified

An applicant who meets the requirements listed below, in conjunction with the development of an approved study plan, may be evaluated for classified graduate standing.

1. Satisfaction of the general prerequisites for graduate studies, which include a baccalaureate degree from a regionally accredited institution and a grade point average of at least 2.5 in the last 60 semester units attempted. Applicants are rarely admitted with less than a 3.0 overall grade-point average.
2. A 3.0 average in psychology coursework.
3. Approved lower-division equivalent courses in psychology:
   a. Introductory Psychology (e.g., Psychology 101)
   b. Elementary Statistics (e.g., Psychology 201)
   c. Research Methods in Psychology (e.g., Psychology 202)
4. Approved upper-division equivalent coursework including classes in history of psychology (e.g., Psychology 408), with a grade of “B-” (2.7) or better (if history of psychology is not completed prior to entering the program it may be completed during the program); and advanced statistics (e.g., Psychology 465), with a grade of “B-” (2.7) or better, completed prior to entering or within the first semester. Also four additional psychology classes completed from the areas below; classes must be from four different areas and one must be a lab class:
   a. Learning and Memory
   b. Cognition/Information Processing
   c. Sensation and Perception/Physiological/Biological
   d. Social/Personality
   e. Abnormal/Clinical
   f. Developmental
5. Satisfactory performance in the General (Verbal, Quantitative, Analytical) and Advanced Subject/Psychology tests of the Graduate Record Examination (GRE).
6. Three satisfactory letters of recommendation. One must be from a psychology professor.
7. Meet the University’s Writing Proficiency Requirement.
8. Supervised empirical research experience.

Invitation to the program is based on competitive evaluation of qualifications and is at the sole discretion of the Psychology Department’s Graduate Studies Committee. New students are admitted to the Master of Arts program in the fall only. Both the university and department applications must be completed on time for full consideration.

The deadline for completing online applications to the university is March 1 (see http://www.csumentor.edu). University deadlines may be changed based on enrollment projections.

Departmental application forms may be obtained from http://hss.fullerton.edu/psychology/masterofarts.asp. The deadline for the return of the departmental application form and all supporting materials is March 1.

Admission to Graduate Standing: Conditionally Classified

It may be possible for an applicant with minimal deficiencies in prerequisite requirements, but who is otherwise highly qualified, to be admitted conditionally to the program. Provisions for the removal of these deficiencies would be outlined as part of the conditional acceptance. Provisions must be made for removal of deficiencies prior to granting classified standing. For further information, consult the graduate program advisor.
Study Plan

The Master of Arts in Psychology requires a minimum of 30 units of approved graduate work, including the completion and acceptance by the department of a written thesis that has been defended orally.

Each student, in consultation with the graduate coordinator, will develop a program of study. This program will be outlined on an official university study plan form and submitted to the department's Graduate Studies Committee for review and approval. To be advanced to candidacy, students must receive a grade of "B-" (2.7) or better on all study plan courses and maintain a 3.0 grade point average overall.

Requirements for the M.A. in Psychology include the following:

500-Level Courses (15 units)
Psychology 500 Issues and Perspectives in Psychological Research (3)
Psychology 510 Experimental Design (3)
Psychology 599 Independent Graduate Research (3)
Two seminars from Psychology 520T Advanced Topics in Psychological Research (3,3)

400-level Content Courses (9-12 units)
Three 400-level psychology classes must be completed, each from a separate category:

- Applied Research
- Cognitive
- Social/Personality/Industrial
- Clinical
- Developmental
- Quantitative
- Sensory Processes/Physiological/Biological

*A list of qualifying classes for each category is available from the psychology graduate office.

Thesis (3-6 units)
Psychology 598 Thesis Research (3 or 3/3 units)

Students must complete Psychology 500 within their first semester in the program. To be advanced to candidacy for the M.A. degree, students must have received a grade of "B-" (2.7) or better in all study plan classes and maintain a 3.0 grade-point average overall. A successful oral defense of the thesis is also required.

Following university regulations, a maximum of five years is normally allowed for completion of coursework and other requirements.

For further details, contact the Graduate Program office in the Department of Psychology.

MASTER OF SCIENCE IN PSYCHOLOGY (CLINICAL)

The Master of Science program combines training in scientific and applied areas of clinical psychology. It is based on the scientist-practitioner model. It prepares students for professional work in a variety of settings and for doctoral training in academic and professional programs in clinical psychology. The M.S. program provides supervised research and clinical fieldwork experience. Completion of the coursework prepares the student for Marriage, Family Therapy (MFT) intern registration. A small amount of additional coursework must be taken to qualify the student for the MFT license.

Admission to Graduate Standing: Classified

An applicant who meets the following requirements may be considered for classified graduate standing upon development of an approved study plan:

1. Satisfaction of the general prerequisites for graduate work, which include a baccalaureate degree from a regionally accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. Applicants are rarely admitted with less than a 3.0 overall grade-point average. (See section of this catalog on Graduate Admissions for complete statement and procedures.)
2. A 3.0 average in psychology
3. A major in psychology* or approved equivalent coursework including the following courses:

   **Lower Division**
   Psychology 101 Introductory Psychology
   Psychology 201 Elementary Statistics
   Psychology 202 Research Methods in Psychology*

   **Upper Division**
   Psychology 306 Biopsychology
   Psychology 341 Abnormal Psychology*
   Psychology 461 Psychological Testing with a grade of B- (2.7) or better* (completed prior to admission or within the first semester)
   Psychology 465 Advanced Psychological Statistics with a grade of B- (2.7) or better * (completed prior to admission or within the first year)

4. Satisfactory performance on both the General and Advanced Psychology Tests of the Graduate Record Examination
5. Three satisfactory letters of recommendation
6. Meeting the university’s Writing Proficiency Requirement
7. Previous paid or volunteer clinical and research experience
8. Completion of a selection interview

New students are admitted to the Master of Science program in the fall only. Those admitted will be selected in the spring from the most qualified applicants, at the sole discretion of the department’s Graduate Studies Committee. An interview of the finalists is required. In addition to the university application, a departmental application form, obtainable at http://hss.fullerton.edu/psychology/masterofscience.asp, must be completed.
Admission to Graduate Standing: Conditionally Classified

It may be possible for applicants who have minimal deficiencies in the prerequisite requirements detailed above, but who are otherwise highly qualified, to be admitted with conditionally classified graduate standing. Provisions must be made for removal of deficiencies prior to the granting of classified standing. For further information, consult the graduate program adviser.

Study Plan

The Master of Science in Psychology requires 50 units of approved graduate work, including the completion and acceptance by the department of a written thesis, which has been defended orally.

Students, in consultation with their program adviser, shall develop a study plan that will be submitted to the Graduate Studies Committee of the Department of Psychology for approval. To be advanced to candidacy, students must receive a grade of "B-" (2.7) or better on all study plan courses and maintain a 3.0 grade point average overall.

Core Courses (10 units)

Psychology 501 Professional and Legal Issues in Clinical Psychology (3)**
Psychology 510 Research Design (3)
Psychology 520T Advanced Topics in Psychological Research (3)
Psychology 599 Independent Graduate Research (1)

Clinical Courses (28 units)

Psychology 545 Advanced Psychopathology (3)**
Psychology 547 Theories of Psychological Intervention (3)**
Psychology 548 Psychotherapy Techniques (3)**
Psychology 549 Marriage, Family and Child Therapy (3)**
Psychology 560 Child and Adolescent Treatment (3)**
Psychology 561 Clinical Psychological Assessment (3)**
Psychology 568 Substance Abuse (1)**
Psychology 569 Cross Cultural Psychology (3)**
Psychology 594A Fieldwork (3)**
Psychology 594B Fieldwork (3)**

Electives (6 units)

Elective coursework must be approved by the Graduate Program Coordinator.

Thesis (6 units)

Psychology 598 Thesis Research (6)

The M.S. Program accepts full-time students only. Part-time study is not possible. Students must complete coursework in the prescribed sequence. The program involves intensive fieldwork experience in clinical settings, emphasizing careful supervision, which includes weekly meetings with Psychology Department faculty and off-campus fieldwork supervisors.

The Psychology Department’s mentor program facilitates students’ early involvement in research, helps students develop their thesis topics and provides academic and career counseling. New students, in consultation with the coordinator, select a mentor prior to their second semester in the program. Students may change mentors at any time by obtaining the agreement of the new mentor, informing the current mentor and consulting with the Graduate Coordinator. It is anticipated that students’ mentors will serve as their thesis advisers in the second year. However, students are free to select a different person for their adviser.

It should be noted that successful completion of coursework is not sufficient to permit continuation in the program. In addition, faculty judgment must be satisfied with respect to the student’s effectiveness and professional and ethical behavior in dealing with clients. Continuation in the program is contingent upon satisfactory performance in all aspects of the program as judged by the Graduate Studies Committee.

PSYCHOLOGY COURSES

Courses are designated as PSYC in the class schedule.

101 Introductory Psychology (3)

Basic concepts, problems and methods in psychology; Perception, learning, measurement, cognitive processes, development, motivation, personality, abnormal behavior, physiological and social psychology. Three hours of research participation required. It is recommended that students satisfy the ELM requirement before enrolling.

110 Reasoning and Problem Solving (3)

Nature of critical thinking, models and strategies; common fallacies of reasoning, self-regulation in the thinking process; application of critical thinking to specific areas.

201 Elementary Statistics (3)

Prerequisites: Psych 101 and completed ELM requirement. Descriptive statistics, probability, hypothesis testing (t, chi-square, F), sampling distributions of mean and variance, correlation and regression, analysis of variance (one-way, two-way, factorial design), interpreting data. Laboratory applications of statistical software to psychological data. (2 hours lecture, 3 hours laboratory)
202 Research Methods in Psychology (3)
Prerequisites: Psych 101, 201 and completed ELM requirement, and completion of a G.E.-certified college composition course; concurrent enrollment in Psych 201 may be allowed by consent of instructor. Fundamentals of psychological research methods. Participation in conducting experiments, analyzing data, interpreting results and writing research reports. (2 hours lecture, 3 hours laboratory)

300 Computer Applications in Psychology (3)
Prerequisites: completion of General Education (G. E.) math requirement and prior completion or concurrent enrollment in Psych 201 and 202. General introduction to the use of computers in psychology. Selection and use of application programs in research, statistics and testing will be emphasized. One or more sections offered online.

302 Learning and Memory (3)
Prerequisites: Psych 101, 201, 202. Students taking Psych 302L concurrently must also have completed Psych 300. Overview of theories and research in classical and operant conditioning, verbal learning, concept learning and memory.

302L Laboratory in Learning and Memory (2)
Prerequisites: Psych 101, 201, 202, 300. Pre- or corequisite: Psych 302. Laboratory course to accompany Psych 302. Application of research methods to the study of topics in learning and memory. Empirical research will be designed, conducted, analyzed and interpreted. Written research reports required. (4 hours of laboratory).

303 Sensation and Perception (3)
Prerequisites: Psych 101, 201, 202, 300. Pre- or corequisite: Psych 303. Laboratory course to accompany Psych 303. Application of research methods to topics in sensation and perception. Empirical research will be designed, conducted, analyzed and interpreted in the context of existing theories. Written research reports required. (4 hours of laboratory).

303L Laboratory in Sensation and Perception (2)
Prerequisites: Psych 101, 201, 202, 300. Pre- or corequisite: Psych 303. Laboratory course to accompany Psych 303. Application of research methods to topics in sensation and perception. Empirical research will be designed, conducted, analyzed and interpreted in the context of existing theories. Written research reports required. (4 hours of laboratory).

304 Comparative Animal Behavior (3)
Prerequisites: Psych 101, 201, 202. Students taking Psych 304L concurrently must also have completed Psych 300. Detailed study of human behavior in comparison with other animal species within an evolutionary context, including behavior genetics, sensory systems, development, communications, parental behavior, mating strategies, aggression, and social organizations. Field trips to local zoos required.

304L Laboratory in Comparative Animal Behavior (2)
Prerequisites: Psych 101, 201, 202, 300. Pre- or corequisite: Psych 304. Laboratory course to accompany Psych 304. Laboratory and field studies in animal behavior. Empirical research will be designed, conducted, analyzed and interpreted. Written research reports required. (4 hours of laboratory).

305 Cognitive Psychology (3)
Prerequisites: Psych 101, 201, 202. Students taking Psych 305L concurrently must also have completed Psych 300. Overview of current theories and research in cognitive psychology, cognitive neuroscience and cognitive science. Topics include perception and attention, imagery, memory, language, creativity, problem solving, reasoning and decision making.

305L Laboratory in Cognitive Psychology (2)
Prerequisites: Psych 101, 201, 202, 300. Pre- or corequisite: Psych 305. Laboratory course to accompany Psych 305. Application of theoretical and experimental principles and findings in cognitive psychology. Empirical research will be designed, conducted, analyzed, interpreted and presented. Written research reports required. One or more sections offered online. (4 hours of laboratory).

306 Biopsychology (3)
Prerequisites: Psych 101, 201, 202. Students taking Psych 306L concurrently must also have completed Psych 300. Topics in biopsychology, including development of nervous system, neural activity, neurotransmitters, the synapse, sensory and motor systems, biological motives, sleep, brain damage, learning, language centers, neurology of mental illnesses, and drug effects in the brain.

306L Laboratory in Biopsychology (2)
Prerequisites: Psych 101, 201, 202, 300. Pre- or corequisite: Psych 306. Laboratory course to accompany Psych 306. Empirical research will be designed, conducted, analyzed and interpreted involving areas of biopsychology. Written research reports required. (4 hours of laboratory).

310 Psychology of Women (3)
Prerequisites: Psych 101. Survey of theories, research and implications for the psychological study of gender differences and similarities, particularly as pertains to the psychological characteristics and problems of women.

311 Educational Psychology (3)
Prerequisite: Psych 101. Application of psychological research and theory to educational processes, including learning, motivation, individual differences, teaching methods and evaluation. Recommended for those interested in teaching careers.

312 The Psychology of Human Sexual Behavior (3)
Prerequisite: Psych 101. Topics in human sexual behavior integrating sexuality as biological, social, clinical and developmental. Surveys and statistics of sexual behavior, sexual orientation, gender identity, sexual variations, causes and treatment of sexual dysfunctions. Legal, moral and social issues.
315 Evaluating Popular Psychology Concepts (3)
   Prerequisite: completion of the G. E. Category I.C. Popular psychology viewpoints are evaluated for their logical coherence, openness to scientific test and whether they are supported by evidence. The difference between personal, experiential appeal and scientific validity.

317 Legal Psychology (3)
   Prerequisite: Psych 101. Survey of issues in psychology and the law with an emphasis on the impact of social scientific evidence on the legal system. Topics include issues surrounding the death penalty, eyewitness testimony, jury decision-making, pretrial publicity and the insanity defense.

322 Psychology of African Americans (3)
   (Same as Afro-Ethnic 322)

331 Psychology of Personality (3)
   Prerequisite: Psych 101. Broad survey of research, theory and assessment techniques in the area of personality. One or more sections offered online.

341 Abnormal Psychology (3)
   Prerequisite: Psych 101. Symptoms, causes, treatment and prevention of mental problems; anxiety disorders, personality disorders, psycho-physiological disorders, psychoses, substance use disorders, sexual disorders and organic disorders.

342 Survey of Clinical Psychology (formerly 481) (3)
   Prerequisite: Psych 341. Methods, diagnosis, therapeutic techniques, research, educational requirements, professional requirements, ethics, graduate school preparation, choosing graduate programs.

346 Asian American Psychology (3)
   (Same as Asian American 346)

350 Environmental Psychology (3)
   Prerequisites: Psych 101 and completion of G. E. Category III.C.1. Theory, research and method in the study of behavior-environment relationships. Influence of such variables as population density and urban design on human behavior.

351 Social Psychology (3)
   Prerequisite: Psych 101. Social psychology is the study of how people think about, influence and relate to one another. Topics include social perception and cognition, attitudes and attitude change, attraction, altruism, aggression, interpersonal influence and group processes.

361 Developmental Psychology (3)
   Prerequisite: Psych 101. Theories, methods and research findings regarding physical, cognitive and psychosocial human development, including such topics as perception, learning, intelligence and personality.

362 Psychology of Aging (3)
   Prerequisite: Psych 101. Characteristics of humans during the adult years. Topics include physical, intellectual, cognitive, personal, social and psychological development, vocational and family changes, retirement and death.

363 Experimental Child Psychology (3)
   Prerequisites: Psych 101 and two of the following: Psych 361, Child/Adolescent Studies 312, 320, 325 or 330. Research methodology in developmental psychology. Critical examination of empirical studies. Design and execution of an empirical investigation. (2 hours lecture, 3 hours laboratory).

391 Industrial/Organizational Psychology (3)
   Prerequisite: Psych 101. Human behavior in the workplace. Traditional and current psychological principles applied to industrial, organizational and business settings. Selection, placement, training, work motivation, human factors, environmental influences, leadership, work stress, workplace violence, organizational communication, organizational development and consumer behavior.

408 History of Psychology (3)
   Prerequisites: one of the following: Psych 302, 303, 304, 305 or 306; and two of the following: Psych 331, 341, 351 and 361. Development of psychology from early times to the present; major traditions and conceptual issues.

414 Cognitive Neuroscience (3)
   Prerequisites: Psych 305 and 306, or consent of instructor. Human cognitive behavior as a brain-based activity: Methodology of Cognitive Neuroscience, functional neuroanatomy and their relationships to perception, attentional encoding and control mechanisms, memory, emotion, language and consciousness.

415 Cognitive Processes (3)
   Prerequisite: Psych 302, 303 or 305. Advanced treatment of theory and research in such topics as attention, pattern recognition, memory, knowledge representation, language, decision-making, judgment, reasoning and problem solving.

417 Psycholinguistics (3)
   Prerequisite: six hours of upper-division work in psychology or linguistics. Theory and research on the psychological processes that make possible language acquisition and use. Three major concerns are: comprehension of spoken and written language; speech production; and language acquisition. (Same as Linguistics 417)

430 A Social Psychological Study in Ethnic Minority Behavior (3)
   (Same as Afro-Ethnic 430)

431 Theories of Personality (3)
   Prerequisite: Psych 331. Traditional and contemporary theories of personality, including psychoanalytic, humanistic-existential, behavioral, trait and social interaction approaches.
461 Psychological Testing (3)
Prerequisites: Psych 201, 202, 300 and senior status (completion of 90 or more units). Intelligence, aptitude, interest and personality testing. Theory, construction, evaluation, interpretation and uses of psychological tests.

464 Advanced Developmental Psychology (3)
Prerequisites: Psych 202, Child/Adolescent Studies 301, 312 or Psychology 361. Review and analysis of major theoretical, empirical and applied issues in developmental psychology.

465 Advanced Psychological Statistics (3)
Prerequisites: Psych 201, 202 and 300. General linear model, regression, analysis of variance techniques and applications to research design and evaluation of data.

466 Advanced Social Science Computer Applications (3)
Prerequisites: Psych 201 and 300 or equivalent. Advanced computer applications focusing on topics such as web page development, data analysis, graphing, data bases and online experimentation and data collection.

467 Multivariate Statistics for Psychology (3)
Prerequisite: Psych 465. Multivariate analysis of variance, profile analysis, discriminate analysis, factor analysis, cluster analysis, multidimensional scaling, introduction to structural equations and hierarchical linear models, and applications to psychological research.

473 Sleep, Dreams, and Behavior (3)
Prerequisites: Psych 306, 331, 341. Role of sleep and dreams in controlling awake behavior. Course topics include historical views/theories, the neurobiology of sleep and dreams, sleep-wake schedules, sleep disorders, and their relationships to cognitive, personality and psychopathology.

474 Health Psychology (3)
Prerequisites: Psych 101 and completion of nine units of upper-division psychology courses. Role of psychology in prediction, prevention and treatment of medical disorders, including stress and illness, psycho-neuro-immunology, psychological aspects of chronic illnesses, behavioral medicine, physician-patient dynamics.

475 Psychopharmacology (3)
Prerequisites: Psych 306 and 341. Basic principles underlying the therapeutic use of drugs and related substances to modify experience and behavior. Psychological, medical and social potentials/limitations of these pharmacotherapies in treating psychological disorders.

480M MARC Proseminar (1)
(Same as Biology 480M)

495 Field Placement in Psychology (3)
Prerequisites: nine units of 300-level psychology courses completed at CSUF by the time of course registration, and a 2.0 GPA in psychology courses. The internship is a supervised experience in which psychological principles or methods are applied in a fieldwork setting. There will be mandatory class meetings for students to discuss and write about their experiences of integrating psychological theory with practice. Required of majors.

496 Student-to-Student Tutorials (1-3)
Consult “Student-to-Student Tutorials” in this catalog for more complete course descriptions.

498 Directed Empirical Research (1-3)
Prerequisites: completion of one upper-division laboratory course in psychology and consent of instructor. Study plan must be approved by university census date. Individual laboratory investigation under direction of a faculty member. No more than three units of credit toward the major.

499 Directed Library Research (1-3)
Prerequisites: completion of at least one upper-division laboratory course in psychology and consent of instructor. Study plan must be approved by university census date. Individual library study under direction of a faculty member. No more than three units of credit toward the major.

500 Issues and Perspectives in Psychological Research (3)
Prerequisites: admission to the psychology graduate program and consent of instructor. Current theoretical, professional and methodological issues in psychology.

501 Professional and Legal Issues (3)
Prerequisite: admission to the M.S. Psychology (clinical) program. Introduction to methodological, ethical and legal issues in the field of Clinical Psychology.

510 Research Design (3)
Prerequisites: Psych 201, 465 and admission to a psychology graduate program. Principles and methods of planning and carrying out systematic psychological research, interdependence of research design and statistical evaluation of results. Practice in formulation of testable hypotheses.
520T Seminar: Advanced Topics in Psychological Research (3)
Prerequisite: admission to a psychology graduate program. Content of seminar may vary each semester. A topic is selected for in-depth study from one or more specialty areas within the field of psychology. May be repeated for credit.

543 Advanced Lifespan Development (3)
Prerequisite: admission to the M.S. Psychology (Clinical) program. In-depth study of advanced lifespan development, theory and research.

545 Advanced Psychopathology (3)
Prerequisites: Psych 341 or equivalent and admission to either the M.S. Psychology (Clinical) program or the M.A. Psychology program. In-depth study of diagnosis, etiology theories, research and prevention of adult and child psychopathology.

547 Theories of Psychological Intervention (3)
Prerequisite: admission to M.S. Psychology (Clinical) program. In-depth coverage of psychotherapy. Principle theoretical approaches covered are: psychodynamic, humanistic, and behavioral/cognitive behavioral.

548 Psychotherapy Techniques (3)
Prerequisite: admission to the M.S. Psychology (Clinical) program. A skills course in conducting diagnostic interviews and basic therapeutic techniques. Role playing and video feedback will play a central role in course. (2 hours lecture, 3 hours laboratory)

549 Marriage, Family and Child Therapy (3)
Prerequisite: completion of first year in M.S. Psychology (Clinical) program. Marriage, family and child therapy: theory, techniques and research.

560 Child and Adolescent Treatment (3)
Prerequisite: satisfactory completion of the first semester of the M.S. Psychology (Clinical) program. Specific therapy techniques, including behavioral, and general approaches to the treatment of children and adolescents.

561 Clinical Psychology Assessment (3)
Prerequisites: Psych 461 and admission to the M.S. Psychology (Clinical) program. Theory, administration, scoring and interpretation of measures of intelligence and objective personality inventories.

568 Substance Abuse (1)
Prerequisite: admission to the graduate program. Impact of alcoholism and drug abuse on the individual, family and community; clinical skills in the diagnosis and treatment of substance abuse; and research on diagnosis and outcome.

569 Cross-Cultural Psychology (3)
Prerequisites: completion of Psych 545 and 547. In-depth study of cross-cultural issues as they apply to clinical psychology, specifically psychotherapy. Practical, research and theoretical issues.

594A Fieldwork (3)
Prerequisite: satisfactory completion of first year’s work in the M.S. Psychology (Clinical) program. Supervised clinical work in mental health agencies. (Minimum of 12 hours field experience per week.)

594B Fieldwork (3)
Prerequisite: satisfactory completion of first year’s work in the M.S. Psychology (Clinical) program. Supervised clinical work in mental health agencies. (Minimum of 12 hours field experience per week.)

598 Thesis Research (3 or 6)
Prerequisites: formal advancement to candidacy and consent of instructor. Development of a proposal for a major piece of empirical research, execution of the study, analysis of the results and writing of a thesis.

599 Independent Graduate Research (1-3)
Prerequisites: admission to a psychology graduate program and consent of instructor. Empirical research in a selected area of psychology. Designed, conducted and written by the student with the collaboration of a member of the faculty. May be repeated for credit.
INTRODUCTION
Political science is the study of people’s behavior as it relates to power and public organizations. Public administration, which is both a subfield of political science and a separate discipline, is concerned with the role played by public employees in policy-making, planning, personnel management, taxation and finance, and in responding to the needs and problems of communities and the nation.

A major in Public Administration features focused study and preparation for service in public agencies or in nonprofit organizations. Public administration majors study the larger political environment of public service and the concepts and goals that underlie such functions as budgeting, personnel, policy analysis and management. Students without professional public service backgrounds gain experience through the government internship.

ADVISERS
The Division of Politics, Administration and Justice emphasizes proper advisement, and all graduate and undergraduate students are strongly urged to talk with an adviser as soon as possible after entering the program. The adviser helps with study plans, and gives information about career possibilities, post baccalaureate fellowships and scholarships, and job possibilities in local government.

Graduate Program Adviser: Dr. Paul Peretz

INTERNSHIPS
The division offers a variety of internships. Each one involves students working in an agency or political organization, and meeting in an on-campus seminar to discuss and analyze their experiences. The internship in Public Administration is numbered Political Science 497 and is required of all majors without public service administrative experience.

CREDENTIAL INFORMATION
The bachelor’s degree in public administration may be effectively combined with subject matter studies necessary for the single subject teaching credential in social studies. Undergraduates are encouraged to work with the department adviser and/or the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. Postgraduate students should contact the Admission to Teacher Education office in the College of Education (657-278-3352) to obtain information on attending an overview presentation and orientation and then contact the department credential adviser.

BACHELOR OF ARTS IN PUBLIC ADMINISTRATION
Basic Requirements
The Bachelor of Arts in Public Administration requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives. Political Science 100, a graduation requirement for all students, is not
part of the political administration major, but is a prerequisite to further work in political science and public administration. The major consists of 39 units of political science and public administration, all in upper division. In addition, nine upper-division units are required in related disciplines, such as American studies, anthropology, criminal justice, economics, geography, history, philosophy, psychology, sociology and statistics. Work in related fields must be approved in writing by one of the department's undergraduate advisers.

Core Requirements (9 units)
- Political Science/Criminal Justice 320 Introduction to Public Management (3)
- Political Science 421 Government and the Economy (3)
- Political Science/Criminal Justice 422 Human Resources Management (3)

Computer Applications and Statistics Requirements (6 units)
- Political Science 321 Research in Public Management (3)
- Political Science 407 Polls, Statistics and Political Interpretation (3)

Urban and Public Policy Requirements (9 units)
- Political Science 300 Contemporary Issues in California Government and Politics (3)
- Political Science 309 Introduction to Metropolitan Politics (3)
- Political Science 315 Politics and Policy Making in America (3)
- Political Science 322 Leadership for Public Service (3)
- Political Science 403 Politics and Policy in Sacramento (3)
- Political Science 408 The Politics of Los Angeles (3)
- Political Science 411 Art of Administration (3)
- Political Science 427 Policy-Making: Urban/Metropolitan Issues (3)
- Political Science 446 Corruption, Ethics and Public Policy (3)
- Political Science 456 The United Nations and International Organizations (3)
- Political Science 472 The Judicial Process (3)
- Political Science 473 Introduction to Constitutional Law (3)
- Political Science 474 Civil Liberties (3)
- Political Science 476 International Law (3)
- Political Science/Geography 478 Urban Planning Principles (3)
- Political Science/Geography 484 Urban Planning Methods (3)

Management 441 Labor-Management Relations (3)

Internship Requirement (3 units)
- Political Science 497 Internship in Public Administration (3)

This requirement may be waived for students who have administrative experience in the public sector.

Electives (12 upper-division units; 15 upper-division units if the Internship Requirement is waived)
- Political Science/Criminal Justice 404 Capital Punishment (3)
- Political Science/Afro 317 Black Politics (3)
- Political Science 352 American Foreign Policy (3)
- Political Science 377 Law, Politics and Society (3)
- Political Science 416 Presidents and the Presidency (3)
- Political Science/Chic 460 The Chicano and Politics (3)
- Political Science 461 The United Nations and International Organizations (3)

Political Science 456 The United Nations and International Organizations (3)

MINOR IN PUBLIC ADMINISTRATION
The minor consists of 18 units. Students must take Political Science/Criminal Justice 320 and 411, 421 or 422, and 12 additional units. Three of these 12 units may be lower-division (e.g., Political Science 100 or 200) and nine must be at the 300/400 level including at least one of Political Science 300, 309, 315, 403, 411, 416, 421, 422, 427, 446, 448, 472, 473, 474, 475, 478 or 484.

MASTER OF PUBLIC ADMINISTRATION
This professional degree is designed to disseminate the knowledge and skills needed for efficient and effective government. The program acquaints the student with the theoretical and practical skills needed to improve the practice of governmental management. It also prepares one to cope with the ethical and moral dimensions of the contemporary policy maker. Career guidance, working experience and placement are important components of the program. It is designed to:
1. Prepare students who wish to enter the field of public administration
2. Increase the professional competence of those already embarked in public administration careers
3. Furnish academic study for those wishing to pursue doctoral work
4. Provide specialized training in areas such as financial administration, personnel administration, administrative research, planning and criminal justice.

The program is designed to aid the student in acquiring several skills. These include:
1. Written and oral communication for public administration
2. Public administration research and analysis techniques
3. Knowledge of organizational processes and behavior
4. An understanding of federal, state and local governmental and administrative systems and processes

5. Knowledge of administrative techniques and practices such as personnel testing, program budgeting and management by objectives

Students may also develop knowledge of various specialized areas of employment such as criminal justice, human services administration, health administration and gerontology.

Application Deadlines
The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based on enrollment projections.

Admission to Graduate Standing: Conditionally Classified
A student may become conditionally classified in the Master of Public Administration program if the university requirements for admission are met. These requirements are a baccalaureate degree from an accredited institution and a grade-point average of at least 2.75 in the last 60 semester units attempted (see Graduate Regulations section of this catalog for complete statement and procedures).

Graduate Standing: Classified
A student who meets the above requirements may become a classified student if all the following conditions are met:

1. Completion of a minimum of 12 semester units of undergraduate coursework in the social sciences or business, six semester units of which must have been upper-division level. At least one of the courses must have been in economics. Upon recommendation of the public administration faculty, suitable practical experience may be substituted for a maximum of six units of the social science/business requirement.

2. Completion of a one-semester course in basic statistics

3. Satisfying at least one of the following conditions:
   a. A grade-point average of at least 3.25 in the undergraduate major and 2.75 in the last 60 units
   b. Between 2.75 and 3.24 in the undergraduate major, 2.5 in the last 60 units, and at least 1000 combined score (vocabulary and math) on the General Test of the Graduate Record Exam
   c. Between 2.75 and 3.24 in the undergraduate major, 2.75 in the last 60 units, and quality professional experience as evaluated by the M.P.A. coordinator based on job description, resume, two letters of reference and four years of professional administrative service
   d. A grade-point average of at least 2.75 in the last 60 semester units and completion of the first 12 units of adviser-approved coursework in this program with a grade-point average of 3.25
   e. A minimum TOEFL score of 570 (international students only).

4. Approval of a study plan through consultation with the M.P.A. coordinator.

MPA Study Plan
The degree study plan requires 39 semester units of adviser-approved coursework. Three units of internship may be included in the total. The study plan must meet the following requirements:

1. Core Courses (18-24 units)
   - Political Science 497 Internship in Public Administration (3)
     (required of those with no previous public sector administrative working experience)
   - Political Science 509 Administrative Organization and Process (3)
     (required of those with no previous introductory course in Public administration taken within the past three years)
   - Political Science 521 Seminar in Public Administration Theory (3)
   - Political Science 523 Administrative Research and Analysis (3)
   - Political Science 526 Administration and Systems Management (3)
   - Political Science 571 Seminar in Public Finance (3)
   - Political Science 572 Seminar in Public Sector Human Resources Management (3)

One of the following:
- Political Science 519 State and Local Government (3)
- Political Science 525 Seminar in Metropolitan Area Government (3)
- Political Science 528 Seminar in Public Administration and Policy (3)

2. Students’ electives should be planned in accordance with career objectives. Four concentrations are offered: criminal justice, human resources, public finance management and urban management. The four concentrations together with the courses currently offered to satisfy the concentration requirement are listed below. The particular mix of courses will change slightly over time.

3. Candidates for the M.P.A. degree must successfully pass a written comprehensive examination, or a candidate may, with the approval of their concentration and the M.P.A. adviser, choose either the project (Political Science 597) or thesis (Political Science 598) in lieu of the comprehensive examination. The project and thesis each earn three units of coursework and include a final oral defense.

4. Candidates who enroll in 400-level courses will be required to do additional work beyond that required of undergraduates.

5. A minimum of half the units must be completed at the 500-level.

6. No more than nine units of postgraduate coursework taken prior to classified standing may be applied to the master’s degree program.

7. Students must demonstrate competence in computer literacy. See the M.P.A. coordinator for details.
Criminal Justice Concentration

In addition to the required core courses, take:
Political Science 560 Seminar in Administration of Justice (3)
Political Science 582 Organizational Development and Change (3)

One of the following:
Political Science 519 State and Local Government (3)
Political Science 525 Seminar in Metropolitan Area Government (3)
Political Science 580 Emergency Management in Public Administration (3)
Adviser-Approved Electives (6-12 units)

Human Resources Concentration

In addition to the required core courses, take two of the following:
Management 441 Labor Management Relations (3)
Management 542 Seminar in Labor Management Relations (3)
Political Science 475 Administrative Law (3)
Political Science 522 Seminar in Public Personnel Administration (3)
Political Science 582 Organizational Development and Change (3)
Adviser-Approved Electives (6-12 units)

Public Finance Management Concentration

In addition to the required core courses, take two of the following:
Economics 461 Ecological Economics (3)
Economics 516 Economics and Benefit Cost Analysis (3)
Political Science 421 Government and the Economy (3)
Political Science 529 Seminar in Public Management Analysis (3)
Adviser-Approved Electives (6-12 units)

Urban Management Concentration

If not taken as a core course, you must take POSC 525 Seminar in Metropolitan Government (3)

Take one or both of the following:
Geography 478 Urban Dynamics and Planning (3)
Geography 484 Urban Planning Methods (3)

Two of the following: (Only one need be taken by those taking both Geography 478 and 484.)
Environmental Studies 595T Selected Topics in Environmental Problems (3)
Geography 488 Land Use Analysis (3)
Political Science 427 Policymaking: Urban/Metropolitan Issues (3)
Political Science 519 State and Local Government (3)
Political Science 529 Seminar in Public Management Analysis (3)
Political Science 580 Emergency Management in Public Administration (3)
Adviser-Approved Electives (6-12 units)

PUBLIC ADMINISTRATION COURSES

Courses are designated as POSC (Political Science) in the class schedule. Please refer to the Political Science Department catalog section for course numbers and descriptions.
INTRODUCTION

Mission: The Department of Radio-TV-Film at California State University, Fullerton (CSUF), offers a comprehensive curriculum and active learning environment to prepare students for meaningful and rewarding careers in film and telecommunication — broadcast, cable, satellite, wireless, digital and interactive media.

Curriculum: A variety of courses in critical studies, production and writing cover many aspects of the electronic media and cinema.

People: Professionally engaged faculty and staff challenge students to expand their knowledge and skills through intellectual inquiry and creative projects, encouraging them to become critical lifelong learners and ethical media content creators.

Location: RTVF is one of three departments in the College of Communications providing access to the vibrant and media-rich Orange County and Los Angeles Basin.

PROGRAM GOALS

A student who earns the bachelor’s degree in Radio-TV-Film:

- Knows the foundational history of the film and electronic media industry and how that history shapes the industry’s present and future
- Understands the structure and function of film and electronic media in society
- Applies fundamental production concepts to aural and visual productions
- Demonstrates fundamental story concepts and writing proficiency
- Contributes ethically to the media industry
- Consumes film and electronic media critically
- Creates at least one project or portfolio piece, such as a script, production or thesis
- Experiences a meaningful internship with exposure to the real workings of the radio, television and/or film industry

BACHELOR OF ARTS IN RADIO-TV-FILM

The Bachelor of Arts degree in Radio-TV-Film requires a minimum of 120 units, including courses for the major, General Education (G.E.), all university requirements and free electives. The 48-unit major includes three required core courses in RTVF, one RTVF production course, eight elective courses in RTVF, and four collateral courses, either within RTVF or approved courses in other departments.

Required Core Courses (9 units)

- RTVF 100 Introduction to Radio-TV-Film (3)
- RTVF 350 Story Structure (3)*
- RTVF 495 Internship in RTVF (3)
RTVF Production Course (3 units)
RTVF 220 TV Studio Production (3)
OR RTVF 225 Field Video Production (3)

RTVF Electives (24 units minimum)
RTVF 210 Introduction to Audio Production (3)
RTVF 220 TV Studio Production (3)
RTVF 225 Field Video Production (3)
RTVF 250 Writing Short Scripts (3)
RTVF 271 American Film 1: Beginnings-1945 (3)
RTVF 272 American Film 2: 1945-Present (3)
RTVF 300 Language of Film (3)
RTVF 310 Advanced Audio Production (3)
RTVF 315 Live Radio Production (3)
RTVF 330 Film Production 1 (3)
RTVF 351 TV Scriptwriting: Sitcom (3)
RTVF 352 TV Scriptwriting: Drama (3)
RTVF 360 Radio and TV Programming (3)
RTVF 361 American TV (3)
RTVF 365 Children's TV (3)
RTVF 370 World Cinema (3)
RTVF 371 Contemporary American Film (3)
RTVF 375 Documentary Film and TV (3)
RTVF 381 Regulation and Censorship (3)
RTVF 385 Radio Station Operations (3)
RTVF 410 Sound Design for Film-TV (3)
RTVF 425 Advanced Video Production (3)
RTVF 427 Documentary Production (3)
RTVF 430 Film Production 2 (3)
RTVF 431 Cinematography (3)
RTVF 434 Digital Effects for Film-TV (3)
RTVF 435 Directing Film and TV (3)
RTVF 455 Screenwriting (3)
RTVF 456 Rewriting the Screenplay (3)
RTVF 472 Contemporary Asian Cinema (3)
RTVF 480 Management in RTVF (3)
RTVF 495 Internship in Radio-TV-Film (3)

Additional electives may be chosen from RTVF courses or courses from other departments. An approved list of courses from other departments is available in the department office and can also be accessed on the department website.

MINOR IN RADIO-TV-FILM
The minor in Radio-TV-Film requires 21 units.

RTVF Core Courses (6 units)
RTVF 100 Intro to Radio-TV-Film (3)
RTVF 350 Story Structure (3)

RTVF Production Course (3 units)
RTVF 220 TV Studio Production (3)
OR RTVF 225 Field Video Production (3)

RTVF Electives (12 units)
Students choose four courses from the RTVF elective list. Additional electives may be added after this catalog is printed. Please check with the department office.

RADIO-TV-FILM COURSES
Courses are designated as RTVF in the class schedule.

100 Introduction to Radio-TV-Film (3)
Overview of the history, structure and function of the radio, TV and film industry. Includes current issues, relevance to society, employment options and other topics. One or more sections offered online.

210 Introduction to Audio Production (3)
Foundational theory and practice of audio production as it pertains to radio, TV and film. Covers broadcasting, recording, editing and mixing. Emphasizes aesthetics and techniques to ensure high quality sound. Uses a digital lab. (2 hours discussion, 3 hours laboratory)

220 TV Studio Production (3)
Introduction to multiple-camera, live-on-tape, studio production. Theory and practice of producing programs live. Students crew all positions, including writer, producer, director, assistant director, lighting director, floor manager, camera operator, video switcher, audio engineer, video engineer, recording engineer and graphics operator. (2 hours discussion, 3 hours laboratory)

225 Field Video Production (3)
Introduction to single-camera, field video production. Theory and practice of producing projects on location. Preproduction, production and post-production using digital cameras and nonlinear editing. Students crew productions, including writer, producer, director, videographer, sound recorder and editor. (2 hours discussion, 3 hours laboratory)

* Meets upper-division writing requirement for Radio-TV-Film majors.
250 Writing Short Scripts (3)

271 American Film 1: Beginnings – 1945 (3)
History of American film and film style from the beginnings to 1945. Relation to socio-historical, economic, political, cultural, artistic and technological contexts.

272 American Film 2: 1945 – Present (3)
History of American film and film style from the post-war period to modern times. Relation to socio-historical, economic, political, cultural, artistic and technological contexts.

300 Language of Film (3)
Prerequisite: completion of G.E. Category I.C. Visual and syntactic components of the motion picture. Detailed analysis of frame, line, space, shape, image size, movement, tone, color and structuring of visual images. One or more sections offered online.

310 Advanced Audio Production (3)
Prerequisite: RTVF 210. Advanced audio projects for radio, TV, film and the Internet, including digital storage and distribution. Complete the audio production process, from pre- through postproduction, applying aesthetic concepts and hands-on skills. (2 hours discussion, 3 hours laboratory)

315 Live Radio Production (3)
Prerequisite: completion of G.E. Category I.A. Concepts and techniques of live radio production. Produce weekly, two-hour, live radio talk shows with segments. Includes all aspects and positions: planning, writing, producing, interviewing, promoting, engineering, recording, hosting and the like. (2 hours discussion, 3 hours laboratory)

330 Film Production 1 (3)
Prerequisites: RTVF 225 and 300. Introduction to theory and practice of motion picture photography and film production. Create short projects, shooting film and editing digitally. Additional cost for film development and digital transfer. (2 hours discussion, 3 hours laboratory)

350 Story Structure (3)
Prerequisites: English 101 and junior standing. Analysis and development of script structure and viable, narrative story elements. Covers acts, scenes, premises, conflict, plots, characters, action, etc. Write critical analyses of professional scripts and author own treatments. Meets upper-division writing requirement for RTVF majors. One or more sections offered online.

351 TV Scriptwriting: Sitcom (3)
Prerequisite: RTVF 350. Theory, principles and practice of writing for situation comedies. Analyze scripts, study program episodes and develop and write an original story and spec script for a current half-hour, prime-time sitcom. Meets upper-division writing requirement for RTVF majors.

352 TV Scriptwriting: Drama (3)
Prerequisite: RTVF 350. Theory, principles and practice of writing for episodic television dramas. Analyze scripts, study program episodes and develop and write an original story and spec script for a current one-hour, prime-time TV drama. Meets upper-division writing requirement for RTVF majors.

360 Radio and TV Programming (3)

361 American TV (3)

365 Children's TV (3)
Prerequisite: completion of G.E. Category III.B.1. or III.B.2. Research and literature on effects of television on children. Historical and contemporary aspects of children's TV issues, including advertising, violence, stereotyping and education. How children's TV producers use concepts related to children to design material for them.

370 World Cinema (3)
Prerequisite: completion of G.E. Category III.B.1. or III.B.2. Global influence of motion pictures. Examines various directors, film movements, national cinemas and the increasing internationalization of the world film industry.

371 Contemporary American Film (3)
Prerequisite: completion of G.E. Category III.B.1. or III.B.2. Recent American films as indicators of societal, cultural and artistic trends. Cinema in light of current theories of postmodernism and formal categories of film production.

375 Documentary Film and TV (3)
Prerequisite: completion of G.E. Category III.B.1. or III.B.2. Documentary form in film and television. Includes development, purpose and current trends. Requirements to write and produce non-fiction films for the mass media, business, education and government.

381 Regulation and Censorship (3)
Prerequisite: completion of G.E. Category II.B.2. Function of law, policy and standards in radio, TV and film. Key regulations, including roles of commissions, courts and amendments. Key censorship practices, including language, sex and violence.

385 Radio Station Operations (3)
Prerequisite: completion of G.E. Category I.A. Concepts and practices of radio station operations, including programming, sales, promotion, traffic, billing, production, news, research and engineering. Allows for in-depth work in several areas.
410 Sound Design for Film-TV (3)
Prerequisite: RTVF 210 and either 220 or 225. Acquiring, recording, editing and mixing sound for film and TV. Special emphasis on creative aspects of sound design. (2 hours discussion, 3 hours laboratory)

425 Advanced Video Production (3)
Prerequisite: RTVF 225. Advanced theory and practice of video production. Includes advanced shooting and editing techniques. Produce projects that may be distributed and/or entered in competitions. (2 hours discussion, 3 hours laboratory)

427 Documentary Production (3)
Prerequisites: RTVF 225 and 375. Preproduction, production and postproduction of documentary film or video. Documentary concepts and hands-on skills. (2 hours discussion, 3 hours laboratory)

430 Film Production 2 (3)
Prerequisite: RTVF 330. Preproduction, shooting and rough editing of a large-crew, sync-sound film. Includes planning, scouting, breakdown, budgeting, scheduling, casting, rehearsing, shooting and preliminary editing. Additional cost for film development and digital transfer. (2 hours discussion, 3 hours laboratory)

431 Cinematography (3)
Prerequisite: RTVF 330. Cinematographic techniques for film and video. Analyze cinematographic styles, including qualities of camera movement, lenses and lighting as expressive tools. Hands-on experience shooting scenes with film and video cameras, lighting and grip equipment. Additional cost for film development and digital transfer. (2 hours discussion, 3 hours laboratory)

434 Digital Effects for Film-TV (3)
Prerequisite: RTVF 225. Design motion graphics and visual effects for film and TV. Previsualizing, titling, matting, rotoscoping and compositing using industry-standard software. (2 hours discussion, 3 hours laboratory)

435 Directing Film and TV (3)
Prerequisite: RTVF 225. Direct for narrative film and television, including breakdowns and use of the camera as an expressive tool. Direct, shoot and edit short scenes. (2 hours discussion, 3 hours laboratory)

455 Screenwriting (3)

456 Rewriting the Screenplay (3)
Prerequisite: RTVF 455. Intensive writing course aimed at students who have completed first drafts of full-length screenplays. Complete a rewrite-polish of their scripts, learning skills to prepare them for production and entrance into the marketplace.

472 Contemporary Asian Cinema (3)
Prerequisite: completion of G.E. Category III.B.1 or III.B.2. Artistic developments in recent East and Southeast Asian cinema. Theoretical analysis and critique of directors, styles, techniques, genres and production elements.

480 Management in RTVF (3)
Prerequisite: completion of G.E. Category II.B.2. Management structure and issues in the RTVF industry. Audience measurement, distribution, finance, personnel, programming, regulation and sales. May include applied experience with college media activities.

495 Internship in Radio-TV-Film (3)
Prerequisites: RTVF 100, 350 and either 220 or 225. Supervised fieldwork at a radio, TV or film organization. Skill development and understanding of industry operation through hands-on experience and networking. Must submit an application one semester prior to taking through the RTVF Internship Office.

496 Student-to-Student Tutorial (1-3)
Prerequisites: 3.0+ GPA, senior standing, written approval from instructor and department chair. Student-to-student tutorial encourages students to learn through teaching. Work may include contact hours with tutees, tutorial preparations, consulting with instructors, reporting-analysis-evaluation of tutorial experiences, participation in university programs for tutors. Does not count toward major or minor units. Grade or Credit/No Credit.

499 Independent Study (1-3)
Prerequisites: 3.0+ GPA, senior standing, written approval from instructor and department chair. Independent Study is of a research or creative nature and shall culminate in a paper, project, comprehensive exam and/or performance. The student shall prepare a proposal including a statement of the basis for the final evaluation.
UNDERGRADUATE READING COURSES

Lower-division courses in reading (Reading 201, 202, and 290) are designed to assist students in developing and utilizing a problem-solving approach in the critical and creative reading and thinking processes required for efficient university learning. Reading 340 provides an introduction to the language development of young children.

CALIFORNIA READING CERTIFICATE

The California Commission on Teacher Credentialing has granted approval to the Reading Department to offer coursework to meet requirements for the California Reading Certificate. Persons wishing to earn the Reading Certificate must make formal application to the university and meet the following requirements:

1. Completed a bachelor’s degree
2. Earned a grade-point average of at least 3.0 in the last 60 undergraduate units completed and at least 3.0 in graduate units completed
3. Possess a multiple subject or single subject credential or another valid California standard teaching credential
4. Submit a Verification of Service form, by program completion, to document three years of successful teaching experience in any grade, preschool through adult, exclusive of student teaching, internship teaching or teaching while holding an emergency credential or permit
5. Present a CBEST card indicating passage of the test prior to program acceptance.

Advisement is available to any student seeking a California Reading Certificate. New students will be assigned an adviser upon acceptance in the program. For further information, please contact the department office, College Park 570, 657-278-3497.

The following courses are required to complete the certificate:

Reading 501 Assessment of Professional Competencies (1)
Reading 507 Reading and Thinking in the Content Areas (3)
Reading 508 Teaching Reading/Language Arts in Today’s Elementary Schools (3)
Reading 514 Linguistics and Reading (3)
Reading 516 Diagnostic-Prescriptive Teaching of Reading (4)
Reading 560 The Sociocultural Context of Literacy and Learning (3)

CERTIFICATE IN POSTSECONDARY READING AND LEARNING

The Certificate in Postsecondary Reading and Learning is designed to prepare reading specialists for postsecondary settings, particularly at the community college level. Persons wishing to earn this certificate must meet the following criteria for admission:

1. Hold a baccalaureate from an accredited institution of higher education
2. Earned a minimum grade-point average of 2.5 in the last 60 semester units attempted, as documented by two official copies of transcripts from all higher education institutions attended.

3. International students from countries where English is not the official language must have a TOEFL score of 575 (CSUF score is 550).

4. Submit an essay related to professional goals, level of technology knowledge, skills and abilities to be an online learner.

5. Technology (minimum) requirements for students' computer equipment can be found on the department website at www.csufextension.org/programs/prl.

6. Knowledgeable in the use of a personal computer (PC or Macintosh), including the ability to: (1) locate, create, move, copy, delete, name, rename and save files and folders on hard drives and secondary storage devices such as floppy disks; (2) use a word processing program that runs on a PC or Macintosh computer to create, edit, format, store, retrieve and print documents; (3) use an electronic mail system to receive, create, edit, print, save and send an e-mail message with and without an attached file; (4) use an Internet browser to search the World Wide Web; and (5) use databases, spreadsheets and multimedia applications.

The following courses are required to complete the certificate:
- Reading 501  Assessment of Professional Competencies (1)
- Reading 507  Reading and Thinking in the Content Areas (3)
- Reading 508  Teaching Reading/Language Arts in Today's Elementary Schools (3)
- Reading 514  Linguistics and Reading (3)
- Reading 516  Diagnostic-Prescriptive Teaching of Reading (4)
- Reading 520  Technology in Reading (3)
- Reading 560  The Sociocultural Context of Literacy and Learning (3)
- Reading 570  Leadership in Reading/Language Arts Program Development (2)
- Reading 581  Remediation of Reading Difficulties (4)
- Reading 585  Professional Development in Reading/Language Arts (3)
- Ed El 511  Survey of Education Research (3)

For further information, please contact the department office, Education Classroom Building, Room 531, 657-278-4023.

**CALIFORNIA READING/LANGUAGE ARTS SPECIALIST CREDENTIAL**

The California Commission on Teacher Credentialing has granted approval to the Reading Department to offer courses to meet requirements for the Reading/Language Arts Specialist Credential. Those wishing to earn an advanced California Reading/Language Arts Specialist Credential must make formal application to the university indicating the specific specialist credential program desired. In addition, applicants must meet the following requirements:

1. Completed a bachelor’s degree
2. Earned a grade-point average of at least 3.0 in the last 60 undergraduate units completed and at least 3.0 in graduate units completed.
3. Possess a multiple subject or single subject credential or another valid California standard teaching credential.
4. Submit a Verification of Service form, by program completion, to document three years of successful teaching experience in any grades from preschool through adult, exclusive of student teaching, internship teaching or teaching while holding an emergency credential or permit.

5. Submit four professional reference forms, by program completion, including two from individuals to document teaching expertise, and two from individuals to document academic expertise.

Advisement is available to any student seeking a Reading/Language Arts Specialist Credential. New students will be assigned an adviser upon acceptance in the program. Prior to their first semester in the program, students should meet with an adviser to develop a credential study plan.

For further information, please contact the department office, College Park 570, 657-278-3497.

The following courses are required to complete the credential:
- Reading 501  Assessment of Professional Competencies (1)
- Reading 507  Reading and Thinking in the Content Areas (3)
- Reading 508  Teaching Reading/Language Arts in Today’s Elementary Schools (3)
- Reading 514  Linguistics and Reading (3)
- Reading 516  Diagnostic-Prescriptive Teaching of Reading (4)
- Reading 520  Technology in Reading (3)
- Reading 560  The Sociocultural Context of Literacy and Learning (3)
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- Reading 581  Remediation of Reading Difficulties (4)
- Reading 585  Professional Development in Reading/Language Arts (3)
- Ed El 511  Survey of Education Research (3)

**MASTER OF SCIENCE IN EDUCATION (READING)**

The program is designed to help qualified individuals gain the technical knowledge and scholarship required to become reading/language arts specialists. This program prepares reading professionals who have the knowledge, skills and dispositions to effectively integrate contemporary theories of reading with sound pedagogical practice.

**Application Deadlines**

The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). However, deadlines may be changed based upon enrollment projections.

**Admission to Graduate Standing: Conditionally Classified**

University requirements include a baccalaureate from an accredited institution and a grade-point average of 3.0 in the last 60 semester units attempted (see "Graduate Admissions" section of this catalog for complete statement and procedures). In addition, an applicant must have an approved major and confer with the graduate program adviser to discuss the prerequisites for attaining classified standing.
Graduate Standing: Classified

A student who meets the admission requirements and the following requirements may be granted classified graduate standing upon: the development of an approved study plan; successful teaching experience or other approved experience; a grade-point average of 3.0 or better in academic and related work; sufficient background in reading; a satisfactory interview; and four references from school administrators, school supervisors or professors.

Study Plan

The final adviser-approved program of coursework for the degree must include:

Core Courses (10 units)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Ed El 511</td>
<td>Survey of Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>Ed El 536</td>
<td>Curriculum Theory and Development</td>
<td>3</td>
</tr>
<tr>
<td>Reading 516</td>
<td>Diagnostic-Prescriptive Teaching of Reading</td>
<td>4</td>
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Concentration Courses (19 units)

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Culminating Experience (1)

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<tbody>
<tr>
<td>Reading 595</td>
<td>Advanced Studies (includes comprehensive examination)</td>
<td>1</td>
</tr>
<tr>
<td>OR Reading 597</td>
<td>Project</td>
<td>1</td>
</tr>
<tr>
<td>OR Reading 598</td>
<td>Thesis</td>
<td>1</td>
</tr>
</tbody>
</table>

For advisement and further information, consult the program graduate adviser.

READING COURSES

Courses are designated as READ in the class schedule.

201 Academic Reading: Analyses and Strategies (3)

Analysis of reading and learning processes, reading interpretation and critical thinking strategies as applied to all types of academic reading; integration and synthesis of academic information.

202 Vocabulary Cognition and Reading Comprehension (3)

Study and analysis of general and academic vocabularies and their influence on reading comprehension and communication. Language knowledge and the development of contextual analysis and word association processes in reading comprehension.

290 Critical Reading as Critical Thinking (3)

Relationship of critical reading to critical thinking. Development of critical thinking skills with application in the interpretation, analysis, criticism and advocacy of ideas encountered in academic readings. One or more sections offered online.

340 Promoting Language and Literacy Readiness in Young Children - Reading (3)

Prerequisites: Child/Adolescent Studies 312 or Psychology 361 or equivalent. Theories of language development. Function of receptive and expressive language development as they relate to literacy development. Relevance of family literacy as young children begin to read. Choosing appropriate books to foster language development and literacy development. Theories of early childhood classroom instruction.

480 The Teaching of Reading (4)

Curriculum and methods in teaching reading and language arts in the elementary and secondary schools. Teachers’ manuals and guides are introduced and studied. Preparation of reading lessons for classroom settings.

501 Assessment of Professional Competencies (1)

Assessment of professional competencies of students entering the Reading program in preparation for obtaining the Reading/Language Arts Specialist Credential. Meets graduate writing requirement for master’s degree.

505 Foundations of Postsecondary Reading and Learning (3)

Theoretical framework and background of field, including historical perspective, student/adult development, reading and learning theory/academic literacy, programmatic structures and components, curriculum design and contemporary issues.

507 Reading and Thinking in the Content Areas (3)

Teaching reading and thinking in the subject area disciplines, including instructional methodology, assessment, materials and program design. One or more sections offered online.

508 Teaching Reading/Language Arts in Today's Elementary Schools (3)

Current trends in the teaching of elementary reading/language arts. Role of the teacher as a decision-maker in the elementary reading/language arts program.

514 Linguistics and Reading (3)

Linguistics and Reading (3) focus on the influence of reading materials and instruction. Trends in linguistics as they relate to the teaching of reading.

516 Diagnostic-Prescriptive Teaching of Reading (4)

Prerequisite: Reading 507 or 508. Case-based study of various assessment devices and trial teaching practices essential for precise intervention in reading/language arts. Includes a model to guide in-depth analysis of a reader with attention to the influences of linguistic, social, cultural, physical, psychological, intellectual and educational factors on learning to read and reading to learn.
520 Technology in Reading (2)
Understanding the need for technological literacy in reading/language arts. Strengths and limitations of technology and computer applications (software/internet) for the development of classroom curriculum for reading/language arts. Designing a lesson plan for the integration of technology into today’s literacy classroom, as well as introducing web page design utilizing existing free services. One or more sections offered online.

560 The Socio-cultural Context of Literacy and Learning (3)
Prerequisite: EDEL 511. Theory and research in teaching reading/language arts to students with diverse cultural, racial, linguistic and socio-economic backgrounds. Methods and approaches for teaching literacy skills. Special emphasis on second language learners. Case study requirement.

570 Leadership in Reading/Language Arts Program Development (2)
Long-term planning, designing effective programs, developing leadership skills and integrating literature and skill-based instruction.

581 Remediation of Reading Difficulties (4)

585 Professional Development in Reading/Language Arts (3)
Prerequisites: Reading 507, 508, 514, 516. Seminar in development and evaluation of reading/language arts programs. Training in staff development and interpersonal relations with teachers, parents, consultants and administrators. Writing for publication, grant proposal writing and other professional responsibilities.

587 Program Management in Postsecondary Reading and Learning (3)
Prerequisites: Reading 505, 507 and 516. Multifaceted components related to the administration, management and supervision of a post-secondary reading and learning program, as well as the current issues and trends in program management.

595 Advanced Studies (1)
Prerequisite: Reading 516. Graduate seminar designed to synthesize and evaluate knowledge in such areas as behavior, teaching strategies, educational technology, program development, communication theory and interpersonal relations related to reading/language arts, and apply these understandings to authentic professional challenges.

597 Project (1-3)
Prerequisite: consent of instructor or graduate adviser. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

598 Thesis (1-3)
Prerequisite: consent of instructor or graduate adviser. Individual research with conferences with the instructor, culminating in a thesis.

599 Independent Graduate Research (1-3)
Prerequisite: consent of instructor or graduate adviser. Independent inquiry for qualified graduate students.
INTRODUCTION

Programs in Science Education are offered at the undergraduate and post-baccalaureate levels. The philosophy of the Science Education Programs at California State University, Fullerton is based upon the belief that teachers play a preeminent role in the science educational process. We prepare teachers to have confidence in their own abilities to access resources and gain the understanding that they need to help individual students become more scientifically literate. Furthermore, we also believe that effective science content preparation is critical in preparing teachers who are able to transform the science content knowledge that they learn in their courses into pedagogical content knowledge that can be taught to others. This process of transformation encompasses all aspects of instruction and evaluation nexus. The science education faculty agrees that teachers must be open and interested in new ideas. They engage in their own inquiry as co-investigators with students who learn science through multiple methods, including inquiry. We support teachers who as active, alert members of their school community, and help the next generation become effective and positive contributors to a diverse society. The Science Subject Matter Preparation Program plays a vital role in preparing future teachers who are steeped in these philosophies and beliefs.

The mission of the Science Education Programs is to prepare students who are competent in subject matter content to teach science at the elementary and secondary levels. Furthermore, we provide guidance and support for both beginning and experienced teachers in the study and use of educational practices developed for the teaching of science, as well as helping these teachers develop original ideas as they relate to their areas of specialization. The program’s primary goal is to address the special needs of both pre-service and in-service science teachers.

Student Outcomes and Indicators

After successful completion of a program of study, our credential recipients and program graduates are:

**Outcome 1: Knowledgeable and Competent Specialists**
- demonstrate strong foundation of knowledge in their fields of study
- demonstrate strong implementation of skills in their fields
- demonstrate ability to use technology as a resource

**Outcome 2: Reflective and Responsive Practitioners**
- promote diversity
- make informed decisions
- engage in collaborative endeavors
- think critically

**Outcome 3: Committed and Caring Professionals**
- become change agents
- maintain professional and ethical standards
- become life-long learners
MINOR IN NATURAL SCIENCES

The Minor in Natural Sciences enables students to gain an understanding in several scientific areas and have a more comprehensive appreciation of the natural sciences by taking courses in at least three different science disciplines. It offers prospective elementary and middle school teachers, as well as majors in other fields such as communications, business, and computer science, a 21-unit (minimum) program that will familiarize them with the most important ideas and problems in the sciences. The minor also meets the requirements for a supplemental credential for prospective elementary teachers and prepares candidates for the CSET subtests for the Foundational Level General Science Credential.

Lower-Division Courses (9-11 units total)

Students choose at least three units from each category listed below. The selection must include an asterisk (*) course from Life Science and a second asterisk (*) course from either Physical Sciences or Earth/Astronomical Sciences. (Note that with the exception of Geological Sci 102, Biology 102 and Physics 102, all asterisk courses have either a required prerequisite or corequisite.)

Earth/Astronomical Sciences

Geological Sci 101 Physical Geology (3)
Geological Sci 101L Physical Geology Laboratory (1)*
Geological Sci 102 Earth and Astronomical Science for Future Elementary Teachers (3)*
Physics 120 Introduction to Astronomy (3)

Life Science

Biology 101 Elements of Biology (3)
Biology 101L Elements of Biology Laboratory (1)*
Biology 102 Biology for Future Elementary Teachers (3)*

Physical Sciences

Chemistry 100 Survey of Chemistry (3)
Chemistry 100L Survey of Chemistry Laboratory (1)*
Chemistry/Physics 102 Physical Science for Future Elementary Teachers (3)*
Chemistry 105 Survey of the Molecules of Life (3)
Chemistry 111 Nutrition and Health (3)
Chemistry 115 Introductory General Chemistry (4)
Chemistry 120A General Chemistry (5)*
Chemistry 120B General Chemistry (5)
Physics 101 Survey of Physics (3)
Physics 101L Survey of Physics Laboratory (1)*
Physics 211 Elementary Physics (3)
Physics 211L Elementary Physics: Laboratory (1)*
Physics 212 Elementary Physics (3)

Upper-Division Courses (12 units)

Students take at least two units from each of three different course groups. The Natural Sciences Minor adviser must approve course selection.

Biological Science

Biology 305 Human Heredity and Development (3)
Biology 306 Biology of Aging (3)
Biology 310 Human Physiology (3)
Biology 311 Nutrition and Disease (3)
Biology 318 Wildlife Conservation (3)
Biology 319 Marine Biology (3)
Biology 330 Ecology of American Indians (3)
Biology 352 Plants and Life (3)
Biology 360 Biology of Human Sexuality (3)
Biology 409 Evolution for Teachers (3)
Biology 453 Life Science Concepts (3)

Chemistry and Biochemistry

Chemistry 303A,B,C Biotechnology and Society (1 unit each)
Chemistry 311 Nutrition and Disease (3)
Chemistry 313A,B,C Environmental Pollution/Solutions (1 unit each)

Geological Science

Geological Sci 310T Topics in California-Related Geology (1, 1, 1)
Geological Sci 410 Physical Earth/Space Systems (3)
Geological Sci 420 Earth Science for Science Teachers (4)

Physics

Physics 301 Energy and the Environment (3)

Teacher Education Core Courses

Biology 453 Life Science Concepts (3)
Geological Sci 410 Physical Earth/Space Systems (3)

Upper-division courses in the natural sciences not listed above may be included in this minor with the approval of the Minor in Natural Sciences adviser.

SUBJECT MATTER PREPARATION PROGRAMS

Subject Matter Preparation Programs (SMPP) require students to take classes that cover the broad range of material found in the California Student Academic Content Standards. Program coursework must meet guidelines set by the California Commission on Teacher Credentialing. While most subject matter preparation programs can be completed within the context of the major, students must choose major electives carefully to simultaneously complete the requirements for the major and the SMPP. For many programs, classes are required in addition to the requirements for the major. Science SMPPs are offered in chemistry, geosciences, biological sciences, physics and foundational level general science. Visit the Science Education Programs Website or contact the Science Education Programs Office for current coursework requirements.
SCIENCE COURSEWORK FOR ELEMENTARY TEACHERS

Science coursework for elementary teachers is designed to deepen the skills and knowledge of future K-8 teachers in the areas of scientific content, scientific processes, and investigation and experimentation in the physical sciences (GEOL 410 Physical Science/Earth Systems and GEOL 420 Earth Science for Science Teachers) and the biological sciences (BIOL 453 Life Science Concepts).

FUTURE TEACHERS PROGRAM

The future teachers program is a collaboration with the Departments of Elementary and Bilingual Education, Secondary Education and Project Tomorrow (www.projecttomorrow.org) to provide participants with a science docent program with a one-semester, three-unit college-credit course (SCED 110 The Teaching Experience), that includes a weekly seminar, tutoring experience, special day on the university campus, and career and academic advising. Future Teachers Advisors are high school teachers (one at each school site) who teach the course in their classroom. Additional information on the Future Teachers Program is found under the Department of Secondary Education, the Future Teachers Program Website (http://ed.fullerton.edu/seced/futureteachers) and on the Project Tomorrow Website.

SINGLE SUBJECT TEACHING CREDENTIAL

Single Subject Teaching Credential in Biological Sciences, Chemistry, Geosciences, Physics and Foundational Level General Science (7-12) is an interdisciplinary program that connects the three main elements of teacher training (subject matter preparation, pedagogical training and field experience) between the Science Education Program, Department of Secondary Education and local school districts. The Credential Program is organized around the California Teaching Performance Expectations and includes subject matter preparation, prerequisite education coursework and credential coursework.

To earn a secondary science teaching credential, candidates must:

- demonstrate subject matter competency
- complete a program of professional preparation.

In addition to the traditional model of teacher preparation, qualified candidates may elect to complete their preparation as a paid Intern in the public schools. Additional information on this program is found on the Single Subject Credential Program Website (http://ed.fullerton.edu/seced) and under the Department of Secondary Education in this catalog.

The California Commission on Teacher Credentialing authorizes nine different science credentials that authorize service in pre-school, grades 12 and under and in classes organized for adults. Each credential requires demonstration of subject matter competence through completion of specific undergraduate or graduate degrees OR successful passage of several subtests of the California Science Examination for Teachers (CSET) in Science. Candidates with a regular credential in a science area are authorized to teach in their specific discipline, as well as general and integrated science, including middle school science. Candidates with a Specialized credential in a science area are authorized to teach only in their specific discipline.

The Single Subject Credential Program is administered jointly with the Department of Secondary Education. See additional program information, including the Internship Program, under that Department.

Prerequisite Courses

EDSC 304 Educational Technology for Secondary Teachers (3)
EDSC 310 The Teaching Experience: Participation (3)
EDSC 320 Adolescence and Education (3)
EDSC 330 Developing Literacy in Secondary Schools (3)
EDSC 340 Student Diversity in Secondary Schools (3)

Preservice Course Required of all Intern Candidates

EDSC 400 Methods for Internship Credential Candidates (3)

Extern Semester (First Semester)

EDSC 410 Teaching English Learners in Secondary Schools (3)
EDSC 440F Supervised Fieldwork in Secondary Schools (2)
EDSC 440S General Pedagogy of Secondary School Teaching (4)
SCED 442 Teaching Science in Secondary Schools (3)
SCED 449E Externship in Secondary Teaching—Science (3)

Notes: EDSC 440F, EDSC 440S, SCED 442 and SCED 449E must be taken concurrently. Enrollment in these courses is based on admission to the Single Subject Credential Program. Fieldwork associated with these courses requires daily observations and co-teaching in public school classrooms for an 18-week period. See additional information on admission requirements and coursework descriptions under the Department of Secondary Education.

Student Teacher Semester (Second Semester)

EDSC 460 Teaching Assessment Seminar (3)
SCED 449I Internship in Secondary Teaching—Science (10)
SCED 449S Seminar in Secondary Teaching—Science (3)

Notes: EDSC 460, SCED 449I and SCED 449S must be taken concurrently. Enrollment in these courses is based on successful completion of first semester coursework. Fieldwork associated with these courses requires daily co-teaching in public school classrooms for an 18-week period. See additional information on coursework descriptions under the Department of Secondary Education.

MASTER OF ARTS IN TEACHING SCIENCE

The primary objectives of the Master of Arts in Teaching Science are to: provide advanced coursework in science curriculum designs appropriate to the professional responsibilities of science educators; provide research and seminar opportunities in contemporary issues in science education; and enable teachers to become more proficient in science disciplines appropriate to their academic teaching assignments. A secondary track and elementary track are available.

558 SCIENCE EDUCATION
Remaining coursework is selected from the departments of Biological Science, Chemistry and Biochemistry, Computer Science, Geological Sciences, Physics or Science Education (if elementary track) and other departments as appropriate. Fifteen units of work are required from the Science Education Program. The graduate work culminates with the student completing a project or thesis in an area of science education that is applicable to the student’s teaching. Faculty from the program and other departments form the committee that guides and evaluates each graduate student.

Admission Requirements

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on Graduate Admission for complete statement and procedures). In addition to the university requirements for admission, acceptance in the MAT-S program is contingent upon the following:

1. Candidates must apply to the university through csu.mentor.org, as well as submit the “Application for Admission to the MAT-S Degree Program” to the Science Education Programs Office. The application is available from the Science Education Programs Office at 657-278-2307, MH-527, sciedreceptionist@exchange.fullerton.edu. The Science Education Program application for the MAT-S must include:
   a. two signed letters of recommendation
   b. a personal resume
   c. documentation of a teaching credential
   d. a Statement of Purpose: one-two pages with information about the candidate’s science area of interest

2. A teaching credential is normally required for classified standing. In special circumstances, a MAT-S faculty adviser may agree to work with a student who has not completed a teaching credential program. For example, an applicant who teaches in a private school or works in a museum may complete the MAT-S without a teaching credential. In these cases, a MAT-S faculty adviser will write a letter waiving the credential requirement for classified standing.

3. Completion of coursework equivalent to a baccalaureate degree in one of the sciences. (For the elementary track, the baccalaureate degree is not normally in the sciences, but the application must provide evidence of in-depth work within the sciences beyond the minimum requirements for a multiple subject teaching credential.)

4. Acceptance by a faculty project/thesis adviser.

5. The admission decision will be made only after the application file is complete.

Application Deadlines

The deadlines for completing online applications are March 1 for the fall semester. (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Advancement to Candidacy

Advancement to candidacy is attained by requesting a graduation check and receiving subsequent approval of the MAT-S faculty adviser and the MAT-S graduate program adviser on the Grad Check Review Form. This form is mailed to students by the University Graduate Studies Office.

Classified Standing

Students should achieve classified standing as soon as they are eligible. A student who meets the admission standards needs to develop a study plan in consultation with the MAT-S faculty adviser and MAT-S graduate program adviser before nine units of degree coursework has been completed. Classified standing will be granted once the study plan has been reviewed and approved by the MAT-S faculty and the Associate Vice President, Graduate Programs and Research.

Students will be notified by the Graduate Studies Office when the study plan is approved and classified standing is granted. Once the study plan is approved, changes can be made only with the approval of the MAT-S faculty adviser and the MAT-S graduate program adviser.

Study plan

The degree program consists of 30 units of upper-division or graduate coursework, of which at least half must be 500-level, and be completed with a grade point average of 3.0 or better.

1. Secondary Track: 15 units will be in the sciences and other departments, in upper-division and graduate courses. At least nine units will be taken in one of the following: biology, chemistry, computer science, geological sciences or physics. Elementary Track: 15 units in upper-division and graduate courses. Electives will be chosen from biology, chemistry, computer science, geological sciences, physics or science education.

2. Fifteen units will be in science education with the following requirements:

Core Courses

Science Ed 550 Theoretical Designs in Science Education (3)
Science Ed 552 Review of Research in Science Education (3)*
Science Ed 554 Issues in Science Education (3)

Culminating Experience

Science Ed 598 Thesis (6)
OR Science Ed 597 Project (3) and Science Ed 599 Independent Graduate Research (3)

For further information and advisement, consult the graduate program adviser or Director of Science Education Programs.

*Meets the Graduate Level Writing Requirement.
SCIENCE EDUCATION COURSES

Courses are designated as SCED in the class schedule.

110 The Teaching Experience: Exploration (2-3)
( Same as EdSec, Special Ed 110)

412 Processes of Science (3)
Prerequisite: junior or senior standing in a science major or admission to the MAT-Science graduate program. Methodologies (action research), logical procedures and explanatory systems that characterize the various natural sciences. Role of science and technology in society. (2 hours lecture, 1 hour activity, 1 hour to be arranged)

442 Teaching Science in the Secondary School (3)
Prerequisite: appropriate education and science education coursework for credential. Curricular objectives, methods and materials, including audiovisual instruction for teaching science. Required before student teaching for candidates for the single subject teaching credential in either the life sciences or the physical sciences. (2 hours lecture, 2 hours activity).

449E Externship in Secondary Teaching (3)
Prerequisite: Science Ed 412 (may be taken concurrently) (See description under Secondary Education)

449I Internship in Secondary Teaching (10)
(See description under Secondary Education)

449S Seminar in Secondary Teaching (3)
(See description under Secondary Education)

495A Internship (3)
Prerequisite: consent of instructor. Supervised field experience permitting application of science education in research, industry and educational settings. For current and prospective science teachers. Periodic class meetings and field experience log and summary are required.

495B Internship (3)
Prerequisite: consent of instructor. Supervised field experience permitting application of science education in research, industry and educational settings. For current and prospective science teachers. Periodic class meetings and field experience log and summary are required.

499 Independent Study (1-3)
Special topics in science education, selected by consultation and completed under the supervision of the instructor. May be repeated for credit.

550 Theoretical Designs in Science Education (3)
Review of major directions, designs and assumptions of science education reform such as the nature of science and scientific inquiry, scientific literacy, the National Science Education Standards, state curricular frameworks, standards and international and national science assessment. How reform affects curriculum, major curricular projects and curricular evaluation.

552 Review of Research in Science Education (3)
Prerequisite: graduate standing. Review of relevant literature that provides the foundation for modern reform in science education. Analyses of research design and execution of appropriate experimental or observational procedures to test hypotheses concerning problems in science education.

554 Issues in Science Education (3)
Prerequisite: graduate standing. Major contemporary issues in science education. One or more sections offered online.

597 Project (1-3)
Prerequisites: advancement to candidacy and an appointed thesis committee. Corequisite: Science Ed 599 (3 units). Selection, investigation and written presentation of a project in science education.

598 Thesis (1-6)
Prerequisites: advancement to candidacy and an appointed thesis committee. Selection, investigation and written presentation of an experimental problem in science education.

599 Independent Graduate Research (1-3)
Graduate student research in a specific area of science education. May be repeated for credit.
SINGLE SUBJECT CREDENTIAL LEVEL I PROGRAM

Based on the department’s philosophy, the program stresses a logical sequence among the critical components of teacher education, including subject matter preparation, pedagogical instruction, fieldwork observation, participation in classroom activities and student teaching. It is responsive to contemporary educational concerns and provides for strict coordination of the varied administrative components, including admission, candidate assessment and program evaluation. The program is articulated with the California Commission on Teacher Credentialing Standards of Quality and Effectiveness for Professional Teacher Preparation Programs, the California Standards for the Teaching Profession, the California Teaching Performance Expectations (TPEs) and the Teaching Performance Assessment (TPA).

The CSU Fullerton Single Subject Credential (Level I) Program begins with a supervised introduction to the secondary school setting (including an early fieldwork component) and progresses toward full immersion into classroom assignments. The program is designed to allow students to move between theoretical knowledge provided in coursework and the practical experience gained in secondary classrooms. During the program, candidates develop philosophical and methodological perspectives that are tested in practical experience. Field experiences complement coursework, enabling students to deepen their understanding of the complex influences shaping our schools.

The program is a three-semester process. First, prospective teachers are introduced to teaching through 12 units of prerequisite undergraduate coursework. Coursework includes a 40-hour early field experience and the development of knowledge and skills in teaching adolescents, diverse student populations and special populations. A special course focuses on literacy development of secondary students. The adolescence course also includes information on health issues. During this prerequisite coursework, candidates are introduced to the Teaching Performance Expectations. They are also introduced to the Teaching Performance Assessment (TPA) and practice similar tasks as they learn course content and begin to develop teaching skills.

Second, candidates complete a first semester of 240 hours of classroom observations and co-teaching in which they are gradually inducted into the full-time student teaching experience in an environment of collegiality and support. This semester allows them to become familiar with their Master Teachers and the particular characteristics, programs and cultures of their schools. During this semester, candidates are referred to as Externs. First semester credential students attend a weekly seminar class that includes presentations by university faculty and staff, as well as district faculty, staff and administrators. During the seminar, candidates learn about the district, schools and classrooms in which they will complete their student teaching. They learn about state, district and local policies on education; instructional strategies; curriculum design, development and implementation; classroom management; assessing students; and the realities of day-to-day teaching. In addition, candidates complete a subject matter specific methods course in which they extend lesson and unit planning skills with a focus on the California K-12 content standards and
standardized assessments. Finally, they complete a course in teaching English learners. During this semester, candidates are assessed on the TPEs and the following for scoring: TPA 1, Subject-Specific Pedagogy, and TPA 2, Designing Instruction.

In the second semester of the program, each student teacher takes full control of three classes per day and has a conference and preparation period. They are responsible for all discipline, managerial, institutional and instructional tasks. During this semester, candidates are referred to as Student Teachers and attend a weekly student teaching seminar led by a university supervisor. In addition, candidates complete a seminar on the Teaching Performance Assessment Preparation to complete the remaining two performance assessments, Assessing Learning and the Culminating Teaching Experience, and document their achievement of the TPEs.

**Learning Goals and Student Learning Outcomes**

The following goals and learning outcomes have been established for students pursuing a degree in secondary education:

**Knowledgeable and competent specialists**
- Demonstrate a strong foundation in subject matter knowledge or field of study
- Demonstrate a strong understanding and implementation of pedagogical skills or skills in chosen field
- Use technology as a resource

**Reflective and responsive practitioners**
- Promote diversity
- Make informed decisions
- Engage in collaborative endeavors
- Think critically

**Committed and caring professionals**
- Be agents for change
- Maintain professional and ethical standards
- Become lifelong learners

**COURSEWORK SEQUENCE**

**Technology** (3 units required for preliminary credential, recommended as early as possible)
- Ed Sec 304 Personal Proficiency in Educational Technology for Secondary Teachers (3)
  OR Ed Sec 307 Personal Proficiency in Educational Technologies for Social Science Teachers (3)

**Prerequisites** (12 units, 40 hours fieldwork)
- Ed Sec 310 The Teaching Experience (3)
- Ed Sec 320 Adolescence (3)
- Ed Sec 330 Developing Literacy in Secondary Schools (3)
- Ed Sec 340 Diversity in Secondary Schools (3)

**Required of All First Semester Internship Candidates**
- Ed Sec 400 Instructional Methods for Secondary Internship Candidates (3)
- Ed Sec 410 Teaching English Language Learners in Secondary Schools (3)

**First Semester (15 units, 240 hours fieldwork)**
- Ed Sec 410 Teaching English Language Learners in Secondary Schools (3)
- Ed Sec 440S General Pedagogy of Secondary School Teaching (4)
- Ed Sec 440F Supervised Fieldwork in Secondary Schools (2)
- Ed Sec 442 Teaching in the Secondary School (3)*
- Ed Sec 449E Externship in Secondary Teaching (3)*

**Second Semester (16 units, 270 hours fieldwork)**
- Ed Sec 449S Seminar in Secondary Teaching (3)*
- Ed Sec 449I Internship in Secondary Teaching (10)*
- Ed Sec 460 Teaching Assessment Seminar (3)

With the exception of Social Studies, Foundational Level Science and Foundational Level Mathematics, courses marked with an asterisk (*) are taken in the academic departments.

**PROFESSIONAL DEVELOPMENT DISTRICT MODEL**

Reflecting the complex contexts of the secondary classroom and modeling a learning community where learning is interactive and dynamic, Single Subject candidates are divided into “Professional Development Districts,” in which four major strategies are emphasized: preparing prospective teachers; providing professional growth opportunities for secondary school educators and university faculty; and enhancing learning opportunities for 7-12 grade students. This comprehensive structure of collaboration and cooperation between multiple levels of educators provides for a dynamic and interactive learning environment that effectively prepares teachers for a rapidly changing and complex society.


**APPLICATION TO THE SINGLE SUBJECT CREDENTIAL (LEVEL I) PROGRAM**

Applicants to the Single Subject Credential (Level I) Program are required to apply to the university, as well as Admission to Teacher Education. Filing deadlines are Feb. 28 (to begin the program the following fall) and Sept. 30 (to begin the program the following spring). An additional fee is required with the application.

Applications for admission into the Single Subject Credential (Level I) Program are evaluated according to the following criteria: subject matter competence, breadth of understanding, professional aptitude and manner; physical and mental fitness, fundamental skills...
and personality and character. Evidence in relation to criteria is submitted at the time of application and includes the following:

- Overall grade-point average appropriate to the individual academic department
- Passage of California Basic Educational Skills Test (CBEST)
- Successful completion of Ed Sec 304 or 307, Ed Sec 310, Ed Sec 320, Ed Sec 330 and Ed Sec 340
- 100% completion of Subject Matter Preparation Program SMPP in your content area or the CSET exam results in your content area. See your adviser
- Proficiency in oral and written English
- Recommendations from academic faculty and school personnel
- Documented field experience in 7-12 classroom or equivalent
- TB Test and MMR (measles, mumps, rubella) certification. Both tests may be done at CSUF Health Center. Call 657-278-2813.
- CPR Training – Candidates must complete CPR Training offered by the American Heart Association (Heart Saver) or the American Red Cross. Training must cover infant, child and adult. Evidence of CPR training must be current (within 2 years) and a copy of the CPR certificate must be submitted with the credential application.
- The Certificate of Clearance form must be sought by the time of application. There is a fingerprint background check form to be completed as specified by the California Commission on Teacher Credentialing.

**INTERNSHIP PROGRAM**

Students who meet requirements set by the California Commission on Teacher Credentialing and Single Subject Internship Credential Program may enter the Professional Development Track. These students receive an internship credential, which entitles them to teach in a public school while taking their coursework at CSUF in the late afternoon, evenings or on the weekends. The curriculum of the Internship Program is a multi-semester experience, including prerequisites, pre-service coursework, fieldwork and student teaching. Students in the Internship Program progress through Ed Sec 400 (Instructional Methods for Secondary Interns) and their first full-time teaching semester of the program as a cohort group, a structure that provides peer support and enhances opportunity for success. In the second full-time teaching semester as an Intern in the program, they are in cohort groups by subject area.

Internship candidates must complete Ed Sec 400 (Instructional Methods for Secondary Internship Candidates) and Ed Sec 410 (Teaching English Learners in Secondary Schools) prior to enrollment as an Internship candidate in the first semester of the program. These courses provide candidates with early instruction on classroom management, lesson planning and instruction and assessment strategies. This course is only offered during summer and January intercession, and requires candidates to collect numerous materials from their school site and district, including school and district emergency procedures, district content and performance standards, a district testing schedule and academic year calendar and textbooks. In Ed Sec 400, candidates prepare a Classroom Management Plan and Letter to Parents, first week lesson plans, a semester plan for instruction, bulletin board materials and an assessment plan. In Ed Sec 410, candidates learn strategies for engaging and supporting beginning, intermediate and advanced English language learners.

Internship credential candidates meet as a cohort group in Ed Sec 440S (General Pedagogy of Secondary School Teaching) and are supervised by the university in Ed Sec 440F (Supervised Fieldwork in Secondary Schools). The two classes are integrated so students realize the inter-relationship of pedagogical theory and practice through collaboration with their internship teaching.

The Ed Sec 440S/F experience for candidates in the Professional Track/Internship program differs from that of the traditional Ed Sec 440F experience because Internship candidates have all completed Ed Sec 400 and Ed Sec 410. The Ed Sec 440S seminar is held on Monday afternoons instead of Friday mornings. Other differences include a weekly seminar discussion that focuses on successes and challenges interns currently experience; assignments that are more tightly focused on teaching; and visits by fieldwork coordinators during the first ten weeks of the semester.

Candidates who become interns in their second semester are required to have completed all of the entrance requirements and four prerequisites above, plus 15-18 units of secondary coursework. (Ed Sec 400 is only required for those individuals beginning an Internship immediately-students who become interns in their second semester have a general and subject-specific methods course their first semester in the program - Ed Sec 440S and 442). The application requires master teachers, university supervisors and principals to certify that they have observed these candidates in classroom teaching and evaluate them as professionally mature and developmentally ready to handle a teaching position with full classroom and school responsibilities. Additionally, the University Subject Matter Program Advisor must recommend the candidate.

**Internship Credential Program Eligibility Requirements**

To be eligible for participation in the first semester University Intern Program credential candidates must have the following items: earned bachelor’s degree from a regionally accredited college or university; passed the California Basic Skills Proficiency Test (CBEST), passed the Subject Matter Competence Exam (CSET) or completed 100 percent of a commission-approved Subject Matter Preparation Program (SMPP), completed character and identification clearance (fingerprints), demonstrated knowledge of the United States Constitution, be accepted into the Single Subject Credential Program and obtained a University Internship Intern Credential. CSU Fullerton uses recommendation forms and an autobiography to assess how the candidate’s prior experiences and attitudes toward children and schools may affect the candidate’s performance in the classroom. Additionally, during prerequisite courses, candidates are required to write their educational philosophy and to participate in 40 hours of fieldwork in public secondary schools. These requirements provide
excellent information related to the candidate’s prior experiences and attitudes toward children and schooling.

Before entering the program, each candidate participates in an interview designed to ask about prior experiences and attitudes toward children. All Intern applicant decisions are made in collaboration with the employing school district. CSU Fullerton will not issue an Intern credential without written approval from the district and bargaining unit.

**SINGLE SUBJECT CREDENTIAL (LEVEL II)**
As of Fall 2003, all candidates are required to complete a Professional Teacher Induction Program through their employing district.

**MASTER OF SCIENCE IN EDUCATION SECONDARY EDUCATION CONCENTRATION**
This program is designed to help career secondary classroom teachers upgrade their skills, become informed about new ideas in secondary teaching and prepare for curriculum leadership roles in public and private schools.

The graduate program builds upon teacher preparation in the Single Subject Credential Program. Whereas coursework in the credential program focuses on knowledge and skills necessary for a beginning secondary teacher, the graduate program will allow students to extend their knowledge and deepen their skills in curriculum design, instructional and assessment strategies, integration of technology and reflection skills.

**Online Hybrid Graduate Program Features**
The graduate programs in Secondary Education are delivered in an online hybrid format, with 49 percent of courses delivered completely via web-based instruction and the other courses delivered partially via web-based instruction. The program begins with a required one-unit prerequisite course.

**Options for Culminating Experience**
The options for candidates’ culminating experiences are the comprehensive examination, action research project, thesis, submission for National Board Certification, development of a major grant proposal, development of a comprehensive curriculum project or development of an article for publication.

**Support for National Board Certification**
One option for candidates’ culminating experiences is submission for National Board Certification. The graduate program in Secondary Education provides up to nine units of support to candidates. EDSC 591 (taught in the fall) is intended to provide students with an introduction to the requirements of National Board certification as well as assist students in beginning work on their portfolios. EDSC 599 provides an independent study to further portfolio work. EDSC 594 (taught in the spring) is intended to provide teachers with as-needed support while they finish their portfolios.

**What is the National Board for Professional Teaching Standards Certification?**
Currently, teachers who have at least three years of experience may elect to participate in this performance-based assessment. The process of becoming a National Board-certified teacher is an intensive one that demands much of teachers. Teachers must complete a portfolio demonstrating their practice and highlighting the ways they put National Board standards into practice. They must include written lesson plans, videotapes of their teaching and extensive written reflections on their teaching. In addition to the portfolio, teachers must complete a more standard written assessment aimed at evaluating their content knowledge. The NBPTS encourages teachers to work together and support one another during this process. They also encourage teachers to seek out support programs and/or mentors who can provide them with feedback on all aspects of the process.

**Application Deadlines**
Applications are only accepted for the fall semester. The deadline for completing the online application is May 1 for the fall semester (http://www.csumentor.edu). Mailed applications must be postmarked by the same deadline. However, deadlines may be changed based upon enrollment projections.

**Admission to Graduate Standing: Conditionally Classified**
University requirements include: a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see “Graduate Regulations” section for complete statement and procedures).

**Graduate Standing: Classified**
Classified standing is granted after a study plan is developed in consultation with a faculty adviser and approved by the Associate Vice President, Academic Programs (or designee). Students must also meet the following admission requirements:

1. An approved major
2. Grade-point average of 3.0 on previous academic and related work
3. Proof of a current teaching credential
4. Current professional resume
5. 500-word statement of purpose outlining your interest in the Secondary Education Master’s Program (e.g., any areas of special interest or emphasis you plan to pursue as a graduate student, a brief description of your current teaching position or anything else that would facilitate an informed decision on your application)
6. Two or more letters of recommendation that address your aptitude for graduate study including your teaching skills as well as your academic preparation. Grade-point average deficiencies may be removed by a demonstration of competency in the graduate program.
Study Plan

Students are required to complete a one-unit prerequisite course that is offered credit/no credit. Check with the department office for registration information. The course allows students to identify major issues in secondary schools, develop a program plan and set goals for their graduate work. The adviser-approved 30 credit units on the graduate study plan will include the following:

**Prerequisite Course (1 unit)**
Ed Sec 501 Introduction to Graduate Studies (1)

**Core Courses (15 units)**
- Ed Sec 504 Advanced Proficiency in Educational Technologies (3)
- Ed Sec 506 Graduate Studies in Secondary Writing (3)
- Ed Sec 535 Survey of Educational Research (3)
- Ed Sec 536 Curriculum Theory and Development (3)
- Ed Sec 591 Professional Seminar in Secondary Teaching (3)

**Concentration Courses (6 units)**
- Ed Sec 522 Family, Community and Professional Partnerships (3)
- Ed Sec 524 Assessing Student Learning (3)

**Electives (6 units)**
Chosen in consultation with the Graduate Program Adviser.

**Culminating Experience (3 units)**
- Ed Sec 594 Project Seminar (3)
- OR Ed Sec 595 Advanced Studies Capstone in Secondary Education (3)
- OR Ed Sec 597 Project (3)
- OR Ed Sec 598 Thesis (3)

**Emphasis in Teacher Induction**

The concentration in Secondary Education with an Emphasis in Teacher Induction is designed for 7-12 grade teachers to earn their Level II Credential and to prepare them for continued instructional and leadership roles in secondary schools. This graduate program builds upon teacher preparation in the Single Subject Credential Program and allows students to extend their knowledge and deepen their teaching skills while working toward the Level II Credential.

**Prerequisite Course (1 unit)**
Ed Sec 501 Introduction to Graduate Studies (1)

**Core Courses (15 units)**
- Ed Sec 504 Advanced Proficiency in Educational Technologies (3)
- Ed Sec 506 Graduate Studies in Secondary School Writing (3)
- Ed Sec 535 Survey of Educational Research (3)
- Ed Sec 536 Curriculum Theory and Development (3)
- Ed Sec 591 Professional Seminar in Secondary Teaching (3)

**Emphasis Courses (6 units)**
- Ed Sec 502A New Teacher Induction, Assessment and Support, Year 1 (1)
- Ed Sec 502B New Teacher Induction, Assessment and Support, Year 1 (2)
- Ed Sec 502C New Teacher Induction, Assessment and Support, Year 2 (1)
- Ed Sec 502D New Teacher Induction, Assessment and Support, Year 2 (2)

**Electives (6 units)**
Chosen in consultation with the Graduate Program Adviser.

**Culminating Experience (3 units)**
- Ed Sec 594 Project Seminar (3)
- OR Ed Sec 595 Advanced Studies Capstone in Secondary Education (3)
- OR Ed Sec 597 Project (3)
- OR Ed Sec 598 Thesis (3)

**Emphasis in Teaching Foundational Mathematics**

The concentration in Secondary Education with an Emphasis in Teaching Foundational Mathematics is a collaborative effort with the Department of Mathematics and is designed to help experienced teachers of mathematics upgrade their skills, become informed about new ideas in secondary teaching and prepare for curriculum leadership roles in public and private schools. The emphasis will provide teachers of math from grade 4 to geometry with a deeper knowledge base in mathematics and mathematics education. Mathematics 303A,B Fundamental Concepts of Elementary Mathematics (6 units) or equivalent are required as prerequisites to the program.

Study Plan

Students are required to complete a one-unit prerequisite course. This course is taken credit/no credit (does not apply to units for the degree). Check with the department office for registration information. The adviser-approved 30 units (minimum) on the study plan will include the following:

**Prerequisite Coursework (1 unit)**
Ed Sec 501 Introduction to Graduate Studies (1)

**Core Coursework (15 units)**
- Ed Sec 504 Advanced Proficiency in Educational Technologies (3)
- Ed Sec 506 Graduate Studies in Secondary School Writing (3)
- Ed Sec 535 Survey of Educational Research (3)
- Ed Sec 536 Curriculum Theory and Development (3)
- Ed Sec 591 Professional Seminar in Secondary Teaching (3)

**Emphasis Coursework (12 units)**
- Math 403A, B Concepts of Middle School Mathematics (3,3)
- Math Ed 532 Teaching Problem Solving in Middle School Mathematics (3)
SECONDARY EDUCATION COURSES

Courses are designated as EDSC in the class schedule.

110 The Teaching Experience: Exploration (2-3)
Exploration of one’s self in relation to other people in the schools and an encounter with the teaching experience through fieldwork. Accompanying seminar helps students extend their observations and explore relevant issues. (2 hours fieldwork, 2 hours seminar) Credit/No credit only. (Same as Special Ed, Sci Ed and Ed El 110)

304 Personal Proficiency in Educational Technology for Secondary Teachers (3)
Prerequisite: Ed Sec 310. Development of personal proficiency in educational technologies to facilitate the teaching process. Training in computer hardware and software terminology; spreadsheets, word processing, presentation applications; Internet search and retrieval; information literacy; electronic communication and awareness of legal and ethical issues. Meets the state requirement for Single Subject Preliminary Credential except Social Studies. (Same as Special Ed 304)

307 Personal Proficiency in Educational Technologies for Social Science Teachers (3)
Prerequisite: Ed Sec 310. Provides social studies teacher with skills to utilize computer technology. Social studies applications in word processing, spreadsheet, database, simulations, graphics, modems and laser disc interfaces. Meets state computer requirements for the Social Studies Single Subject preliminary credential.

310 The Teaching Experience: Participation (3)
History, philosophy and sociology of secondary education. Introduction to California Teaching Performance Expectations and Assessment; needs of special populations, English learners and struggling readers; content standards; and major curriculum reform documents. Includes 40-hour practicum on specific course requirements. May be repeated with consent of instructor.

320 Adolescence and Education (3)
Prerequisite: completion of General Education (G.E.) Category III.C.1. Biological, cognitive and socio-cultural development of adolescents. Contexts of adolescent development, including family, peers, school, work and leisure. Health and safety issues of adolescents. One or more sections offered online.

330 Developing Literacy in Secondary Schools (3)
Prerequisite: Ed Sec 310. Strategies for developing content-based reading/writing abilities, comprehension skills and vocabulary of secondary students. Methods of teaching reading, writing and language skills for English learners and speakers. Diagnostic assessment strategies. Development of materials to be utilized during Ed Sec 440F fieldwork. Letter grade. One or more sections offered online.

340 Diversity in Secondary Schools (3)
Prerequisite: completion of G.E. Category III.C.1. Knowledge and skills for teaching special populations. Principles of educational equity and diversity. Strategies for providing students equitable access to the core curriculum. How teaching is shaped by diversity in California society. Analysis of personal and institutional bias.

400 Instruction Methods for Secondary Internship Candidates (3)
Methodology course for departmental teaching required for first semester internship candidates before beginning first semester of credential program. Meets the methodology requirement for holders of Multiple Subject Credential seeking a Single Subject Credential. Two hours lecture and 30-hour fieldwork experience.

410 Teaching English Learners in Secondary Schools (3)

440F Supervised Fieldwork in Secondary Schools (2)
Prerequisite: admission to the Single Subject Credential Program. Concurrent enrollment in Ed Sec 440S. Ten-week practicum (120 hours, Monday - Thursday) in observation and participation in secondary schools. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit.

440S General Pedagogy of Secondary School Teaching (4)
Prerequisites: admission to Single Subject Credential Program and Ed Sec 340. Concurrent enrollment in Ed Sec 440F. Interrelationship of pedagogical theory and practice, presented in collaboration with local districts. Classroom management, instructional planning, assessment of student learning, engaging all students and teacher professionalism. Must be taken Credit/No Credit. A “B” (3.0) or better is required to receive a grade of credit.

442 Teaching in the Secondary School (3)
449E Externship in Secondary Teaching (3)
Prerequisite: admission to Single Subject Credential Program. Concurrent enrollment in Ed Sec 442. Eight-week practicum (120 hours, Monday - Friday) in co-teaching in secondary schools. Must be taken Credit/No Credit. A "B" (3.0) or better is required to receive a grade of credit. Departmental course offerings are: Art Ed 449E, English Ed 449E, Kinesiology 449E, Math Ed 449E, Music Ed 449E, Science Ed 449E or Theatre Ed 449E.

449I Internship in Secondary Teaching (10)
Prerequisites: successful completion of Ed Sec 440S, 440F, 442, and 449E. Concurrent enrollment in Ed Sec 449S. Eighteen-week practicum (270 hours, M-F) in full-time student teaching in a specific single subject in a secondary school. Must be taken Credit/No Credit. A "B" (3.0) or better is required to receive a grade of credit. Departmental course offerings are: Art Ed 449I, Ed Sec 449I, English Ed 449I, FL-Ed 449I, Kinesiology 449I, Math Ed 449I, Music Ed 449I, Science Ed 449I or Theatre Ed 449I

449S Seminar in Secondary Teaching (3)
Prerequisites: successful completion of Ed Sec 440S, 440F, 442, and 449E. Concurrent enrollment in Ed Sec 449I. Student teaching in a single subject in secondary schools. Taken Credit/No Credit. A "B" (3.0) or better is required to receive a grade of credit.

460 Teaching Assessment Seminar (3)
Prerequisites: Ed Sec 442 and concurrent enrollment in Ed Sec 449I and 449S. Capstone course includes finalization of Teaching Assessment Documentation (TAD) and documentation of proficiency in California Teaching Performance Expectations required for recommendation of Level I Single Subject Teaching Credential. Offered Credit/No Credit only. A "B" (3.0) or better is required to receive a grade of credit.

499 Independent Study (1-3)
Prerequisites: senior or graduate standing, approval of instructor and department. Conduct an individual investigation under supervision of a faculty member; investigation might be an experiment, a library study or a creative project; only students of demonstrated capacity and maturity will be approved; adequate prerequisite study necessary.

501 Introduction to Graduate Studies (1)
A prerequisite to the MSE in Secondary Education designed to prepare entering graduate students to develop their study plan and identify pressing issues in secondary education. Students must have capacity for electronic communication, including e-mail, attachments and web courseware. May be taken before or during the first semester.

502A New Teacher Induction, Assessment and Support, Year 1 (1)
Prerequisite: concurrent participation in Induction Program. Preparation and professional development for new teachers in accordance with the California Standards for the Teaching Profession. Utilization of California Formative Assessment and Support System for Teachers model. Focus on CFASST Events 1-2. (Same as Ed El 502A)

502B New Teacher Induction, Assessment and Support, Year 1 (2)
Prerequisites: Ed Sec 502A and concurrent participation in Induction Program. Preparation and professional development for new teachers in accordance with the California Standards for the Teaching Profession. Utilization of California Formative Assessment and Support System for Teachers model. Focus on CFASST Events 3-6. (Same as Ed El 502B)

502C New Teacher Induction, Assessment and Support, Year 2 (1)
Prerequisites: Ed Sec 502B and concurrent participation in Induction Program. Preparation and professional development for new teachers in accordance with the California Standards for the Teaching Profession. Utilization of California Formative Assessment and Support System for Teachers model. Focus on CFASST Events 7-8. (Same as Ed El 502C)

502D New Teacher Induction, Assessment and Support, Year 2 (2)
Prerequisites: Ed Sec 502C and concurrent participation in Induction Program. Preparation and professional development for new teachers in accordance with the California Standards for the Teaching Profession. Utilization of California Formative Assessment and Support System for Teachers model. Focus on CFASST Events 9-12. (Same as Ed El 502D)

504 Advanced Proficiency in Educational Technologies (3)
Prerequisites: Ed Sec 304 or equivalent; candidate must have been issued a preliminary single subject credential. Theoretical basis and strategies for improving teaching and learning in secondary school classrooms through multimedia technologies. Utilization of technology for curricular, instructional and assessment purposes to support all students in learning. Meets the Professional Teacher Induction Program Technology standard. (Same as Special Ed 504)

506 Graduate Studies in Secondary School Writing (3)
Prerequisite: graduate standing. Current issues, theory and practice regarding the teaching of writing in secondary schools (grades 6-12). Candidates actively and continuously write as they learn about ways to foster the writing development of secondary school students.

522 Family, Community and Professional Partnerships (3)
Effective teaching practices in working with diverse student populations so as to promote equal learning opportunities. Overview of successful community collaboration with service providers, business leaders, policy makers and parents. Complex diversity of families and teaching situations. Importance of partnerships with professional agencies concerned with adolescents. One or more sections offered online.

524 Assessing Student Learning (3)
Prereq or corequisite: Ed Sec 535. Methods of assessing and evaluating student academic achievement in the secondary schools. Improving student performance and aligning assessment with goals and learner characteristics. Designing instruments and focusing on assessment strategies that promote equal learning opportunities. One or more sections offered online.
Graduate Studies in Mathematics Education (3)
Explore research that focuses on teaching and learning mathematics in the middle grades, criteria for improving mathematics programs and critique of current mathematics curricula. Students will analyze research in light of their developing knowledge and teaching experiences.

Survey of Educational Research (3)
Introduces major forms of quantitative and qualitative research used in education. How to select an appropriate research method and the characteristics of sound research. Making reasoned judgments as consumers of research, as well as selecting appropriate information collection strategies. One or more sections offered online.

Curriculum Theory and Development (3)
Secondary school curriculum, including forces operating on the curriculum and the participants involved in middle and high school curriculum building. Process of curriculum building.

Graduate Studies in Teaching English Learners (3)
Prerequisites: Ed Sec 410; candidate must have been issued a preliminary single subject credential. Students must be in their second semester of student teaching or have completed preliminary credential requirements. Final course required for CLAD Certificate. Methodology of English language development and content instruction for English learners, strategies for specially-designed academic instruction in English. Research and policy implications. One or more sections offered online.

Advanced Methods for Teaching Foundational Level Mathematics (3)
Prerequisites: open only to students who hold a California teaching credential. Expanded methods in mathematics pedagogy focusing on curriculum for grades 6-10. Meets California state requirement for single subject methods coursework to add authorization.

Advanced Methods for Teaching Science (3)
Prerequisites: California teaching credential; and either: a) passing score on one CSET science exam; or b) completion of at least three college-level science courses. Expand knowledge of science pedagogy, focusing particularly on curriculum for grades 6-10. Meets California state requirements for single subject methods coursework to add authorization.

Instructional Strategies (3)
Prerequisite: baccalaureate degree or consent of instructor. General course in pedagogy designed for students whose professional work involves instructional responsibilities. General teaching strategies courses design, instruction planning and student evaluation are emphasized. Offered online.

Essential Elements of Online Course Development (3)
Prerequisite: Ed Sec 504. Graduate seminar in creating online courses using several learning management systems, including Moodle, Angel Learning, NiceNet and Blackboard. Best practices in course design are analyzed and incorporated in the online courses.

Professional Seminar in Secondary Teaching (3)
Prerequisites: graduate standing and consent of graduate adviser. Introduction to requirements for National Board certification; focus on development of portfolio entries and analysis of candidate’s teaching (self, peer and instructor) with respect to models of teaching and teachers’ work; review of research related to professional teaching standards.

Project Seminar (3)
Prerequisite: Ed Sec 535. Preparation, evaluation, development and presentation of curriculum research projects, culminating in a graduate project. Individuals and groups participate in critiquing proposals, curriculum projects and research results.

Advanced Studies Capstone in Secondary Education (3)
Further develop competencies in secondary education content area curriculum, instruction, assessment, educational technology, program development, leadership, National Board of Certification and interpersonal relations related to secondary school teaching.

Project (1-3)
Prerequisites: Ed Sec 535 and consent of instructor. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

Thesis (1-3)
Prerequisites: Ed Sec 535 and consent of instructor. Individual research on an empirical project, with conferences with the instructor, culminating in a thesis.

Independent Graduate Research in Secondary Education (1-3)
Prerequisites: consent of instructor or graduate adviser. Individual research with conferences with the instructor.
INTRODUCTION

The mission of the Department of Social Work is to educate committed professionals for direct social work practice with vulnerable children and families, and underserved severely mentally ill individuals and groups, with special sensitivity to the multicultural populations of Orange County and nearby Southern California regions. The Master of Social Work program fulfills this mission, and extends it to include a commitment to develop competent and accountable social workers who will contribute to the generation of practice knowledge and provide leadership in addressing social problems and inequitable social policies affecting individuals, families and communities. This mission is consistent with the purposes of the social work profession as defined by the Council on Social Work Education (CSWE).

The MSW program emphasizes ecological and open systems perspectives that focus on the fit and interactions of a person or family within a variety of dynamic social and economic systems. Effective social work practice is seen as a change-oriented process that seeks to improve the quality of life of clients, ensures equitable access to opportunities and resources, supports social participation and advocates for fairness within a multicultural context. The MSW curriculum helps students gain professional knowledge, values and skills in social work methods and the techniques required to undertake quality practice along the full spectrum of professional tasks. These expectations are accomplished through the integration of the knowledge and theories in the classroom, combined with supervised practical experience in a variety of social service settings. In addition, students are prepared for advanced, specialized direct practice in concentrations representing Child Welfare and Community Mental Health.

The MSW program is designed to address the growing need for social workers to work with individuals, families, groups and organizations in public and nonprofit social service agencies. The goals of the MSW program include:

1. Preparing social work students to take leadership roles in public social service organizations charged with responding to societal problems, such as poverty, family instability, mental illness and child abuse
2. Preparing students to enhance the social functioning and interactions of individuals, families, groups, organizations and communities by teaching strategies to involve targeted populations in accomplishing goals, developing resources, and preventing and alleviating distress
3. Preparing social work students to be change agents and to work effectively in increasingly complex, culturally and racially diverse communities
4. Preparing social work students to understand the impact of racism, sexism, homophobia and other forms of oppression in creating and maintaining barriers to effective participation in American society

DEPARTMENT CHAIR
David Cherin

DEPARTMENT OFFICE
Education Classroom 207

DEPARTMENT WEBSITE
http://hhd.fullerton.edu/MSW

PROGRAM OFFERED
Master of Social Work

FACULTY ADVISORY COUNCIL
David Cherin, Chair (Social Work)
Pauline Abbott (Gerontology)
Joe Weber (Sociology)
Sean Hogan (Human Services)
Mikyong Kim-Goh (Human Services)
Susan Larsen (Human Services)
Trent Nguyen (Human Services)
Rebekah Smart (Counseling)
Sora Tanjasiri (Health Science)

FACULTY
Caroline Bailey, David Chenot, David Cherin, Christine Ford, Sean Hogan, Hansung Kim, Mikyong Kim-Goh, Debra Saxton
5. Preparing social work students to understand the relationship of the economic, political and social system to the maintenance of poverty and oppression in American society;
6. Preparing students to develop and use research, knowledge and skills that advance social work practice

Social workers are employed in varied settings, such as social services agencies and community-based organizations, including health and mental health agencies, child welfare agencies and family services agencies and organizations, as well as in other sectors such as government, corrections, aging services, recreation and industry. They work in many job classifications: direct service, community organization, supervision, consultation, management, administration, education and training, policy analysis and research.


CONCENTRATIONS
The Master of Social Work degree offers opportunity for study in two substantive areas: Child Welfare and Community Mental Health. The concentrations reflect two of the major areas of social concern and programs in our society. Child neglect and abuse, poverty, family violence, drugs and gangs illustrate the tremendous need for services to children and their families. The Community Mental Health concentration responds to the issues of chronic mental illness, behavioral problems, substance abuse and the homeless mentally ill. Professional social workers play a vital role in ensuring that services are available to support many in these vulnerable populations in our region.

Child Welfare Concentration (CW)
The Child Welfare (CW) concentration prepares students for practice in a variety of settings, including child welfare/protective services, health care, mental health, public social services, schools, community-based outpatient agencies, corrections/juvenile justice, residential treatment, programs for persons with developmental disabilities, domestic violence shelters and other specialized programs.

Community Mental Health Concentration (CMH)
The Community Mental Health (CMH) concentration prepares students for practice in a variety of mental health settings, including psychiatric hospitals, residential treatment, county mental health clinics, correctional institutions, substance abuse treatment and other specialized programs.

CALSWEC MSW PROGRAM
The MSW Program at CSUF has established eligibility for the CalSWEC Title IV - E training funds.

California Social Work Education Center (CalSWEC) is a unique partnership between social work education and the publicly supported child welfare structure. The mission and goals of the CalSWEC program is to re-professionalize public child welfare. CalSWEC provides financial support to MSW students in exchange for a commitment to work in a public child welfare agency for a minimum of one year for every year of support received. The intent of the program is to strengthen and enhance the quality of practice by professionally trained and educated public child welfare social workers. Priority is given to applicants representing diverse population groups currently served by child welfare agencies in California. Fluency in a high demand language is also given priority. Years of service and other child welfare experience also weighs significantly into the selection process. Students in the program must be U.S. citizens or have a permanent visa.

The Title IV-E stipends provide for two (2) years of support for students enrolled in the MSW program. The student signs a contract to secure full-time employment in a public child welfare agency for two (2) years (one year of employment for each year of support) but is expected to remain in public child welfare employment for longer than this minimum period. Once accepted into the program, students must undergo pre-screening for county employment, including fingerprinting and participation in the criminal clearance process.

With the passage of the Mental Health Services Act, a parallel training stipend program was established in California for MSW students who specialize in mental health. Similar to the child welfare training, the Mental Health Initiative, also managed by CalSWEC, offers training stipends for one year of support for students enrolled in the MSW program in exchange for a commitment to work in a public mental health agency for a minimum of one year for every year of support received.

MASTER OF SOCIAL WORK
Admission Requirements
Minimum requirements for admission to conditionally classified standing in the program include the following:
1. Commitment to a two-year, full-time cohort course of study for completion of the MSW
2. Hold a baccalaureate degree in good standing from an accredited institution of higher education
3. Have earned a minimum grade-point average of 3.0 in the last 90 quarter units or last 60 semester units as documented by official transcript(s) from all higher education institutions attended
4. A strong liberal arts undergraduate foundation that is similar to the undergraduate graduation requirements from an accredited institution of higher education
5. Evidence of language skills and/or cultural experiences appropriate to the diverse communities to be served
6. At least one year of paid or volunteer experience in a human service context or related area
Students must submit a written essay explaining why they would be good candidates for the program, including describing their
experience and/or commitment to social work, evidence of personal qualifications, motivation and potential that shows promise of becoming a successful social worker.

8. Submission of an academic or professional piece of writing

9. Submission of three letters of reference from individuals who are familiar with the student's academic work potential, level of maturity and relevant experiences.

10. Completion of an interview

11. Submission of two applications: a CSUmentor (www.csumentor.edu) application and the Department of Social Work application submitted online to the department.

12. For international students from countries where English is not the official language, a score of 575 on the paper exam, 230 on the computer based exam or 89 on the Internet-based TOEFL is required. A student scoring between 555-574 on the paper exam, 215-229 on the computer-based exam or 83-88 on the Internet-based TOEFL may be admitted conditionally depending upon an evaluation of the entire application file.

13. Accessibility Issues: Special accommodations for disabled students will be made on an individual student, as-needed basis in compliance with the CSUF Catalog (online catalog at http://www.fullerton.edu/disableservices/handbook/SupportiveServices.htm). Please contact the instructor and Program Coordinator.

Classification and Advancement to Candidacy

Advancement to classified standing and candidacy requires the student to maintain continued good academic standing in all coursework and field experiences. In the case of unsatisfactory academic performance, the Chair of the Social Work Department, with the approval of the Office of Graduate Studies, shall recommend remediation or dismissal of a student.

Under special circumstances, a graduate student may be approved for a one-semester leave of absence or, with approval of the Social Work Department, for a two-semester leave in extraordinary circumstances. For such consideration, the student must be in good academic standing. (See the "Graduate Regulations" section of this catalog for additional details concerning advancement to classified standing or candidacy.)

Advisement

Upon admission to the program, each student is assigned to a faculty adviser. Advisers provide academic assistance, help students develop official study plans, and monitor their progress throughout the duration of enrollment. Students should consult their adviser on a regular basis.

MSW CURRICULUM

The MSW at CSUF requires completion of 60 semester credit hours over two years of full-time study. There is a specialized three-year part-time program that slightly modifies this course of study and spreads the 60 units over three years. This part-time program is currently only open to Orange County employees of either the Social Services or Health Care agencies. Foundation coursework is based on a generalist social work practice curriculum that prepares students for advanced academic work in one of two concentrations, Child Welfare or Community Mental Health. Students are exposed to lifespan perspectives that address life cycle issues and concepts from birth to old age. While the concentrations are designed to allow students to focus on a particular population, it is expected that the student's education will involve sufficient foundational content to allow him or her to transfer this knowledge to any population or service setting.

The program will emphasize a Direct Practice method. This methodological approach is designed to prepare students for advanced practice and leadership roles in public and nonprofit social services agencies and in voluntary agencies serving children, youth and families and in those providing community mental health services to the chronically and seriously mentally ill.

FIRST YEAR FOUNDATION CURRICULUM

MSW 501 Social Work Perspectives on Human Behavior I (3)
MSW 502 Social Work Perspectives on Human Behavior II (3)
MSW 510 Social Work Practice I (3)
MSW 511 Social Work Practice II (3)
MSW 520 Social Welfare Policy and Services I (3)
MSW 521 Social Welfare Policy and Services II (3)
MSW 530 Applied Social Work Research Methods I (3)
MSW 531 Applied Social Work Research Methods II: Practice and Program Evaluation (3)
MSW 540 Social Work Field Instruction I (2)
MSW 541 Social Work Field Instruction II (2)

SECOND YEAR ADVANCED CURRICULUM

Child Welfare Concentration

MSW 503 Social Work Perspectives on Human Behavior III (3)
MSW 512 Child Welfare: Advanced Practice I (3)
MSW 513 Child Welfare: Advanced Practice II (3)
MSW 522 Child Welfare Policy and Social Work (3)
MSW 542 Advanced Social Work Field Instruction I (2)
MSW 543 Advanced Social Work Field Instruction II (3)
MSW 550 Social Work Practice with Diverse Populations (3)
And three additional units of adviser-approved coursework.

Electives (3 units) May choose one of the following:
MSW 561 Social Work Practice and the Law (3)
MSW 570 Social Work Practice in Substance Abuse Treatment (3)
COUN 522 Techniques of Brief Treatment and Assessment (3)
COUN 525 Psychopharmacology for Counselors (3)
COUN 535 Addictions Counseling (3)
SOCIAL WORK COURSES

Courses are designated as MSW in the class schedule.

501 Social Work Perspectives on Human Behavior I (3)
Prerequisite: admission to MSW program. Overview of ecological systems theory used in social work profession for clinical and policy-oriented assessments of human functioning and needs during infancy, childhood and adolescence. Reciprocal relationships between human behavior and the social environment.

502 Social Work Perspectives on Human Behavior II (3)
Prerequisite: MSW 501. Overview of ecological model used in social work profession for clinical and policy-oriented assessments of human functioning and needs from young adulthood through old age. Reciprocal relationships between human behavior and the social environment.

503 Social Work Perspectives on Human Behavior III (3)
Prerequisite: MSW 502. Advanced social work theory and application regarding development of human psychopathology across the life span, including understanding and diagnosing dysfunctional behaviors with the DSM-IV TR.

510 Social Work Practice I (3)
Prerequisite: admission to MSW program. Critical analysis and examination of social work roles and integration of those roles within a person-environment perspective. Focuses on an integrative framework combining direct practice with individuals, families, groups and communities with a commitment to organizational and social change.

511 Social Work Practice II (3)
Prerequisite: MSW 510. Further deepens knowledge and skills essential for social work practice, including individual, family, group, community and organizational interventions. Cultural responsiveness, commitment to professional competence and ethics, interprofessional development, social and economic justice, and client empowerment.

512 Child Welfare: Advanced Practice I (3)
Prerequisites: MSW 510, 511. Designed as the first of two advanced practice courses for students preparing for careers in public child welfare. Assessment and intervention model, and the practice of social work within the legal context of the dependency court.

513 Child Welfare: Advanced Practice II (3)
Prerequisites: MSW 510, 511, 512 and advancement to second year. Integration of theory and practice pertaining to social workers’ roles in child welfare settings. Application of direct intervention models and development of advanced specialized skills for addressing the behavioral, emotional and situational problems of children and families.

514 Community Mental Health: Advanced Practice I (3)
Prerequisite: MSW 511. Application of theory and practice with diverse populations utilizing a multicultural framework and case materials to analyze treatment issues and empowerment strategies in community mental health. Individual, family and group strategies.

515 Community Mental Health: Advanced Practice II (3)
Prerequisite: MSW 514. Analyzes psychosocial rehabilitation and recovery as the dominant treatment model in contemporary community mental health programs. Use of psychoeducation to address chronic mental illness, substance abuse, depression, anxiety and family violence.

520 Social Welfare Policy and Services I (3)
Prerequisite: admission to MSW program. History of social welfare and the social work profession, the evolution of social work values and ethics and a broad array of U.S. social welfare services including income maintenance, health care, mental health and child welfare.
521 Social Welfare Policy and Services II (3)
Prerequisite: MSW 520. Policy practice knowledge, skills, advocacy strategies, values and ethics regarding the political processes underlying social welfare policy development and practice. Diverse methods of policy analysis and policy issues that are important to multicultural populations. Fulfills Graduate Writing Requirement.

522 Child Welfare Policy and Social Work (3)
Prerequisite: MSW 521. Examine and analyze conceptual and pragmatic underpinnings of federal, state and local policies, as well as specific laws and regulations influencing social work practice with children, youth and their caregivers.

523 Mental Health Policy and Social Work (3)
Prerequisite: MSW 521. Social welfare policy issues in the understanding and treatment of mental disorders at the national, state and local levels. Major factors influencing the provision of mental health services such as managed care.

530 Applied Social Work Research Methods I (3)
Prerequisite: admission to MSW program. Evaluation, appraisal and application of the concepts, design and process of applied research in social work, focusing on foundation skills in conducting empirical research within the context of theory, literature review, research design and measurement, research ethics and professional practice.

531 Applied Social Work Research Methods II: Practice and Program Evaluation (3)
Prerequisite: MSW 530. Prepares students for roles in practice and examines basic research and statistical methods utilized to evaluate the delivery of social services. This is the second course in the sequence and builds upon the conceptual work in MSW 530.

540 Social Work Field Instruction I (2)
Prerequisite: admission to MSW program. Fieldwork experience in a social services agency under the supervision of professional social workers. Introduces the range of professional roles, social services infrastructure and policies, professional ethical standards, case management principles and social work intervention modalities.

541 Social Work Field Instruction II (2)
Prerequisite: MSW 540. Continued and advanced supervised social work practice experience in a community agency utilizing direct social service practice skills. Greater in-depth focus on collaborative client case management to prepare students for professional employment with emphasis on effective practice with diverse populations.

542 Advanced Social Work Field Instruction I (2)
Prerequisite: MSW 541. Advanced supervised social work practice in a community agency with focus on the range of professional social work roles in child welfare or community mental health settings. Requires 2 hrs/wk seminar and 20 hrs/wk agency placement.

543 Advanced Social Work Field Instruction II (3)
Prerequisite: MSW 542. Continuation and intensification of supervised social work practice in a community agency with focus on advanced practice skills in community mental health or child welfare settings. Requires 2 hrs/wk seminar and 20 hrs/wk agency placement.

550 Social Work Practice with Diverse Populations (3)
Prerequisites: admission to MSW program. Prepares future social workers to examine social work case management issues related to disadvantaged client groups based on race, ethnicity, gender, sexual orientation, age and disability status. Ecological diversity-sensitive practice, advocacy and empowerment of vulnerable clients.

561 Social Work Practice and the Law (3)
Prerequisite: first-year MSW courses successfully completed. Survey of major legal issues, policies and resources relevant to social workers. Issues such as abortion, adoption, child custody, right to treatment, mental health commitment procedures, children's rights, rights of the elderly, marriage and divorce.

570 Social Work Practice in Substance Abuse Treatment (3)

580 Social Work Practice with the Poor and the Homeless (3)
Homelessness in the context of social responsibility for the poor. Legal, social and economic context of homelessness; diversity of the homeless, their special needs and behaviors and assesses systems of care and treatment.

596 Master’s Project Development (3)
Prerequisite: MSW 530. Concurrent enrollment in MSW 531. Under direction and approval of a faculty advisor, a student develops and prepares the beginning chapters of their MSW project and submits human subjects’ approval to conduct research. Prepares students to complete their project.

597 Master’s Project (3)
Prerequisites: MSW 530, 531 and 596. Under direction and approval of a faculty advisor, student completes a research project on a question development in MSW 596. This is a final written project that culminates the MSW degree program.

599 Independent Graduate Research (1-4)
Individual research on a library or empirical project in a selected area of social work with collaboration of a member of the faculty, culminating in one or more papers. May be repeated for credit up to a maximum of four units.
INTRODUCTION

Sociology is the systematic and scientific study of society and social behavior. The sociologist looks beyond individual and unique events to the predictable broad patterns and regular occurrences of social life that influence individuals. Studies range from the profound impact of post-industrial societies on family life, crime, mass communications, gender, race, ethnicity and intergenerational relations to the study of emotions and the values that govern daily social encounters.

The sociology major is designed to provide undergraduate preparation leading to careers in social work, politics, law, public administration, the nonprofit sector, international development, marketing, urban and environmental planning, public relations, personnel, criminal justice, counseling and other social service professions. The Bachelor of Arts in Sociology will also prepare a student for advanced studies in several areas, including sociology, social work, environmental studies, education, public health and urban planning.

Sociological Internship

The internship course, Sociology 495, offers the opportunity for students to participate in supervised field activities. The internship permits students to apply their relevant sociological knowledge to meet the challenges of a practical setting. This course can be used to earn three units of credit for such experiences. Students must make arrangements with the Internship Coordinator during the semester prior to enrollment in the course. The course may be repeated for a maximum of six units credit. See important note at the end of the Independent Studies section.

Independent Study

The independent study course, Sociology 499, allows students to expand upon their special interests in the field of sociology. Independent studies are usually in areas not covered by the normal course offerings of the department and consists of individual research projects. Research projects may include library research or actual field research. Enrollment in the course requires that students meet regularly with their faculty supervisors. One to three units of credit may be earned. The course may be repeated for a maximum of six units credit.

Note: Students may apply a maximum of nine units of internship and independent study combined, toward the major.

Credential Information

The bachelor’s degree in Sociology may be effectively combined with subject matter necessary for the multiple subject teaching credential (K-8). Undergraduates are encouraged to work with the Center for Careers in Teaching (657-278-7130) as early as possible in their academic careers to plan efficient course selections for general education, the major and electives. It may be possible to enter the credential program in the senior year of the bachelor’s degree. Students should contact the Teacher Education Office in the College of Education at 657-278-3352 to obtain information on attending an overview presentation.
International Learning Opportunities in Sociology

Majors in sociology will find an increasing emphasis on cross-national perspectives woven throughout most of the coursework available within the department. Sociology is rapidly becoming international in both scope and content. Sociology majors are encouraged to explore international educational opportunities, either through the CSU International programs, through CSUF’s own exchange program or through any one of the other numerous international programs offered by academic institutions throughout the United States. The Department of Sociology will cooperate fully in providing academic credit in sociology for such experiences where appropriate.

BACHELOR OF ARTS IN SOCIOLOGY

The B.A. in Sociology requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and electives.

For the major, students are required to complete a minimum of 36 units of coursework in sociology. In addition, students must satisfy the three-unit upper-division writing requirement. Included within the 36 units are 15 units of core courses required of all majors and 21 units of adviser-approved electives tailored to each student’s career objectives. Sociology 101 Introduction to Sociology is a required prerequisite for most sociology courses. It is recommended that Sociology 302 Social Research Methods be one of the first upper-division Sociology courses, and Sociology 410 Theories of Social Behavior be taken after 15 units of sociology.

A total of nine adviser-approved units may be transferred from a community college. At least 27 units must be upper-division. All Sociology majors, including new students and transfer students entering California State University, Fullerton beginning fall 2003 are required to take Sociology 303. All courses counting towards the major must be taken for a letter grade. Students must pass core courses and the writing requirement with a grade of “C” (2.0) or better.

Core Courses (15 units)
Sociology 101 Introduction to Sociology (3)
Sociology 302 Social Research Methods (3)
Sociology 303 Statistics for the Social Sciences (3)
Sociology 309 Computer Applications in Sociology (3)
Sociology 410 Theories of Social Behavior (3)

Upper-Division Writing Requirement (3 units)
The upper-division writing requirement is in addition to the 36 units needed for the major. (English 301, 360, 365 may be substituted for Sociology 308).

Choose one of the following:
Sociology 308 Writing for Sociology Students (3)
English 301 Advanced College Writing (3)
English 360 Scientific and Technical Report Writing (3)

Electives (21 units)
Students are to select a minimum of 21 units of elective coursework in sociology consistent with their career objectives.

Concentration Options
As part of the 21 units in elective courses, sociology majors have the option of selecting one of the following concentrations in consultation with a faculty member. A concentration consists of 12 units selected from the courses listed within each concentration below. Students must take the required course (or one of the required courses) as one of the four courses.

Students choosing the option of a concentration must complete a capstone experience. Students will choose and complete this project under the mentorship of any faculty member who is willing to be a mentor. The capstone experience itself must be arranged with the mentor ahead of time and before beginning the capstone experience. The capstone experience may include, but is not limited to a research project, fieldwork culminating in a written or oral presentation and/or other appropriate assignments. The written portion of the capstone experience shall include a combination of sociological conceptual schemes, as well as empirical findings. It is advisable that the capstone experience be completed before turning in the graduation check form to the graduation unit.

FAMILY
Required Course (3 units)
Sociology 351 Sociology of Families (3)

Electives (9 units)
Choose nine units from the following:
Sociology 353 Sociology of Childhood (3)
Sociology 354 Gender, Sex and Society (3)
Sociology 355 Women in Contemporary Societies (3)
Sociology 381 Sociology of Sexualities (3)
Sociology 385 Family Violence (3)
Sociology 459 Sociology of Marital Dissolution (3)
Sociology 495 Sociology Internship (3)

Service-Learning Opportunity
All sociology majors are encouraged to take advantage of the service learning opportunities offered as an optional part of some courses each semester. Many sociology classes offer assignments with a service-learning component and these are noted in the schedule of classes offered each semester. In these, the student performs some service to a community agency that is integrated with coursework. Students are expected to meet the needs of the community organization while they learn from their service experience and enhance their learning in the course. Please see your departmental adviser if assistance is needed in finding a class with service-learning.
**GERONTOLOGY**

**Required Course (3 units)**
Sociology 133 Introduction to Gerontology (3)

**Electives (9 units)**
*Choose nine units from the following:*
- Sociology 351 Sociology of Families (3)
- Sociology 360 Sociology of Death and Dying (3)
- Sociology 433 Aging and Social Services (3)
- Sociology 443 Sociology of Aging (3)
- Sociology 495 Sociological Internship (3)

**SOCIAL WORK**

**Required Course (3 units)**
Sociology 305 Social Work Practice (3)

**Electives (9 units)**
*Choose nine units from the following:*
- Sociology 300 Social Work (3)
- Sociology 385 Family Violence (3)
- Sociology 408 Sexual Abuse in American Society (3)
- Sociology 416 Sociology of Alcoholism (4)
- Sociology 443 Sociology of Aging (3)
- Sociology 459 Sociology of Marital Dissolution (3)
- Sociology 495 Sociological Internship (3)

**EDUCATION**

**Required Course (3 units)**
Sociology 352 Sociology of Education (3)

**Electives (9 units)**
*Choose nine units from the following:*
- Sociology 341 Social Interaction (3)
- Sociology 350 Social Relations and Emotions (3)
- Sociology 351 Sociology of Families (3)
- Sociology 353 Sociology of Childhood (3)
- Sociology 413 Juvenile Delinquency (3)
- Sociology 495 Sociological Internship (3)

**DEVIANC AND SOCIAL PROBLEMS**

**Required Course(s) (3-6 units)**
*Take at least one of the following*
- Sociology 411 Criminology (3)
- Sociology 413 Juvenile Delinquency (3)

**Electives (6-9 units)**
*Choose 6-9 units of the following:*
- Sociology 365 Law and Society (3)
- Sociology 385 Family Violence (3)
- Sociology 408 Sexual Abuse in American Society (3)
- Sociology 415 Sociology of Corrections (3)
- Sociology 466 Deviant Behavior (3)
- Sociology 495 Sociological Internship (3)

**CLASS, RACE AND GENDER**

**Required Course(s) (3-9 units)**
*Take at least one of the following:*
- Sociology 356 Social Inequality (3)
- Sociology 357 Minority Groups Relations (3)
- Sociology 354 Gender, Sex and Society (3)

**Electives (3-9 units)**
*Choose 3-9 units from the following:*
- Sociology 355 Women in Contemporary Society (3)
- Sociology 381 Sociology of Sexualities (3)
- Sociology 443 Sociology of Aging (3)
- Sociology 495 Sociological Internship (3)

**MINOR IN SOCIOLOGY**

**Required Courses (9 units)**
- Sociology 101 Introduction to Sociology (3)
- Sociology 302 Social Research Methods (3)
- Sociology 410 Theories of Social Behavior (3)

**Elective Courses (12 units)**
Students select 12 units of upper-division coursework in sociology.

**MASTER OF ARTS IN SOCIOLOGY**

The Sociology Department accepts graduate students in the fall and spring semesters of each academic year. The deadlines for completing online applications are March 1 for the fall semester and Oct. 1 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

The program for this degree provides advanced study in general sociology. It offers an opportunity to broaden one’s knowledge of society, strengthen skills of sociological analysis and conduct research in depth in an area of particular interest. It may be used as preparation for study toward the doctorate in sociology, for community college teaching, participation in research or for a variety of positions in business and industry, corrections, the community or government.

The 30-unit program is composed of a 12-unit core course sequence that all students must complete. Depending on options chosen by the student, the core course sequence is augmented with
requirements for the special emphasis and electives to total 30 units. The Master of Arts program is designed to facilitate close contact between students and faculty, encourage students to accept a role in the selection of course offerings and participate in areas of departmental decision making.

**Prerequisites**

Students must meet the university requirements for admission to graduate standing. Please see the “Graduate Regulations” section of this catalog for policies and procedures on admission of graduate students.

In order to be accepted as a sociology graduate student, the applicant must have a grade-point average of 3.0 or better in the most recent 60 units of college work and a grade-point average of 3.25 or better for all work in sociology. A minimum of 18 upper-division units in sociology is required, including the following courses or their equivalents:

- Sociology 302 Social Research Methods (3)
- Sociology 303 Statistics for the Social Sciences (3)
- Sociology 410 Theories of Social Behavior (3)

Courses in methods, statistics and theory must have been completed within the last five years prior to application. Two letters of reference attesting to the applicant’s academic potential and a writing sample must be sent to the graduate coordinator. In some cases, an interview may be required.

Students may be accepted as conditionally classified sociology majors with either course or GPA deficiencies. Deficiencies must be corrected within one year of admission to the program.

Students will be classified upon the fulfillment of the above prerequisites and after an approved study plan has been developed, in consultation with the Graduate Coordinator.

**Study Plan**

The study plan for the degree must be completed with a minimum grade-point average of 3.0 with no course grades below “C” (2.0). The study plan requires 30 semester units, with a minimum of 24 units at the 500 level approved by the student’s adviser, and include the following:

**Required Core Courses (12 units)**
- Sociology 501T Seminar: Topics in Societal Structure and Process (3)
- Sociology 502A The Research Process (3)
- Sociology 502B The Research Process (3)
- Sociology 581 Advanced Theories of Social Behavior (3)

*Note: Sociology 502A and 581 are designed to be taken during the first semester of graduate studies. Sociology 502A meets the University Graduate Writing Requirement.*

**Electives (15 units)**

Maximum six units of approved 400-level Sociology courses

**Thesis/Project/Comprehensive Exam (3 units) Take at least one of the following:**
- Sociology 597 Project (3)
- Sociology 598 Thesis (3)
- Sociology 599 Independent Graduate Research plus Comprehensive exam (3)

It is highly recommended that students planning on doctoral studies complete the thesis option.

For further information, consult the graduate program adviser.

**EMPHASIS IN APPLIED SOCIAL RESEARCH**

This emphasis within the M.A. in Sociology prepares students for research analyst positions in business firms, government agencies, educational institutions and medical institutions.

**Study Plan**

The study plan for the degree must be approved by the Applied Research adviser and must include the following:

**Core Course Sequence (12 units)**
- Sociology 501T Seminar: Topics in Societal Structure and Process (3)
- Sociology 502A The Research Process (3)
- Sociology 502B The Research Process (3)
- Sociology 581 Advanced Theories of Social Behavior (3)

**Applied Research Sequence (12 units)**
- Sociology 501T Seminar: Only the following topic applies: Evaluation and Applied Survey Research (3)
- Adviser-approved course in quantitative or qualitative methods or statistics (3)
- Sociology 597 Project (3,3)

*Note: A one-year placement in a research setting or settings (6 units) culminates in an applied research paper similar to a thesis but with an applied as opposed to a theoretical approach.*

**Electives (6 units)**

Adviser-approved 400- or 500-level courses in Sociology or related fields.

**SOCIOLOGY COURSES**

Courses are designated as SOCI in the class schedule.

**101 Introduction to Sociology (3)**

Basic concepts of sociology; includes social interaction, culture, personality, social processes, population, social class, the community, social institutions and socio-cultural change.

**133 Introduction to Gerontology (3)**

Prerequisite: completion of the General Education (G. E.) Category III.C.1. Multidisciplinary overview of characteristics, strengths and problems of older persons; diversity in aging process involving gender, race, ethnicity, subculture; services to older adults; gerontology as an academic discipline and a field of practice. (Same as Gerontology 133)
300 Social Work (3)
Prerequisite: Sociology 101. History, philosophy, values of social work profession, fields of practice (casework, group work, macro practice); theories of human behavior in social environments. Social work as career objective and qualifications necessary. Recommended for students considering careers in human services, social work, social policy development. One or more sections offered online.

302 Social Research Methods (3)
Prerequisite: Sociology 101. Qualitative and quantitative perspectives on social research. Purpose and components of qualitative and quantitative research design, including the role of theory in research, sampling, reflexivity, the practice of mixed methods of data collection, analysis and writing results.

303 Statistics for the Social Sciences (3)
Prerequisites: completion of G. E. Categories III.A.1 and III.C.1. Techniques for the elementary statistical analysis of social data. Description and inferential measures include tests, chi-square, analysis of variance, contingency table analysis and linear regression.

304 The Black Family (3)
(Same as Afro-Ethnic Studies 304)

305 Social Work Practice (3)
Prerequisites: Sociology 101 or equivalent. Theories, methods, principles, ethics, fields of social work practice. Generalist model; micro (individual), mezzo (group), macro (organization, community, advocacy, case management) levels of intervention. Recommended for students considering careers in human services, counseling, social work or social policy development. Methods and theories underlying social work practice.

306 Applying Sociology in the Community (3)
Prerequisite: Sociology 101. Combines service to the community with discussion and analysis of selected social problems and community issues. A service-learning class that requires approximately 40 hours per semester of community service, in addition to weekly class meetings. One or more sections offered online.

308 Writing for Sociology Students (3)
Prerequisite: Sociology 101. Composition, sources of information and sociological writing for different audiences. Satisfies the classroom portion of the upper-division writing requirement for sociology majors. Instructional fee.

309 Computer Applications in Sociology (3)
Prerequisite: Sociology 101. Introduction to the use of computers in Sociology. Training in the use of Microsoft applications and microcomputers as it relates to research, data analysis, publications and presentations. Topics include survey analysis with SPSS; constructing and editing data files and word processing. One or more sections may be offered online.

311 Social Interaction (3)
Prerequisite: Sociology 101. Social and socio-psychological dimensions of group behavior and the socialization of the individual. Social interaction and its impact on the individual and personality formation.

345 Sociology of Communication (3)
Prerequisite: Sociology 101. Social processes involved in communicating with symbols-verbal, visual and "body-language" – in interpersonal settings and the mass media.

348 Collective Behavior (3)
Prerequisite: Sociology 101. Characteristics of crowds, mobs, publics. Analysis of social movements and revolutions, their relation to social unrest and their role in developing and changing social organization.

350 Social Relationships and Emotions (3)
Prerequisite: Sociology 101. Consideration of social relationships emphasizing emotional bonds as the primary integrating force, including interactions between emotions and relationships.

351 Sociology of Families (3)
Prerequisites: Sociology 101 and completion the G. E. Category III.C.1. Family as a social institution. Historical and cross-cultural perspectives; social change affecting marriage and the family; analysis of American courtship and marriage patterns; the psycho-dynamics of family life.

352 The Sociology of Education (3)
Prerequisites: Sociology 101 and completion the G. E. Category III.C.1. Education as a social institution and agent of socialization. Dynamic interplay with economic, political, religious, family institutions and community. Gender, race and class inequality in education. Cross-national perspectives on education and related social problems and social policy.

353 Sociology of Childhood (3)
Prerequisites: Sociology 101 and completion the G. E. Category III.C.1. Historical, cross-national and contemporary views of children and youth in society; childhood socialization and the effects of the family, school, peers, gender roles, the media community and technology; social problems of children and youth; recommendations for social policy.

354 Gender, Sex and Society (3)
Prerequisite: Sociology 101. Critical examination of gender as a social and institutional construct, including analyses of identity, sexuality, media, family, work, economy, the state and global relations.

355 Women in Contemporary Societies (3)
Prerequisite: Sociology 101. Micro and macro analyses of women’s roles and experiences in contemporary societies. Topics may include gender socialization, institutional inequalities, women's work, violence against women, resistance to inequality, women's health and sexuality.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>356</td>
<td>Social Inequality (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101 and completion the G. E. Category III.C.1. Development, patterns, structures and consequences of social inequality, with emphasis on social class, race, ethnicity, gender and sexuality in the U.S. Dynamics of resistance and social change.</td>
</tr>
<tr>
<td>357</td>
<td>Minority Group Relations (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Development and current conditions of minority/majority relations through study of social, political and economic causes and consequences of prejudice and discrimination. Evolutionary and revolutionary movements for change will be studied. One or more sections offered online.</td>
</tr>
<tr>
<td>360</td>
<td>Sociology of Death and Dying (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Dying as a social process; functions of bereavement behavior; the grief process; fear of death and dying; death-related rituals, demographic aspects of mortality; American death acceptance-denial controversy.</td>
</tr>
<tr>
<td>365</td>
<td>Law and Society (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Relationship between a society and its laws using sociological theory and major concepts. Analysis of court process, legal professions and related social institutions.</td>
</tr>
<tr>
<td>371</td>
<td>Sociology of City Life (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Ecology, patterns of growth, institutional inequalities, social problems, cultures and organized resistances of urban communities in global contexts.</td>
</tr>
<tr>
<td>381</td>
<td>Sociology of Sexualities (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Sociological aspects of sexualities, socio-historical and comparative perspectives; relationships of sexual constructs to life cycle, gender, race, class, nation and power. One or more sections offered online.</td>
</tr>
<tr>
<td>385</td>
<td>Family Violence (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Contemporary issues of family violence: victims, perpetrators and societal responses. Causes, intervention and prevention of all types of abuse – child, sibling, spouse, parent and elder – through the examination of theories, research findings and practical field application.</td>
</tr>
<tr>
<td>408</td>
<td>Sexual Abuse in American Society (3)</td>
<td>Sociology 101</td>
<td>Prerequisites: Sociology 101 and 466. Sociological examination of sexual abuse in contemporary society, specifically patterns of forcible rape and child sexual victimization. Theories and research findings regarding causes, consequences and other dynamics of sexual victimization, including responses of social groups to such victimization.</td>
</tr>
<tr>
<td>410</td>
<td>Theories of Social Behavior (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101 or upper-division standing. Main schools of sociological thought, both European and American. Systems of theory, methodology of theorists, cultural change and social institutions. One or more sections offered online.</td>
</tr>
<tr>
<td>411</td>
<td>Criminology (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Extent, causes and control of criminal behavior. Criminal law, causal factors and theories, correctional institutions, probation and parole and preventive efforts.</td>
</tr>
<tr>
<td>413</td>
<td>Juvenile Delinquency (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Juvenile delinquency as a social problem. Sociological study of the causes of delinquent behavior and programs of control, treatment and prevention.</td>
</tr>
<tr>
<td>415</td>
<td>Sociology of Corrections (3)</td>
<td>Sociology 101</td>
<td>Prerequisites: Sociology 101, 411 or 413. Current problems and programs in probation, parole and correctional institutions. For students planning careers in corrections.</td>
</tr>
<tr>
<td>416</td>
<td>Sociology of Alcoholism (4)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Sociological analysis of alcoholism. Socio-emotional causes and consequences of this type of drug addiction. (3 hours seminar; 2 hours activity)</td>
</tr>
<tr>
<td>433</td>
<td>Aging and Social Services (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101 or upper-division standing. Sociological analysis of social problems of aging with special emphasis on strategies of intervention and barriers to service utilization. Critical examination of community service delivery systems. Review career opportunities and qualifications required. (Same as Gerontology 443)</td>
</tr>
<tr>
<td>443</td>
<td>Sociology of Aging (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Analysis of population age structure; theories of aging; aging in family, economic, political, religious, educational, leisure/esthetic institutions, aging and ethnicity, social policy and the future of aging. One or more sections may be offered online. (Same as Gerontology 443)</td>
</tr>
<tr>
<td>455</td>
<td>Medical Sociology (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Comprehensive sociological perspective for interpreting medicine and medical behavior. In a multifaceted approach, disease processes as they affect the individual and others in his environment, health practice and petitioners, health institutions and the cost and service of health services will be considered.</td>
</tr>
<tr>
<td>458</td>
<td>Sociology of Religious Behavior (3)</td>
<td>Sociology 101</td>
<td>Prerequisite: Sociology 101. Religious behavior examined by social science theories. Religious rituals/beliefs to cope with anxiety and powerlessness before natural forces and social structures and processes. Religion’s contributions to individual identity, societal order and change. (Same as Comparative Religion 458)</td>
</tr>
</tbody>
</table>
459 The Sociology of Marital Dissolution (3)
Prerequisite: Sociology 101. Social-psychological causes and consequences of voluntary marital dissolution (separation, divorce). Topics include: erosion of attachment, personal identity changes, changing and new relationships with others, starting over, dating again, sexuality changes, loneliness, anxieties.

463 Political Sociology (3)
Prerequisite: Sociology 101. Theoretical perspectives; nature of power and authority; social structure and political institutions; elites and decision making; social influences on political behavior; political movements.

466 Deviant Behavior (3)
Prerequisite: Sociology 101. Social construction, nature and patterns of deviance. Topics include theories of deviance, research on deviance, types of deviance, constructing deviance, deviant identity, relations among deviants, deviant acts and deviant careers.

467 Sociology of Sport (3)
Prerequisite: Sociology 101. Nature, position, functions and growing importance of sports in contemporary industrial society. Particular emphasis given to relationships between structure, variety and extent of sports activity and other institutional sectors in society.

473 Formal Organizations (3)
Prerequisite: Sociology 101 or equivalent. Sociological analysis of formal organizations (industrial, governmental, welfare, military, medical, educational, correctional, etc.) as systems of social interaction. Topics include blueprinting vs. informal organization, structure, authority, decision-making, role conflicts, communication and morals.

476 Sociology of Charity and Nonprofits (3)
Prerequisite: completion of G.E. Category III.C.1. Sociological perspectives on giving and volunteering; roles of charitable organizations in the U.S.; forms of generosity; purpose and characteristics of U.S. nonprofits; how local nonprofits address social problems; theories of social capital and civic engagement. Service-learning option at local nonprofit.

495 Sociological Internship (3)
Prerequisites: completion of 12 upper-division units of Sociology and at least a 3.0 GPA in the major. Supervised field experience permitting application of relevant sociological material in practical settings. Requires 120 hours in the field.

499 Independent Study (1-3)
Prerequisites: completion of 12 units of Sociology and at least a 3.0 GPA. Individual research project, either library or field. Student must enroll with an instructor whose recognized interests are in the area of the planned independent study. Conferences with the instructor as necessary and the work culminated in one or more papers. May be repeated for credit.

500 Process of Adult Development and Aging (3)
(Same as Gerontology 500)

501T Seminar: Topics in Societal Structure and Process (3)
Prerequisite: consent of instructor. Analysis of a specialization within the study of society such as: socialization and personality; deviance; social change; institutional structure and process. May be repeated for credit.

502A The Research Process (3)
Prerequisite: Sociology 502A. Problems of social research. Causal inferences, value bias and measurement, construction of scales. Instructional fee.

502B The Research Process (3)
Prerequisite: Sociology 502B. Problems of social research. Nonparametric analyses, multivariate methods, causal inferences, value bias and measurement, construction of scales. Instructional fee.

503 Aging and Public Policy (3)
(Same as Gerontology 503)

504T Selected Topics in Gerontology (3)
(Same as Gerontology 504T)

508 Social and Ethical Issues in Aging (3)
(Same as Gerontology 508)

581 Advanced Theories of Social Behavior (3)
Prerequisite: Sociology 301 or equivalent. Basic elements and key problems in constructing and evaluating sociological theories.

596 Community College Symposium (3)
Prerequisite: consent of adviser. Introductory sociology, social problems and marriage and family; teaching preparation. Includes oral exam.

597 Project (3)
Prerequisites: classified standing in the M.A. in Sociology program and proposal approved by supervising faculty member and the Sociology Department Graduate Studies committee. Under the direction of a faculty member, a topic that integrates learning in the program with an applied area of student’s interest will be selected, and a major project on the topic will be developed and submitted.

598 Thesis (3)
Prerequisites: acceptance as a candidate for the Master of Arts in Sociology, and approval of topic. Individual research under supervision, reported in a thesis and defended successfully in an oral examination conducted by a faculty committee.

599 Independent Graduate Research (3)
Prerequisite: consent of graduate adviser and instructor. Individual research on a library or empirical project, with conferences with instructor as necessary, culminating in one or more papers. May be repeated for credit.
INTRODUCTION

Software Engineering is the discipline of developing and evolving software systems that are reliable and efficient, and that are affordable to develop and evolve. The discipline has matured in response to the increasing importance of software, particularly in safety-critical applications, and to the huge impact of large and expensive software systems that affect many people in many parts of society. Unique factors in the evolution of software engineering include the fact that software is intangible and its operation is discontinuous. Thus, the discipline seeks to integrate the principles of computing and mathematics with the rigor that engineering disciplines bring to the reliability and trustworthiness of the products developed.

Software engineering students have the opportunity to focus on software reliability, software evolution and on the development of software systems that are correct from their inception. Learning how to provide genuinely useful and usable software is preeminent.

MASTER OF SCIENCE IN SOFTWARE ENGINEERING

The Master of Science in Software Engineering is a professional degree program housed within the Department of Computer Science and draws upon a team of outstanding faculty with expertise, training and experience in Computer Science and Software Engineering.

The objective of this program is to prepare individuals for careers as software engineers and software process managers in industry and government agencies.

Benefits of the program include:
- The degree represents a comprehensive, high quality, affordable program staffed by a team of outstanding and dedicated faculty with expertise and experience in Software Engineering, backed up with strong program and administrative support
- The program is completed in 22 months (two courses per semester)
- The coursework in the program is 100 percent online
- The program promotes collaboration, professional networking, and team-building among peers, faculty, staff and other professionals
- Graduates of the program will gain valuable knowledge and skills in the development, design, evaluation and implementation of software engineering. Furthermore, graduates will obtain software process expertise based on sound and current research, theory and practice, and will be well positioned in a competitive job market.

Admission and Program Continuation Requirements:

Minimum State requirements for admission to conditional classified standing in the program include:
- A baccalaureate from an accredited institution of higher education
- A minimum grade-point average of 2.5 in the last 60 semester units attempted as
documented by two official copies of transcripts from all higher education institutions attended

- Good standing at the last college attended

The deadline for completing online applications is March 1 for the following fall semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadline. However, deadlines may be changed based upon enrollment projections.

In addition, students must meet the following program requirements:

- For international students from countries where English is not the official language, a TOEFL score of 550.
- Prior IT-related work experience.
- Introductory undergraduate software engineering course (Computer Science 362 or equivalent work experience) and/or phone interview to determine whether the student possesses work experience in the area of software development to satisfy program prerequisites (i.e., the equivalence of Computer Science 362).
- Technology requirements as follows: e-mail account and dependable internet connection.

Continuation and completion of the program requires:

- Registration, attendance and successful completion of the virtual orientation and Midpoint Symposium
- If circumstances force a student to fall out of the original cohort schedule, the student will be permitted to continue in the program, but will default to the next cohort cycle provided the student remains in good academic standing.
- Accessibility Issues: Special accommodations for disabled students will be made on an individual student, as-needed basis in compliance with the CSUF Catalog (online catalog at http://www.fullerton.edu/disabledservices/handbook/SupportiveServices.htm. Please contact the instructor and program coordinator if this applies to you.

Study Plan

- Attendance at the initial virtual orientation
- Attendance at the virtual midpoint symposium

Core Courses (12 units)
- Comp Science 541 Systems and Software Standards and Requirements (3)
- Comp Science 543 Software Maintenance (3)
- Comp Science 544 Advanced Software Process (3)
- Comp Science 545 Software Design and Architecture (3)

Advanced Software Process Evaluation Courses (6 units)
- Comp Science 542 Software Verification and Validation (3)
- Comp Science 547 Software Measurement (3)

Advanced Software Engineering Management Courses (6 units)
- Comp Science 546 Modern Software Management (3)
- Comp Science 548 Professional, Ethical and Legal Issues for Software Engineers (3)

Capstone Experience (6 units)
- Comp Science 597* Graduate Project in Computer Science (6)

*(Comp Science 597 will be offered in two 3-unit segments)
Consult the Computer Science section of the catalog for course descriptions.
INTRODUCTION

The Department of Special Education at California State University, Fullerton provides exemplary preparation for special education candidates, general education teachers clearing the preliminary credential and persons interested in improving techniques to work with at-risk children. The faculty in the Department of Special Education are nationally recognized for their contributions in the field of Special Education. Credential programs in Mild/Moderate Disabilities, Moderate/Severe Disabilities and Early Childhood Special Education are available. Additionally, certification programs are available for Resource Specialist and Early Childhood Special Education. Candidates can earn a master’s degree in any of the above areas. The Department of Special Education provides a program that is nationally accredited (NCATE) in addition to meeting the California Commission on Teacher Credentialing (CCTC) requirements. The department takes pride in meeting the Council for Exceptional Children (CEC) recommended program standards. The department offers full and part-time programs.

The Department of Special Education is strongly committed to a conceptual knowledge and skill based framework soundly integrated with the philosophies of the university, school and division.

The University Mission, College Philosophy and Department theme emphasize the active, social nature of learning, the interconnections among ways of learning, the dispositions of inquiry and the relationship to the larger diverse society. The refined mission and marks indicate the department is both substantive and technical, theoretical and practical, realistic and entrepreneurial.

CONCEPTUAL FRAMEWORK

University

Learning is preeminent at California State University, Fullerton. We aspire to combine the best qualities of teaching and research universities where actively engaged students, faculty and staff work in close collaboration to expand knowledge. The inherent purpose of the University is to extend, refine and diffuse knowledge.

Students

The quality of the educator is the most critical variable in education. It is our central promise that educators possess a wide constellation of knowledge and skills. These include knowledge of the subject taught, understanding of development and learning, pedagogical skills in communicating knowledge, and awareness of the social and political contexts of schools. Educators must also possess a commitment to lifelong learning, respect for all individuals enriched by an understanding of culture and diversity, and a professional commitment to work collaboratively with other professionals to provide the highest quality education to a diverse, multicultural population.
Faculty
The faculty at CSU Fullerton is committed to excellence in teaching and demonstrates the highest standards of ethical practice. Our faculty model interactive, dynamic teaching and inquiry that promote reflective practice based on sound research and theory coupled with real world problems. At CSU Fullerton, learning expands beyond the classroom to include partnerships within the community.

MISSION STATEMENT OF THE DEPARTMENT OF SPECIAL EDUCATION
The mission of the Department of Special Education is to develop quality teachers who value lifelong learning. We provide credentials for teachers specializing in:
• Mild/Moderate Disabilities
• Moderate/Severe Disabilities
• Early Childhood Special Education

The program is designed to train educational generalists in inclusive non-categorical approaches for children with heterogeneous special needs. We believe in collaborations with general education, special education, all service providers, parents and the community. We train teachers in pedagogy that is multi-paradigmatic and provide a variety of theoretical perspectives related to teaching. The primary teacher focus should be to meet the individual needs of the child and family. The instructional curriculum provides credential and master’s degree candidates with a broad background in the physiological, environmental and social aspects of exceptionality. Candidates will learn effective research-based teaching strategies, characteristics, interdisciplinary/collaboration skills, plus transition and positive behavior support, as each establishes a conceptual base of understanding of persons with disabilities. Master’s degree programs are available in all areas of specialty.

APPLICATION DEADLINES
The deadlines for completing online applications are Feb. 28 for the fall semester and Sept. 30 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

ADMISSION REQUIREMENTS
1. University graduate application
2. Department of Special Education application
3. Three letters of recommendation
4. Letter of intent including education philosophy, purpose statement (This is the same as an autobiography)
5. Overall grade point average of 2.75 for credential programs; 3.0 for Master of Science Program
6. Certificate of Clearance
7. U.S. Constitution verification
8. Passage of the California Subject Examinations for Teachers (CSET) of the National Teacher Examination (PRAXIS) or completion of the single subject preparation program or completion of any single subject competency examination approved by the state (for Mild/Moderate, Moderate/Severe program candidates only)
9. Completion of the California Basic Education Skills Test (CBEST) (for all candidates)
10. Satisfactory completion of prerequisite courses:
   a. Special Ed 371 (for all candidates)
   b. Ed El 315A and 315B, Child/Adolescent Studies 315 or equivalent (for those students interested in working with elementary students) and Ed El 325 for those candidates interested in a dual credential (multiple subject and special education)
      OR
      Ed Sec 310 and Ed Sec 320 (for those students interested in working with secondary students) and Ed Sec 330 and Ed Sec 340 for those candidates interested in a dual credential (secondary education and special education)
   c. Courses on transcripts reflecting Child Development-Birth-8 (for early childhood majors only)
11. Field experience with typically developing students (for all programs)
12. Faculty interview
13. Submitted proof of a bachelor’s degree before enrollment in student teaching.

For further information please call the Admissions Assistant at 657-278-4196.

EDUCATION SPECIALIST CREDENTIALS
Programs leading to three Education Specialist credentials are available. They are:
1. Specialist credential to teach persons with mild/moderate disabilities, including specific learning disabilities, mild mental retardation and other health-impaired and emotional disturbance (Mild/Moderate)
2. Specialist credential to teach persons with moderate/severe disabilities, including severely developmentally disabled, mental retardation, multi-handicapped, emotionally disturbed and children with autism (Moderate/Severe)
3. Specialist credential to teach infants, toddlers and preschool children with disabilities (Early Childhood Special Education)

The California Commission on Teacher Credentialing adopted a policy that requires all special education teaching credential candidates to complete preparation programs for a preliminary (Level I) and professional (Level II) credential. All persons completing
Level I preparation programs are required to obtain a professional clear special education credential (Level II) through an approved university program within five years of the date of issuance of the Level I credential.

Advisement is available to any student seeking an Education Specialist credential in the Department of Special Education. New students will be assigned an adviser at the time of admission to the Department of Special Education.

The Special Education Specialist Credential consists of three phases:

1. A prerequisites phase in which students are introduced to the basic characteristics of the various types of disabilities, make field observation in various settings, and experience practices and procedures of the day-to-day world of teaching exceptional students.

2. A core-components phase, where the issues and concerns related to statistical assessment and identification of exceptional individuals, as well as the legal mandates and regulations of special education law, exploration of the dynamics of disabilities as it relates to families and parents; and effective researched based teaching techniques are mastered.

3. An advanced specialization phase, in which specific issues related to the area of specialty are addressed, i.e., characteristics and teaching methods courses relating to the specific disability area, including the on-site field support components for all credentials and the resource specialist certificate. Students must finish the prerequisite phase before entering the other two areas. The core-components phase and the advanced specialization phases are taken concurrently to allow the teacher to learn about their field of specialization as quickly and efficiently as possible. At the end of Phase III, candidates qualify for a Level I credential. Level II credential is designed as an induction period to support new teachers on-the-job. Each candidate selects a specific area of emphasis. Several courses in Level II lead to a master’s degree.

Undergraduates anticipating career options in Special Education may take any 200-300 or 400-level course prior to program admission.

**STREAMLINED TEACHER EDUCATION PROGRAM**

Designed for freshmen planning to be teachers, students in the Streamlined Teacher Education Program (STEP) combine their bachelor’s degree requirements with credential program courses to earn both the degree and the preliminary credential in an efficient, well-planned program. Students in STEP complete the requirements for the bachelor’s degree in either Child and Adolescent Development or Liberal Studies and the requirements for a Professional (preliminary) Multiple Subject Credential (for teaching elementary school) and/or an Education Specialist Credential (for teaching special education).

Students in STEP benefit from early field experience in K-12 classrooms, regular contact with faculty members from their major departments and from the education departments and regular advisement and support throughout the program. Students in STEP also have multiple opportunities to meet and work with other students in the program, facilitating their social connections with other students with similar career aspirations.

Transfer students may also participate in STEP. To be well-positioned to participate in the program, they must seek advisement from their community college counselors as early in their academic careers as possible. Students in this program must take a particular pattern of courses to satisfy General Education Program requirements. Transfer students should check the Center for Careers in Teaching website for more information.

For further information about STEP, please visit the Center for Careers in Teaching (CCT) website at http://www.fullerton.edu/cct or visit the CCT directly in H 113.

**MILD/MODERATE AND MODERATE/SEVERE CREDENTIAL**

**Level I**

- Special Ed 421 Working with Families of Individuals with Disabilities (3)
- Special Ed 430 Foundations in School Teaching (3)
- Special Ed 433 Language Arts and Reading Instruction in the Public Schools (3)
- Special Ed 435 Mathematics Curriculum and Instruction in Elementary School Teaching (3)
- Special Ed 438 Supervised Fieldwork in Elementary Teacher Education (2)
- Special Ed 439 Student Teaching in Elementary School (5)
- Special Ed 450 Visual and Performing Arts (1)
- Special Ed 451 Community, School, Classroom Issues (1)
- Special Ed 462 Practices and Procedures in Special Education (3)
- Special Ed 463 Characteristics of Individuals with Mild/Moderate Disabilities (3)
  - OR Special Ed 464 Characteristics of Individuals with Moderate/Severe Disabilities (3)
- Special Ed 482A Curriculum and Methods for Individuals with Mild/Moderate Disabilities (3)
  - OR Special Ed 482B Curriculum and Methods for Individuals with Moderate/Severe Disabilities (3)
- Special Ed 489A Directed Teaching in Special Education (A) (6)
  - OR Special Ed 489B Directed Teaching in Special Education (B) (6)
- Special Ed 520 Assessment in Special Education (3)
- Special Ed 522 Positive Behavior Support (3)
- Special Ed 531 Seminar: Individuals with Moderate/Severe Disabilities (3)
  - OR Special Ed 532 Seminar: Individuals with Mild/Moderate Disabilities (3)
Level II
Health Sci 358 Health Education (3)
Special Ed 304 Personal Proficiency in Educational Technology for Secondary Teachers (3)
Special Ed 510 Research Methods and Statistics (3)
Special Ed 529 Collaborative and Consultative Seminar (3)
(Induction Plan Written)
Special Ed 533 Seminar: Issues and Trends in Collaborative/ Consultative Services (3) (Induction Plan Finalized)
Special Ed 584 Transition, Vocation and Careers Over the Lifespan (3)
Special Ed 586 Curriculum Issues in Special Education (3)
Special Ed 599 Independent Graduate Research (3)

EARLY CHILDHOOD SPECIAL EDUCATION CREDENTIAL

Level I
Human Comm 407 Speech-Language Development and Disorders for Educators (3) or adviser agreed upon equivalent
Special Ed 371 Exceptional Individual (3)
Special Ed 400 Early Childhood Special Education (3)
Special Ed 421 Working with Families of Individuals With Disabilities (3)
Special Ed 430 Foundations in School Teaching (3)
Special Ed 436 Literacy for Early Childhood Special Education Specialists (3)
Special Ed 489A Directed Teaching in Special Education (A) (6)
OR Special Ed 489B Directed Teaching in Special Education (B) (6)
Special Ed 514 Infant Assessment and Intervention (3)
Special Ed 515 Preschool Assessment and Intervention (3)
Special Ed 522 Positive Behavior Support (3)
Special Ed 535 Advanced Seminar: Early Childhood Special Education (Web Class) (3)

Level II
Health Sci 358 Health Education (3)
Special Ed 304 Personal Proficiency in Educational Technology for Secondary Teachers (3)
Special Ed 510 Research Methods and Statistics (3)
Special Ed 529 Collaborative and Consultative Seminar (3)
(Induction Plan Written)
Special Ed 533 Seminar: Issues and Trends in Collaborative/ Consultative Services (3) (Induction Plan Finalized)
Special Ed 584 Transition, Vocation and Careers Over the Lifespan (3)
Special Ed 586 Curriculum Issues in Special Education (3)
Special Ed 599 Independent Graduate Research (3)
Education Specialist Level II

SPECIAL EDUCATION UNIVERSITY INTERNSHIP

The department currently has a two-year internship program designed to offer support to teachers on the job in local school districts. Interns receive systematic support, guidance and feedback from both the participating school districts and from university faculty and staff.

Prerequisites:
1. Letter from school district providing starting date of employment for internship
2. Completion of Intern Credential application (pick up in the Credential Center, College Park 740)
3. Acceptance into the Special Education program, including completion of department prerequisite coursework
4. Evidence of subject matter competency
5. Passage of the California Basic Education Skills Test (CBEST)
6. Special Ed 371, 421, 430 and 462. Completion of all or partial general education coursework

Special program features include: (1) an emphasis on effective teaching strategies in reading and mathematics; and (2) specialized training in collaboration skills for the inclusive classroom including positive behavior supports, diversity awareness and curriculum modifications and adaptations for the inclusive classroom.

MASTER OF SCIENCE IN EDUCATION (SPECIAL EDUCATION)

This program is designed to prepare graduate students to critically analyze and evaluate empirically based research; theoretical constructs and philosophical foundations; and historical, psychological and sociological issues related to the education of individuals with disabilities. It focuses on analysis and interpretations of policy as related to curriculum, pedagogy and methodology. Specific emphasis is offered in the areas of Early Childhood Special Education, Collaborative-Consultation, Mild/Moderate Disabilities, Moderate/Severe Disabilities and the Education of the Gifted and Talented.

Application Deadlines
The deadlines for completing online applications are Feb. 28 for the fall semester and Sept. 30 for the spring semester (see http://www.csumentor.edu). Mailed applications need to be postmarked by the same deadlines. However, deadlines may be changed based upon enrollment projections.

Admission to Graduate Standing: Conditionally Classified
Requirements include a baccalaureate degree from an accredited institution and a grade-point average of at least 3.0 in the last 60 semester units attempted (see the “Graduate Regulations” section of this catalog for policies and procedures regarding admission).
Graduate Standing: Classified

A student who meets the admission requirements and the following requirements may be granted classified graduate standing:

1. Grade-point average of 3.0 or better in all previous academic and related work
2. An approved major
3. Completion of Special Ed 371 Exceptional Individual
4. Satisfactory interview and autobiography
5. Development of a study plan approved by the Special Education Department's graduate program adviser and the Associate Vice President, Academic Programs (Graduate Studies Office)

Study Plan

Prerequisite (1 unit)
Special Ed 501 Introduction to Graduate Studies (1)

Core Classes (12 units)
Special Ed 510 Research Methods and Statistics (3)
Special Ed 522 Positive Behavior Support (3)
Special Ed 551 Bilingual/Multicultural Special Education: Assessment, Curriculum and Instruction (3)
Special Ed 586 Curriculum Issues in Special Education (3)

Concentration (12 units)
Special Ed 504 Advanced Proficiency in Educational Technologies (3)
Special Ed 515 Preschool Assessment and Intervention (3)
OR Special Ed 520 Assessment in Special Education (3)
Special Ed 529 Collaborative and Consultative Seminar (3)
Special Ed 530 Graduate Seminar in Giftedness and Creativity (3)
OR Special Ed 531 Seminar: Individuals with Moderate/Severe Disabilities (3)
OR Special Ed 532 Seminar: Individuals with Mild/Moderate Disabilities (3)
OR Special Ed 535 Advanced Seminar: Early Childhood Special Education (Web Class) (3)

Electives (3 units)
Any 500-level adviser-approved elective courses. Candidates opting for the Project (SPED 597) or thesis (SPED 598) must take SPED 596 as their elective.

Culminating Experience (3 units)
Special Ed 595 Culminating Seminar in Special Education (3)
OR Special Ed 597 Project (3)
OR Special Ed 598 Thesis (3)

RESOURCE SPECIALIST CERTIFICATE OF COMPETENCY

The curriculum for the Resource Specialist certificate of competency is designed to prepare candidates, who have approved entry-level skills and professional preparation, assume the role as resource specialists in programs serving special education students.

The certificate program meets the competencies set forth by the California Commission on Teacher Credentialing as well as additional standards deemed appropriate by the faculty of the Department of Special Education, other university personnel and community advisory board members. Students desiring this certificate without enrolling for a degree or credential should apply for admission to the university as post baccalaureate with a Resource Specialist objective.

Prerequisites

1. A 3.0 grade-point average in teacher presentation coursework
2. Passage of the California Basic Education Skills Test (CBEST)
3. Evidence of multiple subject or single subject credential
4. Appropriate Advanced Specialist Credential in Special Education. (Learning Handicap or Severe Handicap). Students should contact a department adviser prior to initiating a program for the R.S.P. Certificate.

Note: Verification of three years of successful teaching involving regular class and special education experience is necessary before the certificate will be granted.

CERTIFICATE IN EARLY CHILDHOOD SPECIAL EDUCATION

This five-year professional certificate program is designed to meet the standards and competencies adopted by California’s Commission on Teacher Credentialing. This two-semester program provides professional training to enable students to teach in Early Childhood Special Education programs for children with special needs ages birth through five years.

Note: Only nine units of graduate-level coursework from another institution can be petitioned to fulfill equivalent course requirements in the certificate program and this certificate can only be added to a clear credential.

Prerequisites

1. Baccalaureate degree in an interdisciplinary field related to Special Education (e.g., Child and Adolescent Development, Nursing, Human Services, Psychology, Kinesiology and degree programs with Adapted Physical Education emphases, etc.)
2. Minimum grade-point-average of 2.75
3. Background knowledge in typical child development and experience with young children
4. Met all Department prerequisites described in this catalog
5. Verification of a clear Education Specialist level II Credential

Study Plan

Core Requirements (21 units)
Special Ed 400 Early Childhood Special Education (3)
Special Ed 421 Working with Families of Individuals with Disabilities (3)
Adviser-approved Directed Teaching in Special Education Course (6)
Special Ed 514 Infant Assessment and Intervention (3)
Special Ed 515 Preschool Assessment and Intervention (3)
Special Ed 535 Advanced Seminar: Early Childhood Special Education (Web Class) (3)

Electives
The nine elective units must meet the following criteria: (1) courses will have to diversify and expand upon the student’s previous higher education coursework or degree program; and (2) all selected coursework will have to be approved by the student’s program adviser.

SPECIAL EDUCATION COURSES
Courses are designated as SPED in the class schedule.

110 The Teaching Experience: Exploration (2-3)
(Same as Ed Sec 110)

209 Overview of Paraprofessional Roles and Responsibilities (3)
Overview of paraprofessional roles including legal, instructional and behavioral. Train to work as teaching assistants. (10 hours fieldwork required)

211 Classroom Practices for Diverse Learners (3)
Prerequisite: SPED 209. Paraprofessionals will be prepared in classroom/community practices for diverse learners. Topics will include literacy, language, assessment and behavior support. (10 hours fieldwork required)

250 Disabilities: The Movies and the Media (3)
Critical overview of issues related to prejudice, misperceptions and stereotypes of individuals with disabilities. Opportunity to view numerous contemporary films and videos on persons with disabilities.

304 Personal Proficiency in Educational Technology for Secondary (3)
(Same as Ed Sec 304)

371 Exceptional Individual (3)
Overview of all areas of exceptionalities and topical review of characteristics of individuals with exceptional needs. Opportunity to participate in various simulations and activities designed to enhance the understanding of diversity in our society. One or more sections offered on-line.

400 Early Childhood Special Education (3)
Prerequisite: Child/Adolescent Studies 325A or equivalent course in normal infant and early childhood development. Provides characteristics of young children ages birth-5 years with disabilities, developmental delays and those “at risk” for developmental delays. Rationale for early intervention and preschool programs, program models and service delivery approaches will be presented.

410 Research Methods and Statistics for Teachers (3)
Prerequisites: Education Specialist (Preliminary) Credential. Introduce basic knowledge and skills necessary to effectively understand and apply research. Commonly used research methods and statistical procedures employed in educational research. Offered online only. Not available for use on a graduate study plan.

411 Mainstreaming (3)
Assists implementation of the “Least Restrictive Environment” placement requirement of Individuals with Disabilities Education Act (IDEA). Techniques and strategies to modify general education classrooms to accommodate all students with ability differences.

421 Working with Families of Individuals with Disabilities (3)
Prerequisite: Special Ed 371. Characteristics of family systems; functional assessment of family needs, concerns and priorities. Effective communication, collaborative skills and identification of community resources. One or more sections offered online.

430 Foundations in School Teaching (3)
(Same as Ed El 430)

433 Language Arts and Reading Instruction in the Public Schools (3)
(Same as Ed El 433)

434 Methods and Inquiry for Teaching English Learners (2)
(Same as Ed El 434)

435 Mathematics Curriculum and Instruction in Elementary School Teaching (3)
Prerequisites: SPED 371 and EDSC 310, EDEL 315 or HCOM 407. (Same as Ed El 435)

436 Literacy for Early Childhood Special Education Specialists (3)
Prerequisite: Special Ed 371. Basic principles of and teaching techniques for emergent literacy in reading, writing and verbal and non-verbal communication for children with disabilities birth to age five. Not available for graduate degree credit. Credit/No Credit Only.

437 Social Studies Curriculum and Instruction in Elementary School Teaching (2)
(Same as Ed El 437)

438 Supervised Fieldwork in Elementary Teacher Education (1-2)
(Same as Ed El 438)

439 Student Teaching in the Elementary School (5-14)
(Same as Ed El 439)

450 Visual and Performing Arts Methods: Art, Dance, Drama and Music (1)
(Same as Ed El 450)

451 Community, School and Classroom Issues (1)
(Same as Ed El 451)
452 P.E., Health and Mainstreaming Education (1)  
(Same as Ed El 452)

453 Teaching Performance Assessment Support (1)  
(Same as Ed El 453)

462 Practices and Procedures in Special Education (3)  
Prerequisite: Special Ed 371. Critically examines current laws, educational implementation and related practices in Special Education from birth through 21 years. Issues of multiculturalism; non-discriminatory assessment, curriculum and instructional strategies; federal, state and community resources. One or more sections offered online.

463 Characteristics of Individuals with Mild/Moderate Disabilities (3)  
Prerequisites: Special Ed 371. In-depth examination of individuals with diverse cognitive, social-emotional and physical characteristics and their educational needs. Offered as Web course only.

464 Characteristics of Individuals with Moderate/Severe Disabilities (3)  
Prerequisite: Special Ed 371. In-depth examination of individuals with diverse cognitive, social-emotional, behavioral and physical characteristics and their educational needs. One or more sections offered online.

482A Curriculum and Methods for Individuals with Mild/Moderate Disabilities (3)  
Prerequisites: Special Ed 430, 433, 435, 462 and 463. Curriculum development, instructional methodology and materials for teaching individuals with mild/moderate disabilities. Instructional strategies permitting access to the Core curriculum.

482B Curriculum and Methods for Individuals with Moderate/Severe Disabilities (3)  
Prerequisites: Special Ed 430, 433, 435, 462, and 464. Curriculum development, instructional methodology and materials for teaching individuals with moderate/severe disabilities. Functional academics, life skills and adaptations to Core curriculum.

489C Directed Teaching in Special Education: Infants and Toddlers (6)  
Prerequisites: Special Ed 371, 400, 430, 462, 522. Corequisite: Special Ed 514. Supervised practice field/clinical experience with exceptional individuals ages birth to three years related to skills and competencies specified for the completion of university or State-approved endorsements or certificates. May be repeated for credit. Must be taken credit/no credit.

489D Directed Teaching in Special Education: Preschool (6)  
Prerequisites: Special Ed 371, 400, 430, 462, 522. Corequisite: Special Ed 514. Supervised practice field/clinical experience with exceptional individuals ages 3-5 years related to skills and competencies specified for the completion of university or State-approved endorsements or certificates. May be repeated for credit. Must be taken credit/no credit.

490 Field Studies: Special Education (3)  
Prerequisites: Special Ed 371 or 400 and consent of department chair. Supervised practicum/field or clinical experience with exceptional individuals related to skills and competencies specified for the completion of university- or State-approved endorsements or certificates. May be repeated for credit. Must be taken Credit/No Credit.

496 Senior Educational Practicum (3)  
Prerequisites: approval by department chair and instructor. Provides for an advanced level of educational practicum within school and/or agency settings.

499 Independent Study (3)  
Prerequisites: senior or graduate standing, department chair approval and consent of instructor. Supervised individual studies under the direction of faculty member. Experimental, research or creative projects.

501 Introduction to Graduate Studies (1)  
(Same Ed Sec 501)

504 Advanced Proficiency in Educational Technologies (3)  
(Same Ed Sec 504)

510 Research Methods and Statistics (3)  
Prerequisites: Special Ed 501, 520, 530, 531; 532 or 535. Educational research methodology and statistics. Considers various methods of education research, formulation of research hypotheses, and preparation of research documents. Understanding descriptive and inferential statistics in educational research.

514 Infant Assessment and Intervention (3)  
Prerequisites: Child/Adolescent Studies 315, Special Ed 400 or equivalent. Transdisciplinary model for assessment of infant birth to three years of age at risk for developmental delays and their families will be presented. Culturally sensitive assessments and family-focused interventions used to develop Individualized Family Service Plans (IFSP) will be presented.
515 Preschool Assessment and Intervention (3)
Prerequisites: Child/Adolescent Studies 315, Special Ed 400 or equivalent. Assessment of preschool-age children at risk for developmental delays and their families using both formal and informal testing instruments. Translation of child and family assessments into preschool special education program planning will also be discussed.

520 Assessment in Special Education (3)
Prerequisites: Special Ed 371, 462, 482A or 482B. Critically examines application of measurement and data analysis in the K-12 classroom.

522 Positive Behavior Support (3)
Prerequisites: Special Ed 371, 411, 462, 482A, 482B or 514. Developing an educational approach to supporting positive behaviors in the classroom and community. Regulations mandated by Hughes AB 2386. Behavior Intervention Case Manager (BICM) certificate provided to qualified personnel.

528 Advanced Special Education Seminar: Curriculum, Assessment and Instructional Management (3)
Prerequisite: Special Ed 463 or 464. Collaborative and consultative strategies and techniques for delivering direct and indirect services to individuals with disabilities in a continuum of settings.

529 Collaborative and Consultative Seminar (3)
Prerequisites: Special Ed 463, 464 and/or Level I preliminary specialist credential. Training in staff development, theory and communication skills needed to work with decision-making groups. Candidates design state mandated induction plan for professional growth.

530 Graduate Seminar in Giftedness and Creativity (3)
Prerequisite: Special Ed 463. Varieties of higher cognitive functioning and those characteristics or performances described as creativity. Ways to enhance skills in analysis, synthesis, evaluation, creative problem solving and divergent productions.

531 Seminar: Individuals with Moderate/Severe Disabilities (3)
Prerequisites: Special Ed 371, 464 recommended or equivalent and Special Ed 482B. Analyzes selected issues with major emphasis on independent investigation into the contributions of contemporary theory and research and the review of the emerging trends. One or more sections offered online.

532 Seminar: Individuals with Mild/Moderate Disabilities (3)
Prerequisites: Special Ed 371, 463 recommended or equivalent and Special Ed 482A. Analyzes selected issues with major emphasis on independent investigation into the contributions of contemporary theory and research and the review of the emerging trends.

533 Seminar: Issues and Trends in Collaborative/Consultative Services (3)
Prerequisites: Special Ed 510, 529, 586, 599 and candidate must be in final semester of Level II education specialist program. Contemporary research and practices as they apply to collaborative and consultative services in school and agency settings.

535 Advanced Seminar: Early Childhood Special Education (Web Class) (3)
Prerequisites: Level I; Special Ed 400, 514, and 515. Theoretical bases, research related to assessment and service delivery approaches and current issues and trends in early childhood intervention.

551 Bilingual/Multicultural Special Education: Assessment, Curriculum and Instruction (3)
Prerequisite: Special Ed 434. Prepares teachers to teach special needs students who come from culturally and linguistically diverse backgrounds. Curriculum development, assessment practices and review of instructional needs. One or more sections offered online.

584 Transition, Vocation and Careers Over the Lifespan (3)
Prerequisites: Special Ed 371 or 411; and Special Ed 529; for online section, technology specified on department's website. Development of curriculum and methods addressing transition, vocation, career and social competency issues from infancy to adulthood. One or more sections offered online.

586 Curriculum Issues in Special Education (3)
Prerequisites: graduate status and consent of instructor; Special Ed 510, 531; 532 or 535. Philosophical, social, economic and educational issues which underlie decision-making with respect to curriculum and methods in special education.

595 Culminating Seminar in Special Education (3)
Prerequisites: completion of all master's courses on study plan. Graduate capstone seminar for qualified candidate preparing for the comprehensive examination that is designed to assess competencies in the field of special education.

596 Advanced Research Seminar (3)
Prerequisites: Special Ed 530, 531, 532 or 535; Special Ed 510; 520; 522. Builds upon material learned in Special Ed 510 Research Methods and Statistics; further explores inferential and descriptive statistics, use of statistical applications such as SPSS, qualitative data analysis and help in developing scholarly writing in order to complete one or more chapters of the project or thesis. Course may be repeated once for credit.

597 Project (3)
Prerequisite: consent of instructor. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

598 Thesis (3)
Prerequisite: consent of instructor. Conducts individual research; conferences with the instructor culminating in a thesis.

599 Independent Graduate Research (3)
Prerequisite: consent of instructor. Independent inquiry. For qualified graduate students.
INTRODUCTION
The Department of Theatre and Dance undergraduate and graduate programs include the fields of acting, dance, directing, musical theatre, playwriting, technical production and design. Specifically, the coursework and theatrical and dance production activities are arranged to provide opportunities for students to: (1) develop an appreciation for theatre arts and dance; (2) become aware, as audience or participants, of the shaping force of theatre arts and dance in society; (3) improve the knowledge and skills necessary for work in the theatrical arts profession and careers in dance; (4) pursue graduate studies; and (5) prepare for teaching theatre.

Public performance is at the center of the department’s programs. Therefore, continuing theatre and dance production activities are essential for all students at California State University, Fullerton, including the undergraduate theoretical student, as well as the undergraduate pre-professional, professional and graduate conservatory student. The program in dance is designed to develop basic technique, ability to perform and fundamental principles that lead to a fuller appreciation of the art. Within a clear framework of technique and dance studies, students will encounter challenges in both areas. Public performance, as well as a sound academic schedule, is considered paramount.

The Theatre and Dance Department is accredited by the National Association of Schools of Dance and the National Association of Schools of Theatre. The theatre undergraduate program ranks among the top 16 schools in the nation according to the Performing Arts Major’s College Guide published by Macmillan Books. The dance program is also ranked among such noteworthy programs as Cornell, Duke, Hofstra and Brigham Young Universities.

GENERAL BACHELOR’S DEGREE REQUIREMENTS
The Bachelor of Arts degree requires a minimum of 120 units and the Bachelor of Fine Arts requires a minimum of 132 units. This includes courses for the major, General Education and any free electives.

The concentration in Liberal Arts in theatre is for those who wish to study theatre as a cultural contribution or who wish to pursue graduate degrees in theatre with an emphasis in theory and research. It is strongly recommended that students electing this plan support the major with approved electives from art, music, foreign languages, literature, philosophy or speech.

Teaching in theatre meets the requirements of the teaching credential with specialization in secondary teaching with a degree in Theatre Arts and a degree in English.

The Bachelor of Fine Arts Degree is designed for those wishing to pursue a career as a professional artist. Currently, concentrations in Acting and Musical Theatre are offered.

The Bachelor of Arts in Dance is designed to develop competency for pursuing careers in dance or for pursuing a graduate degree in dance. Dance majors must enroll in daily technique classes to meet the demands of choreographic and performance challenges. The Bachelor of Arts in Dance necessitates the daily training of the body and
mind in technique classes. Dance majors are advised to participate in two daily classes, preferably one in Ballet and the other in Modern.

In addition to the requirements listed below for the major, students must meet the university requirements for general education. Students pursuing a concentration in Teaching must meet all specific requirements for the desired teaching credential. See description of secondary school teaching credential program under Department of Secondary Education. In addition, students pursuing the Teaching concentration should see the department's secondary education adviser regarding the course sequence required for the single subject waiver in English.

To qualify for a B.A. or B.F.A. degree with a major in theatre or dance, students must have a "C" (2.0) or better in all theatre, dance or music courses required for the degree. In addition to course requirements, all theatre and dance majors will enroll for two units of Theatre 478B each semester of residency up to a maximum of eight semesters. All dance majors are strongly encouraged to enroll in Dance 478A Performance each semester.

Theatre 375 with a grade of "C" (2.0) or better fulfills the upper-division writing requirement for theatre majors. Dance 325 with a grade of "C" (2.0) or better fulfills the upper-division writing requirement for dance majors.

Theatre 200, or its equivalent, is a prerequisite for all upper-division theatre courses with the exception of Theatre 478A,B. Transfer students may take Theatre 200 concurrently with their first semester of upper-division courses. Prior to entering their junior year, or upon transferring to Cal State Fullerton, all students electing an Acting or Musical Theatre concentration under the B.F.A., or the major in Dance will be evaluated and advised as to potential for advancement in the major. Auditions are held only at the end of the Spring Semester for entrance into the junior level performance classes. Students should contact the department regarding audition requirements.

**BACHELOR OF ARTS IN THEATRE ARTS**

**LIBERAL ARTS CONCENTRATION**

Students in the Liberal Arts Concentration must take Theatre 110 Oral Communication of Literature (3) to fulfill General Education Category I.A.

**Lower-Division Core (11 units)**
- Theatre 140 Acting I (2)
- Theatre 200 Art of the Theatre (3)
- Theatre 276 Introduction to Stagecraft (3)
  OR Theatre 277 Introduction to Costume Design (3)
- Theatre 285 Theatrical Makeup (3)

**Upper-Division Core (21 units)**
- Theatre 351 Theatre Management (3)
- Theatre 370A Fundamentals of Directing (3)
- Theatre 375 Seminar in Writing: Critical Techniques (3)
- Theatre 386 Fundamentals of Lighting Design (3)
- Theatre 475A,B,C World Theatre (3,3,3)

**Electives (22 adviser-approved units)**

**Acting/Directing (3-9 units minimum)**
- Theatre 141A,B Voice/Movement for Stage I (3,3)
- Theatre 240A,B Acting II (3,3)
- Theatre 241A,B Voice/Movement for Stage II (2,2)
- Theatre 350 Stage Management (2)
- Theatre 370B Fundamentals of Directing (3)
- Theatre 470A Advanced Directing (3)

**Technical Theatre and Design (3-9 units minimum)**
- Theatre 288 Introduction to Scene Design (3)
- Theatre 387 Audio Techniques (3)
- Theatre 486 Advanced Lighting Design (3)
- Theatre 487 Advanced Audio Techniques (3)
- Theatre 488 Advanced Design and Production (3)

**PRODUCTION/PERFORMANCE CONCENTRATION**

Students in the directing emphasis must take Theatre 110 Oral Communications of Literature to fulfill General Education Category I.A.

**Directing Emphasis**

**Lower Division (23 units required)**
- Theatre 140 Acting I (2)
- Theatre 141A,B Voice/Movement for Stage I (3,3)
- Theatre 200 Art of the Theatre (3)
- Theatre 240A Acting II (3)
- Theatre 276 Introduction to Stagecraft (3)
- Theatre 277 Introduction to Costume Design (3)
- Theatre 288 Introduction to Scene Design (3)

**Upper Division (32 units required)**
- Theatre 350 Stage Management (2)
- Theatre 351 Theatre Management (3)
- Theatre 370A,B Fundamentals of Directing (3,3)
- Theatre 375 Seminar in Writing: Critical Techniques (3)
- Theatre 386 Fundamentals of Lighting Design (3)
- Theatre 470A,B Advanced Directing (3,3)
- Theatre 475A,B,C World Theatre (3,3,3)

All theatre majors with an emphasis in directing must assistant stage manage a production either prior to or concurrently with Theatre 470A Advanced Directing, and must stage manage a production prior to graduation.

**Playwriting Emphasis**

Students in the Playwriting Emphasis must take Theatre 110 Oral Communication of Literature to fulfill General Education Category I.A.
Lower Division (11 units required)
- Theatre 140 Acting I (2)
- Theatre 200 Art of the Theatre (3)

With six units from:
- Theatre 276 Introduction to Stagecraft (3)
- Theatre 277 Introduction to Costume Design (3)
- Theatre 288 Introduction to Scene Design (3)

Upper Division (35 units required)
- Theatre 350 Stage Management (2)
- Theatre 364 Seminar in Playwriting (3,3)
- Theatre 370A,B Fundamentals of Directing (3,3)
- Theatre 375 Seminar in Writing: Critical Techniques (3)
- Theatre 386 Fundamentals of Lighting Design (3)
- Theatre 464 Advanced Playwriting (3)
- Theatre 475A,B,C,E World Theatre (3,3,3,3)

Electives (6 units) from the following:
- Theatre 300 Theatre and Cultural Diversity (3)
- Theatre 351 Theatre Management (3)
- Theatre 383 Drama into Film (3)
- Dance 301 Dance and Cultural Diversity (3)

Students in the Playwriting Emphasis must assistant stage manage a production either prior to or concurrently with Theatre 370B.

Design/Technical Production Emphasis
- Theatre 110 Oral Communication of Literature to fulfill General Education Category I.A.

Lower Division (20 units required)
- Theatre 140 Acting I (2)
- Theatre 200 Art of the Theatre (3)
- Theatre 276 Introduction to Stagecraft (3)
- Theatre 277 Introduction to Costume Design (3)
- Theatre 285 Theatrical Makeup (3)
- Theatre 288 Introduction to Scene Design (3)

Upper Division (27 units required)
- Theatre 350 Stage Management (2)
- Theatre 370A,B Fundamentals of Directing (3)
- Theatre 375 Seminar in Writing: Critical Techniques (3)
- Theatre 377 Costume Design (3)
- Theatre 386 Fundamentals of Lighting Design (3)
- Theatre 402B Dramatic Activities for Children (3)
- Theatre 470A Advanced Directing (3)
- Theatre 475A,B,C,E World Theatre (9)

Teaching Concentration (Single Subject)
- Theatre 110 Oral Communication of Literature to fulfill General Education Category I.A.

Lower Division (26 units required)
- Theatre 140 Acting I (2)
- Theatre 141A,B Voice/Movement for Stage I (3,3)
- Theatre 200 Art of the Theatre (3)
- Theatre 240A Acting II (3)
- Theatre 276 Introduction to Stagecraft (3)
- Theatre 277 Introduction to Costume Design (3)
- Theatre 285 Theatrical Makeup (3)
- Theatre 288 Introduction to Scene Design (3)

Upper Division (29 units required)
- Theatre 350 Stage Management (2)
- Theatre 370A,B Fundamentals of Directing (6)
- Theatre 375 Seminar in Writing: Critical Techniques (3)
- OR English 301 Advanced College Writing (3)
- Theatre 386 Fundamentals of Lighting Design (3)
- Theatre 402B Dramatic Activities for Children (3)
- Theatre 470A Advanced Directing (3)
- Theatre 475A,B,C,E World Theatre (9)

Teaching Education majors are required to complete a degree in English.

Bachelor of Fine Arts in Theatre Arts

Acting Concentration
- This concentration is for students who desire a professionally oriented education and training in acting. Only those who exhibit exceptional talent, motivation and commitment will be admitted to the program.

Students in the Bachelor of Fine Arts in Theatre Arts must take Theatre 110 Oral Communication of Literature to fulfill General Education Category I.A.
Prior to entering the junior year, or upon transferring to Cal State Fullerton, all students electing the acting concentration will be auditioned, evaluated and advised for advancement in the major.

All applicants for the B.F.A. Acting Concentration must complete the following for entry into the degree program: Theatre 140, Theatre 141A,B, Theatre 200 and Theatre 240A,B or equivalent, with a minimum grade of "B-" (2.7) in each course and an audition in acting.

In addition to the requirements listed below for the major, students must meet the university requirements for a baccalaureate degree.

**Lower Division (7 units required)**

Theatre 241A,B Voice/Movement for Stage II (2,2)

**Theatre 285 Theatre**

**Upper Division (50 units required)**

Theatre 310 Oral Interpretation of Shakespeare (3)

Theatre 340A,B Acting III (3,3)

Theatre 341A,B Voice/Movement for Stage III (2,2)

Theatre 370A Fundamentals of Directing (3)

Theatre 375 Seminar in Writing: Critical Techniques (3)

Theatre 440A,B Acting IV (3,3)

Theatre 443 Audition and Rehearsal Processes (3)

Theatre 475A,B, C World Theatre (3,3,3)

Theatre 482A,B Acting IV: Camera Techniques for Actor and Director (3,3)

Theatre 483 Advanced Acting Workshop (3)

Theatre 497 Production and Performance Projects in Theatre (1,1,1,1)

**Electives (6 units required)**

One course from each category

**Category I (3 units):**

Theatre 276 Introduction to Stagecraft (3)

Theatre 277 Introduction to Costume Design (3)

Theatre 288 Introduction to Scene Design (3)

Theatre 386 Fundamentals of Lighting Design (3)

Theatre 387 Audio Techniques (3)

**Category II (3 units):**

Theatre 300 Theatre and Cultural Diversity (3)

Theatre 351 Theatre Management (3)

Theatre 364 Seminar in Playwriting (3)

Theatre 383 Drama into Film (3)

Once students are accepted and enrolled in the Acting Concentration, they are required to audition each semester, and to accept any role in which they are cast until the degree program is completed.

At the end of each semester of the junior year of study, a faculty committee shall evaluate each BFA candidate. The committee has the authority to retain, dismiss or place candidates on probation. To be retained in the BFA Acting program, students must prepare an acting demonstration (jury). The acting/directing faculty will assess each student at this time and determine if the student warrants retention, probation or dismissal from the program. Each student will be assessed on professionalism, collegiality and progress.

**MUSICAL THEATRE CONCENTRATION**

This degree is for students who desire a professionally oriented education and training in musical theatre. Only those who exhibit exceptional talent, motivation and commitment will be admitted to the program.

Prior to entering the junior year, or upon transferring to Cal State Fullerton, all students electing a major in musical theatre will be auditioned, evaluated and advised as to potential for advancement in the major.

All applicants for the B.F.A. Musical Theatre Concentration must complete the following to qualify for entry into the degree program: Theatre 140 and Theatre 141A,B, Theatre 200 and Theatre 240A,B or equivalent, with a minimum grade of "B-" (2.7) in each course and an audition that shall consist of acting, singing and dance.

In addition to the requirements listed below for the major, students must meet the university requirements for a baccalaureate degree. Music 101 Music Theory for Non-Music Majors (3) must be taken to fulfill General Education Category III.B.1 before taking Theatre 181 Basic Music Reading.

All degree candidates must:

1. prove competency in piano
2. achieve a 300 level in voice juries
3. audition for and be available for casting in all Department of Theatre and Dance musical theatre productions

**Lower Division (17 units required)**

Theatre 181 Basic Music Reading and Sight-Singing (1)

Theatre 236A,B Fundamentals of Musical Theatre Performance (2,2)

Theatre 285 Theatrical Makeup (3)

Theatre 276 Introduction to Stagecraft (3)

Theatre 277 Introduction to Costume Design (3)

Theatre 288 Introduction to Scene Design (3)

Dance 212 Ballet II (2)

Dance 232 Jazz II (2)

Dance 242 Tap Dance II (2)

**Upper Division (44 units required)**

Theatre 340A,B Acting III (3,3)

Theatre 370A Fundamentals of Directing (3)

Theatre 375 Seminar in Writing: Critical Techniques (3)

Theatre 436A,B Musical Theatre Workshop (3,3)

Theatre 437 Musical Theatre Practicum (1,1,1)

Theatre 475A,B or C World Theatre (3,3,3)
Electives in the discipline of musical theatre (3 units required) from:
- Dance 126 Dance Improvisation (2)
- Dance 312 Ballet III (3)
- Dance 332 Jazz III (3)
- Music 184A Piano Class for Non-Music Majors (1)
- Music 365V Vocal Workshop (1)
- Theatre 437A,B Musical Theatre Practicum (3,3)

All dance technique courses may be repeated for credit upon adviser recommendation.

At the end of each semester of the junior year of study, a faculty committee shall evaluate each BFA candidate. The committee has the authority to retain, dismiss or place candidates on probation. To be retained in the BFA Musical Theatre program, students must juries in Voice, dance and acting. In addition to the juries, each student will be assessed on professionalism, collegiality and progress.

BACHELOR OF ARTS IN DANCE

The Bachelor of Arts in Dance is for students who desire an education in the art of dance. The mission of the dance program is to develop dance artists and to foster the skills, understanding and discipline that prepare them for the professional world. The curriculum combines practical training in technique, aesthetics and critical training. Intensive training in Modern Dance and Ballet is complemented by improvisation, composition, dance history, kinesiology, pedagogy and performance experiences. The graduating student is prepared technically and creatively to work as a dance artist from the studio to the stage. Students entering the program must attend a placement class and an advisement session before enrolling in the major. It is mandatory that dance majors be assessed, evaluated and advised as to the potential for advancement in both Modern Dance and Ballet on a yearly basis.

All degree candidates must:
1. receive a "C" (2.0) or better in all course requirements
2. enroll in daily technique classes
3. successfully complete the fourth level of both Ballet and Modern Dance in order to graduate
4. attend yearly dance assessments
5. audition and be available for casting

Lower Division (11 units required)
- Dance 122 Modern Dance I (2)
- Dance 126 Dance Improvisation (2)
- Dance 212 Ballet II (2)
- Dance 222 Modern Dance II (2)
- Dance 226 Rhythmic Analysis (3)

Upper Division (39 units required)
- Dance 301 Dance and Cultural Diversity (3)
- Dance 312 Ballet III (2)
- Dance 322 Modern Dance III (2)
- Dance 323A,B Dance Composition (3,3)
- Dance 324 Forces and Figures in Dance (3)
- Dance 325 Dance Theory and Criticism (3)
- Dance 372 Dance Kinesiology (3)
- Dance 412 Ballet IV (3)
- Dance 422 Modern Dance IV (3)
- Dance 423 Advanced Dance Composition (3)
- Dance 424 Dance Pedagogy (2)
- Dance 471 Creative Dance for Children (3)
- Dance 478A Production and Performance (2)
- Dance 497 Production and Performance Projects in Dance (1)

Electives (7 units required)
With the approval of the appropriate departmental adviser, students complete a minimum of seven elective units, including at least one course from each category below:

Category I:
- Dance 142 Tap Dance I (2)
- Dance 213 Classical Pointe (2)
- Dance 232 Jazz II (2)
- Dance 242 Tap Dance II (2)
- Dance 332 Jazz III (3)
- Kinesiology 381 Sports, Games and Culture (3)
- Music 100 Introduction to Music (3)
- Theatre 100 Introduction to the Theatre (3)
- Theatre 160 Acting for Non-Majors (3)
- Dance 479 Repertory and Performance Techniques (2)

Category II:
- Theatre 277 Introduction to Costume Design (3)
- Theatre 285 Theatrical Makeup (3)
- Theatre 386 Fundamentals of Lighting Design (3)
- Theatre 387 Audio Techniques (3)

MASTER OF FINE ARTS IN THEATRE ARTS

This degree is for students who desire a professionally oriented education in design and technical production, acting and directing. It is the objective of the department to educate and train highly skilled, motivated individuals for careers in professional theatre (including television and film) or for careers as artist-teachers in college or university theatre. Only those who demonstrate an exceptional talent, a high degree of motivation, and a deep com-
mitment to their education and training will be admitted into the program. The highest academic and creative standards will be demanded throughout the program. A positive attitude and a rigid sense of theatre discipline are essential for success in the program.

The degree requires 60 units of approved coursework. Based on a student’s previous undergraduate or professional experience, substitutions or revisions in the study plan might be appropriate. Average length of time to complete the program is three years.

At the end of each semester, each M.F.A. candidate shall be evaluated by a faculty committee. The committee, by recommendation to the Associate Vice President for Graduate Studies, has the authority to retain, dismiss or place candidates on probation. To be retained in the M.F.A. Acting Program, students must prepare an acting demonstration (jury) at the end of each semester. The performance faculty will assess each student at this time and determine if the student warrants retention or dismissal from the program based on a set of predetermined criteria. In addition to the acting jury, each student will be assessed on professionalism, collegiality and progress in coursework and departmental productions.

**Application Deadlines**

Applications for the Directing and Acting Concentrations are accepted in the fall semester only in odd-numbered years (i.e., Fall 2009, 2011, etc.) for admission in even-numbered years (i.e. Fall 2010, 2012, etc.) Applications for the Design/Technical Production Concentration are accepted every fall semester. The deadline for completing online applications is March 1 for the following fall semester; mailed applications also need to be postmarked by March 1. This deadline may change based upon enrollment projections.

Please call the Theatre and Dance Department directly at 657-278-3628 to satisfy additional requirements for consideration, including auditions for actors, interviews for directors and design portfolios for design/production students.

**Admission to Graduate Standing: Classified**

Prerequisites for admission to the program and granting of classified standing are:

1. B.A., B.F.A. or M.A. from an accredited college or university with a major in theatre; or a degree in a related field and extensive work in technical design and production, acting or directing
2. Completion of an oral interview and satisfactory review of the student’s portfolio or audition
3. Acceptance by the faculty
4. Minimum GPA of 3.0 in all upper-division undergraduate work in theatre. A minimum GPA of 2.75 for the last half of the undergraduate program is also required
5. Completion of any additional prerequisites which may be required by the student’s individual committee prior to classification
6. Selection of a graduate adviser and committee. Total committee membership should be three or four faculty members, including the adviser
7. Submission of a formal M.F.A. study program approved by the individual committee, the department graduate adviser and the dean of graduate studies
8. Must meet the Graduate Writing Requirement

**Admission to Graduate Standing: Conditionally Classified**

Students who do not meet certain prerequisites may be considered for admission in conditionally classified graduate standing. Consult the graduate program adviser.

**STUDY PLAN - ACTING**

**Course Requirements (60 units)**

- Theatre 443  Audition and Rehearsal Processes (3)
- Theatre 500  Intro to Graduate Study in Theatre (3)
- Theatre 541  Voice and Movement for the Actor (8)
- Theatre 543  The Performer and the Professional Theatre (3)
- Theatre 563  Acting Studio (16)
- Theatre 565  Dramatic Textual Analysis (3)
- Theatre 570A,B  Styles of Directing/Performance (6)
- Theatre 582A,B  Camera Techniques for the Actor and Director (3,3)
- Theatre 583  Graduate Seminar: Acting (3)
- Theatre 597  Projects (Two) (3,3)
- Adviser-Approved Elective (3)

**M.F.A. Projects in Acting**

The M.F.A. in Acting requires the completion of two creative projects which, by their nature, are of sufficient challenge and complexity to be accepted as worthy completion of the period of study. These projects, which shall be performances in major departmental productions, shall be approved by the individual’s committee. In addition, the program will culminate in a project book submitted by the M.F.A. candidate to the individual’s committee. The project book will clearly and objectively articulate the development of the candidate's process as an actor based on the various experiences in and materials discovered through classroom and performance.

**STUDY PLAN - DIRECTING**

**Course Requirements (60 units)**

- Theatre 470A  Advanced Directing (3)
- Theatre 470B  Advanced Directing (3)
- Theatre 500  Introduction to Graduate Study in Theatre (3)
- Theatre 541  Voice and Movement for the Actor (2)
- Theatre 563  Acting Studio (4)
- Theatre 565  Dramatic Textual Analysis (3)
- Theatre 570A,B  Styles of Directing/Performance (12)
- Theatre 575  Seminar in Theatre History (3)
- Theatre 582A,B  Camera Techniques for the Actor and Director (6)
- Theatre 583  Graduate Seminar: Acting (3)
M.F.A. Projects in Directing

The M.F.A. in Directing Program requires the completion of three creative projects that have been approved by the individual's committee and which by their nature, are of sufficient challenge and complexity to be accepted as worthy completion of the period of study. These projects shall be mounted and presented by the Department of Theatre and Dance as a portion of its production program. The program shall culminate in a project book submitted by the M.F.A. candidate to the individual's committee. The project book will clearly and objectively articulate the process of formulating the final main stage project from initial concept to critical reaction, utilizing experiences and material discovered through classroom participation and the development of the production.

STUDY PLAN - DESIGN AND TECHNICAL PRODUCTION

Students should concentrate their activities in two of the following four technical theatre areas during their three-year course of study: scene design, costume design-make up, lighting-sound and technical production.

Course Requirements (60 units)

All of the following (9 units):
- Theatre 500 Introduction to Graduate Study (3)
- Theatre 565 Dramatic Textual Analysis (3)
- Theatre 575 Seminar in Theatre History (3)

Three from the following (9 units):
- Theatre 566 Seminar in Technical Production (3)
- Theatre 577 Graduate Seminar: Costume Design (3)
- Theatre 578 Graduate Seminar: Scene Design (3)
- Theatre 586 Graduate Seminar: Lighting Design (3)

Four enrollments in the following (24 units):
- Adviser-approved units from technical courses in theatre, art or engineering (12 units)
- Creative project in two of the four technical areas: Theatre 597 Project (3) (6 units)

M.F.A. Projects in Design

The M.F.A. Program in Design and Technical Production shall be culminated by two creative projects which, by their nature, are of sufficient challenge and complexity to be accepted as worthy completion of the period of study. These projects are determined by the individual committee and shall be design assignments for major productions. Each project shall be reviewed by the individual committee within two weeks after completion. If accepted, the student shall submit a project book within a specified time.

DANCE COURSES

Courses are designated as DANC in the class schedule.

101 Introduction to Dance (3)
- Historical and contemporary dance forms. Experiences in various dance forms such as ballet, modern, jazz, folk, ethnic, mime. Recommended for non-majors.

112 Ballet I (1-2)
- Fundamental structure and technique of beginning classical ballet. May be repeated for a maximum of four units. (2 hours activity per unit)

122 Modern Dance I (1-2)
- Fundamental structure and technique of beginning modern dance. May be repeated for a maximum of four units. (2 hours activity per unit)

126 Dance Improvisation (2)
- Theory and practice of improvisation in movement. Practical use of improvisation in expressing imagery, developing choreographic concepts and enhancing performance. (4 hours activity)

132 Jazz I (2)
- Modern jazz dance techniques and basic jazz choreography. May be repeated once for credit. (4 hours activity)

142 Tap Dance I (2)
- Structure and technique of tap dance and tap choreography. May be repeated once for credit. (4 hours activity)

212 Ballet II (1-2)
- Prerequisite: Dance 112. Intermediate level technique of classical ballet. May be repeated for a maximum of four units. (2 hours activity per unit)

226 Rhythmic Analysis (3)
- Prerequisites: Dance 126, 212, 222. Musical form and structure as it pertains to dance and choreography: musically notating dance rhythms and percussion accompaniment.

232 Jazz II (2)
- Prerequisite: Dance 132. Intermediate level skills in jazz technique and choreography. (4 hours activity)
242 Tap Dance II (2)  
Prerequisite: Dance 142. Intermediate skills in tap technique and choreography. May be repeated for once for credit. (4 hours activity)

301 Dance and Cultural Diversity (3)  
Prerequisite: Dance 101. Impact of various dance forms, from primitive time to modern, on diverse cultures. Contributions of immigrants, minorities and women to dance as a personal, social and cultural expression.

312 Ballet III (1-2)  
Prerequisite: Dance 212 and/or consented placement test. Classical ballet technique at the second stage of the intermediate level. Complex combinations. Elements of technique and theory. May be repeated for credit. (2 hours activity per unit)

322 Modern Dance III (1-2)  
Prerequisite: Dance 222 and/or consented placement test. Modern dance technique at an advanced intermediate level. Detailed study of technical theory with emphasis on more complex combinations. May be repeated for credit. (2 hours activity per unit)

323A Dance Composition (3)  
Prerequisites: Dance 126, 226, 312, 322 and junior standing. Choreography and forms of beginning dance composition. Final project required. (6 hours activity).

323B Dance Composition (3)  
Prerequisite: Dance 323A. Choreography and forms of intermediate dance composition. Final project required. (6 hours activity)

324 Forces and Figures in Dance (3)  
Prerequisites: Dance 301 and 323A. Dance history from primitive to contemporary times, including historical eras, famous dancers, choreographers and companies.

324A Forces and Figures in Dance History I (3) signed by senate  
Prerequisite: Dance 323A. Ballet history from ancient Greece to contemporary times, including historical dance styles, artistic forces, prominent dance figures, dance companies, dance literature and dance media.

324B Forces and Figures in Dance History II (3) signed by senate  
Prerequisite: Dance 324A. Modern dance history from Isadora Duncan and Denishawn to contemporary times, including various dance styles, artistic forces, prominent dance figures, dance companies, dance literature and dance media.

325 Dance Theory and Criticism (3)  
Prerequisites: Dance 323B and 324. Dance theory and philosophy, choreographic styles, published reviews, critique writing. Fulfills the course requirement for the university upper-division baccalaureate writing requirement for dance majors.

332 Jazz III (3)  
Prerequisite: Dance 232. Advanced jazz techniques and choreography through grade three of professional jazz dance. Relation of jazz to other forms of dance. (6 hours activity)

336 Dance for Musical Theatre (3)  
Prerequisites: Acceptance into the BFA in Theatre Arts Musical Theatre concentration. Dance utilized in musical theatre. Ensemble and individual approaches to the style. May be repeated once for credit. (6 hours activity)

372 Dance Kinesiology (3)  
Prerequisites: Dance 126, 212 and 222. Structural aspects of the human body and factors that affect movement in dance.

412 Ballet IV (3)  
Prerequisite: Dance 212, 312. Stylization and performance of the advanced level of classical ballet. May be repeated for credit. (6 hours activity)

422 Modern Dance IV (3)  
Prerequisite: Dance 322 and/or placement test. Advanced level skills in modern dance. Emphasis on individual techniques. May be repeated for credit. (6 hours activity)

423 Advanced Dance Composition (3)  
Prerequisite: Dance 323A,B or equivalent. Elements and forms in dance composition. Choreographing dances of concert quality. (6 hours activity)

424 Dance Pedagogy (2)  
Prerequisites: Dance 112, 222, 226, 323A, 372 and consent of instructor. Philosophies, techniques and methods for developing progressions in dance instruction.

471 Creative Dance for Children (3)  
Prerequisite: upper-division standing. Methods and materials for teaching creative dance to children.

478A Production and Performance (2)  
(Same as Theatre 478A)

479 Repertory and Performance Techniques (2)  
Prerequisites: Dance 312, 322 and audition. Broadens understanding of the history, theory and practice of concert dance performance. Emphasizes learning repertory and exploring performance techniques. Maybe repeated twice for credit. (4 hours activity)

497 Production and Performance Projects in Dance (1-3)  
Prerequisites: upper-division standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Projects that culminate in production or performance. May be repeated for credit.

499 Independent Study (1-3)  
Prerequisites: upper-division standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Undergraduate research projects. May be repeated for credit.
THEATRE COURSES

Courses are designated as THTR in the class schedule.

100 Introduction to the Theatre (3)
For the general student leading to an appreciation and understanding of the theatre as an entertainment medium and as an art form. Recommended for non-majors.

110 Oral Communication of Literature (3)
Analysis and performance of literary works through the medium of oral interpretation. Understanding the content of communication in literature as well as the form. Techniques involved in the discovery, critical evaluation and performance of various literary speakers. Meets the General Education (G.E.) requirement in Oral Communication for Theatre/Dance majors.

140 Acting I (2)
Improvisation, movement, relaxation and characterization techniques for performance. For majors only. (4 hours activity)

141A Voice/Movement for Stage I (3)
Intensive training in the integral use of the voice and body for the actor; developing skills for vocal and physical relaxation, flexibility and strength. Phonetics and anatomy. May be repeated once for credit.

141B Voice/Movement for Stage I (3)
Prerequisite: Theatre 141A. Intensive training in the integral use of the voice and body for the actor; developing skills for vocal and physical relaxation, flexibility and strength. May be repeated once for credit.

160 Acting for Non-Majors (3)
Form and content of acting: improvisation, action, motivation, and behavior. Recommended for non-majors. (6 hours activity)

181 Basic Music Reading and Sight Singing (1)
Practical skills in music reading and sight-singing. Fundamentals of voice production for the musical theatre. (2 hours activity)

193 Individual Voice Instruction (1-2)
Prerequisite: jury recommendation. Individual voice study with approved instructor. Technique and repertoire. B.F.A. Musical Theatre Majors must register for one unit each semester of residency up to a maximum of four semesters. Instructional fee required. May be repeated for credit.

200 Art of the Theatre (3)
Study of scripts with emphasis on dramatic analysis and cultural significance. Required of all theatre majors.

236A Fundamentals of Musical Theatre Performance (2)
Introduction to materials, exercises, techniques and the preparation of audition portfolio for performance in musical theatre. May be repeated for credit. (4 hours activity)

236B Fundamentals of Musical Theatre Performance (2)
Prerequisites: Theatre 141A, 200, 236A and auditions. Continued study of materials, exercises, techniques and the preparation of audition portfolio for performance in musical theatre. May be repeated for credit. (4 hours activity)

240A Acting II (Formerly 263A) (3)
Improvisations, exercises, and techniques of acting for the stage. Motivation and behavior in characterization. (6 hours activity)

240B Acting II (Formerly 263B) (3)
Prerequisites: Theatre 141A,B; 200 and 240A. Improvisations, exercises and techniques of acting for the stage. Motivation and behavior in characterization. (6 hours activity)

241A,B Voice/Movement for Stage II (2,2)
Prerequisites: Theatre 141A,B. Continuation of intensive voice/movement training for the actor; strong focus on movement and voice for extension of range and availability, and for character development. Each may be repeated once for credit.

276 Introduction to Stagecraft (3)
Planning and constructing stage and television scenery. Use of tools and stage equipment. Work in the scenic lab for department productions is required. May be repeated for credit. (6 hours activity)

277 Introduction to Costume Design (3)
Design fundamentals, including costume history, research, play analysis, fabric selection, construction basics and hypothetical design projects. (6 hours activity)

279 Drafting for the Theatre (3)
Prerequisites: Theatre 141A,B. Drafting and reading technical drawings. Work in the scenic lab for department productions is required. May be repeated for credit. (6 hours activity)

285 Theatrical Makeup (3)
Makeup for stage and television. Individual skill in character analysis, application in pigment, plastic, hair, makeup and selection and use of makeup equipment. (6 hours activity)

288 Introduction to Scene Design (3)
Prerequisite: Theatre 276. Scene design, including script analysis, formation of visual concepts, floor plan development and model building for stage and camera. (6 hours activity)

293 Individual Voice Instruction (1-2)
Prerequisite: jury recommendation. Individual voice study with approved instructor. Technique and repertoire. B.F.A. Musical Theatre Majors must register for one unit each semester of residency up to a maximum of four semesters. Instructional fee required. May be repeated for credit.

300 Theatre and Cultural Diversity (3)

310 Oral Interpretation of Shakespeare (3)
Prerequisite: upper-division standing; Theatre 110. Develop techniques for oral interpretation of Shakespeare with special emphasis on the problems of verse.
311 Oral Interpretation of Children's Literature (3)
Oral presentation of children's literature in classroom, recreation and home situations including individual and group performance of fiction, non-fiction, fantasy and poetry. Not available for graduate degree credit.

315 Chicano/Latino Theatre (3)
(Same as Chicana/o Studies 315)

320 Theatre and Issues in American Society (3)
Prerequisite: completion of G.E. Category III.B.1. Introduction to the Arts. Study and analysis of modern and contemporary literature and productions of comedies, dramas and musicals that examine current social problems to establish an experiential view of living in today's world.

331 Shakespeare on Film (3)
(Same as English 331)

340A Acting III (Formerly 363A) (3)
Prerequisites: Theatre 141A,B, 200, 240A,B and audition. Characterization; roles, special problems and application of acting techniques through exercises and two-character scenes from contemporary theatre. (6 hours activity)

340B Acting III (Formerly 363B) (3)
Prerequisites: Theatre 340A and audition. Characterization; roles, special problems and application of acting techniques through exercises and two-character scenes from contemporary theatre. (6 hours activity)

341A,B Voice/Movement for Stage III (2,2)
Prerequisites: Theatre 241A,B. Process-oriented advanced work in stage voice/movement for the actor. Extended vocal techniques, integration of voice/movement with acting/directing perspectives. Each may be repeated once for credit.

346 Introduction to Entertainment and Tourism Studies (3)
(Same as Communications 346)

350 Stage Management (2)
Corequisite: Theatre 370A. Backstage management, including interrelationships of production personnel for stage and television.

351 Theatre Management (3)
Prerequisite: junior or senior standing. Overview of theatre producing, audience development, fundraising, business management; arts management principles and organization. Participation in College of the Arts management work required. (6 hours activity)

357 Blacks in the Performing Arts (3)
(Same as Afro-Ethnic 357 and Music 357.)

364 Seminar in Playwriting (3)
Prerequisites: evidence of interest in creative writing and consent of instructor. Superior models, development of style, and group criticism and evaluation of independent work as it relates to play-writing. May be repeated for credit.

370A,B Fundamentals of Directing (3,3)
Prerequisite: Theatre 140 and 200. Prerehearsal problems and procedures, structural analysis of plays, composition, picturization, pantomimic dramatization, movement and rhythm on stage and in television. Practice in directing scenes. (6 hours activity)

375 Seminar in Writing: Critical Techniques (3)
Prerequisite: Theatre 200. Practical criticism as applied to local dramatic productions. Fulfills the university upper-division baccalaureate writing requirement for theatre arts majors.

377 Costume Design (3)
Advanced work in the design process involving research, analysis, costume history and construction fundamentals.

379 Drawing and Rendering (3)
Scenic and costume rendering techniques and scene painting techniques for effective communication between designer, director and technical personnel.

383 Drama into Film (3)
Prerequisite: completion of G.E. Category III.B.1, Introduction to the Arts. Critical examination of films adapted from plays. Interpretation and evaluation of the techniques and structure employed in presenting dramatic literature in theatrical and film performance. Intended primarily for non-theatre majors; may be used as a theatre-major elective.

386 Fundamentals of Lighting Design (3)
Theories of lighting for stage and camera productions. Work on departmental productions is required. (6 hours activity)

387 Audio Techniques (3)
Practice necessary to integrate live and recorded sound into performing arts productions. Recording, reproduction and studio techniques. (6 hours activity)

388 Period Styles and Form for the Theatre (3)
Visual survey through lecture and slides of architecture, interior design and furniture from ancient to modern times. Provides necessary basis for advanced design course.

393 Individual Voice Instruction (1-2)
Prerequisite: jury recommendation. Individual voice study with approved instructor. Technique and repertoire. B.F.A. Musical Theatre majors must register for one unit each semester of residency up to a maximum of four semesters. Instructional fee required. May be repeated for credit.

402A Dramatic Activities for Children (3)
Prerequisite: junior or senior standing. Creative dramatics as a tool for building and developing creative and socialized processes in children. Sense memory, movement/mime, dialogue, characterization and dramatization.
402B Dramatic Activities for Children (3)
Prerequisite: junior or senior standing. Creative dramatics as a tool for building and developing creative and socialized processes in children. Teaching techniques, including concentration, imagination, dramatization and improvisation for adolescents.

403A Theatre for Young Audiences (3)
Prerequisite: audition. Theatrical production for an audience of children. Philosophy, theory and practice. (6 hours activity)

403B Theatre for Young Audiences (3)
Prerequisite: 403A. Theatrical production for an audience of children. Application of production principles. (6 hours activity)

436A Musical Theatre Workshop (3)
Prerequisites: Theatre 340B, Dance 336 and audition. Roles and excerpts from musical theatre: musical, dramatic, language and dance techniques. Scenes and musical numbers in workshop. Large group and solo work.

436B Musical Theatre Workshop (3)
Prerequisites: Theatre 340B; 436A, Dance 336 and audition. Roles and excerpts from musical theatre: musical, dramatic, language and dance techniques. Scenes and musical numbers in workshop. Small group and audition material preparation.

437A,B Musical Theatre Practicum (1-3,1-3)
Prerequisites: Theatre 236A,B; 240A,B; Dance 232 and audition. Development and preparation of musical theatre materials for small, medium and large group presentations. Performances of prepared materials. Application of performance principles to auditions. Each may be repeated once for credit.

440A Acting IV (Formerly 463A) (3)
Prerequisites: Theatre 310, 340A,B and audition. Historical theories and techniques of styles of acting—Greek through renaissance periods. (6 hours activity)

440B Acting IV (Formerly 463B) (3)
Prerequisite: Theatre 440A and audition. Historical theories and techniques of styles of acting—neoclassic periods to contemporary styles. (6 hours activity)

443 Audition and Rehearsal Processes (3)

449 Capstone in Entertainment and Tourism Studies (3)
(Same as Communications 449)

451 Theatre Production Management (3)
Prerequisite: Theatre 351 or consent of instructor. Theatrical producing, entertainment production and overall production management. Production research, a study of historical and current theatrical methods, and practical experience in day-to-day production management duties.

464 Advanced Playwriting (3)
Prerequisite: Theatre 364. Advanced study in writing and analyzing dramatic texts.

466 Seminar in Advanced Technical Production (3)
Prerequisites: Theatre 276, 279, 288; working knowledge of VectorWorks and Excel. Advanced technical production for the performing arts. Role of the technical director and skills/technique needed to be successful. Topics include cost estimating, purchasing, budgeting strategies, creative problem solving, scenic studio management, season and production scheduling, and time/stress management. May be repeated once for credit. (6 hours activity)

470A Advanced Directing (3)
Prerequisites: Theatre 288, 350, 370A,B and consent of instructor. Readings in theory, analysis of scripts and practice in directing plays for their oral and visual value as theatre. Each student directs a one-act play. (6 hours activity)

470B Advanced Directing (3)
Prerequisites: Theatre 288, 350, 370A,B and consent of instructor. Readings in theory, analysis of scripts and practice in directing plays for their oral and visual value as theatre. Each student directs two one-act plays or equivalent. (6 hours activity)

475A,B,C,E World Theatre (3,3,3,3)
Prerequisites: Theatre 200 and junior standing. Historical examination of significant developments in World Theatre and drama from the origins to the present.

476 Scenery Automation and Rigging (3)
Prerequisites: Theatre 276, 279, 288, working knowledge of VectorWorks and consent of instructor. Theory and practice of scenery automation and stage rigging with emphasis on traditional theatre venues and the design of systems for special production requirements. May be repeated once for credit. (6 hours activity)

478A Production and Performance (2)
Performing in stage or camera productions. (More than 6 hours activity) (Same as Dance 478A)

478B Production and Performance (2)
Technical crew work in stage or camera performances. One section of 478B per semester required of all theatre and dance majors, as well as non-majors cast in theatre and dance department productions. (More than 6 hours activity)

479 Computer Aided Design for Theatre Design and Production (3)
Prerequisites: Theatre 276, 277, 279, 288, 379, 386 and consent of instructor. Advanced theatre design and technical production with emphasis on the computer as a design and drafting tool. Applications include VectorWorks and Painter. May be repeated for credit.
482A Acting IV: Camera Techniques for Actor and Director (3)
Prerequisites: Theatre 340A,B or Theatre 370A,B. Adaptation of stage acting/directing techniques for the camera, audition, rehearsal and final performance project, utilizing studio equipment. Development of camera acting/directing techniques. (6 hours activity)

482B Acting IV: Camera Techniques for Actor and Director (3)
Prerequisite: Theatre 482A. Adaptation of stage acting/directing techniques for the camera, audition, rehearsal and final performance project, utilizing studio equipment. Production of varied dramatic presentation for broadcast. (6 hours activity)

483 Advanced Acting Workshop (3)
Prerequisites: Theatre 440A,B and audition. Extensive scene study, based on particular needs and problem areas of the advanced acting student. (6 hours activity)

485 Advanced Theatre Makeup (3)
Prerequisite: Theatre 285. Problems in makeup, including special techniques and materials: prosthetics, hairpieces and masks for stage and television productions. May be repeated once for credit. (6 hours activity)

486 Advanced Lighting Design (3)
Prerequisite: Theatre 386 or consent of instructor. Design and technology of lighting for stage and television. May be repeated for credit. (6 hours activity)

487 Advanced Audio Techniques (3)
Prerequisite: Theatre 387 or consent of instructor. Advanced problems in the design and technology of live and recorded sound used in the performing arts. (6 hours activity)

488 Advanced Design and Production (3)
Prerequisites: Theatre 276, 277, 279, 288 and consent of instructor. Scenic and costume design projects for various theatres and television. May be repeated for credit.

493 Individual Voice Instruction (1-2)
Prerequisite: jury recommendation. Individual voice study with approved instructor. Technique and repertoire. B.F.A. Musical Theatre majors must register for one unit each semester of residency up to a maximum of four semesters. Instructional fee required. May be repeated for credit.

495 Theatre Internship (3)
Prerequisite: consent of appropriate faculty supervisor. Supervised work experience in all areas of theatre to expand the dimensions of the classroom by integrating formal academic training with direct application. Periodic seminar meetings to discuss work. May be repeated once for credit.

496 Student-to-Student Tutorial (3)
Prerequisites: grade point average of at least 3.0, upper-division standing, previous enrollment in the course being tutored or equivalent experience and written approval from the instructor. Encourages students to learn through teaching. Work may include contact hours with tutees; tutorial preparation; consulting with instructor; reporting, analysis and evaluation of tutorial experiences; and participating in university programs for tutors. Does not count toward major requirements. May be taken for letter grade or credit/no credit.

497 Production and Performance Projects in Theatre (1-3)
Prerequisites: junior or senior standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Projects that culminate in production or performance. May be repeated for credit.

499 Independent Study (1-3)
Prerequisites: junior or senior standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Undergraduate research projects. May be repeated for credit.

500 Introduction to Graduate Study in Theatre (3)
Methodological problems in graduate research. Location of source materials, including library and original data; interpretation of research and practice in scholarly writing. Must be taken the first semester after admission to graduate study.

541 Voice and Movement for the Actor (2)
Prerequisite: audition. Corequisite: Theatre 563. Development and conditioning of the actor’s voice and body, with an emphasis on understanding and transforming the actor’s use of his/her vocal and physical instrument. Required of first and second year M.F.A. students. May be repeated for credit.
543 The Performer and the Professional Theatre (3)
Prerequisite: Theatre 443 and audition. Continues techniques and strategies used by the performer in accessing the professional environments of live theatre, film and television, including the selection, preparation and performance of dramatic material for a professional acting showcase.

563 Acting Studio (4)
Prerequisite: audition. Re-creation and interpretation of roles utilizing period and contemporary dramatic literature, interrelating voice, movement, characterization and period style acting. Enrollment limited to M.F.A. students. May be repeated for credit.

565 Dramatic Textual Analysis (3)
Prerequisite: graduate standing. Process of translating a dramatic text to theatrical production, with an emphasis on techniques of perception, imagination and integration used by the theatrical artist in developing a concept and determining specific performance choices.

566 Seminar in Technical Production (3)
Prerequisite: consent of instructor. Advanced theories in preparing and installing scenery for theatrical production; engineering drawings, exploring materials and research into new methods of theatre technology. May be repeated for credit up to six units.

570A Styles of Directing/Performance (3)
Prerequisites: Theatre 470A,B. Research in the theories of directing and acting styles and practice in directing and performance of period plays. Staging and acting problems from Greek tragedy through the Restoration.

570B Styles of Directing/Performance (3)
Prerequisites: Theatre 470A,B. Research in the theories of directing and acting styles and practice in directing and performance of period plays. Staging and acting problems from recent classical work (Ibsen, Strinberg, Chekhov) to present. May be repeated once for credit.

575 Seminar in Theatre History (3)
Directed research and criticism in examining significant historical periods or movements in theatre history. May be repeated for credit.

577 Graduate Seminar: Costume Design (3)
Prerequisite: consent of instructor. Costume production problems and their solutions. Specific designers, past and present. Research in practical methods of interpreting the designer's sketch. May be repeated for credit up to six units.

578 Graduate Seminar: Scene Design (3)
Prerequisite: consent of instructor. Scenic design projects involving in-depth production style and scheme development. May be repeated for credit up to six units.

582A Camera Techniques for the Actor and Director (3)
Prerequisites: Theatre 541 and 563. In-depth study of the process and performance of camera techniques utilized by actor and director. Camera compatibility, rehearsal, acting and directing methods. Develop screen acting and directing techniques.

582B Camera Techniques for the Actor and Director (3)
Prerequisites: Theatre 541,563 and 582A. In-depth study of the process and performance of camera techniques utilized by actor and director. Camera compatibility, rehearsal, acting and directing methods. Production of varied dramatic presentations for broadcast.

583 Graduate Seminar: Acting (3)
Prerequisites: Theatre 563A,B. Investigation and delineation of current acting methods as techniques for solving problems presented by popular dramatic literature. Develop a personal acting philosophy and methodology. May be repeated once for credit.

586 Graduate Seminar: Lighting Design (3)
Prerequisite: consent of instructor. Advance theoretical lighting design projects. Production problems and their solutions. Specific designers, past and present. May be repeated for credit up to six units.

588A,B Graduate Projects in Design and Technical Theatre (3,3)
Theoretical projects and designs for productions prior to final projects. Faculty and student critiques. Tailored to individual student needs. Enrollment limited to M.F.A. students.

597 Project (1-3)
Prerequisites: consent of instructor, student’s graduate committee and department executive committee. Development and presentation of a creative project beyond regularly offered coursework. May be repeated for credit up to six units. Student must complete course application form by the end of the seventh week of the semester preceding that in which the work is to be done.

599 Independent Graduate Research (1-3)
Prerequisites: consent of student's graduate committee and instructor; application form with appropriate signatures must be on file in department office prior to registration. Research in theatre. May be repeated for credit.

THEATRE EDUCATION COURSES
Courses are designated as THED in the class schedule.

442 Teaching Theatre in the Secondary School (3)
Prerequisite: admission to teacher education. Objectives, methods and materials for teaching in the secondary school.

449E Externship in Secondary Teaching (3)
(See description under Department of Secondary Education.)

449I Internship in Secondary Teaching (10)
(See description under Department of Secondary Education.)

449S Seminar in Secondary Teaching (3)
(See description under Department of Secondary Education.)
INTRODUCTION

Women’s Studies emphasizes the study of gender-based movements, gendered experience, research, analysis and theory, from a women-centered perspective, as subjects and as researchers. Core courses incorporate information technologies and community service learning experiences that offer students opportunities to develop essential skills and civic commitments. Students develop links to the community and to businesses and professional sites where they have opportunities to apply and evaluate the research, methods and theories that they are studying.

THE MAJOR

The major in women’s studies is designed for students who have a particular interest in learning more about the roles and status of women in society. Cross-disciplinary in structure, the major draws from a wide variety of courses offered by many departments throughout the university. Women’s studies majors develop proficiency in a wide variety of research methodologies appropriate to humanities and the social sciences, as well as the areas of business, science and the arts. The goals of the major are to apply concepts learned in women’s studies courses to other academic areas, to encourage more students to do research in the area and to prepare students in selected career paths where sensitivity to women’s issues is important (particularly in business, education, counseling, human services, public administration and the health professions, as well as liberal arts degrees in general).

THE MINOR

The minor has wide applicability and career goals to work in other disciplines. Students have the opportunity to extend academic or career interests in ethnic or international studies or in specific disciplines to include gender analysis through independent study units that can be applied toward their minor.

WOMEN’S STUDIES PROGRAM COUNCIL

Renae Bredin (Women’s Studies), Rebecca Dolhinow (Women’s Studies), Donna Nicol, (Women’s Studies), Karyl Ketchum (Women’s Studies), Terri Snyder (American Studies), Leila Zenderland (American Studies), Jennifer Yec (Asian American Studies), Barbra Erickson (Anthropology), Patricia Perez (Chicana/o Studies), Erin Hollis (English), Natalie Fousekis (History), Cora Granata (History), Cheryl Cooky (Kinesiology), April Bullock (Liberal Studies), Craig McConnell (Liberal Studies), Reyes Fidalgo (Modern Languages), Amy Coplan (Philosophy), Shelly Arsenault (Political Science), Pamela Fiber-Ostrow (Political Science), Valerie O’Regan (Political Science), Dana Collins (Sociology), Michael Perez (Sociology)
STUDENT ORGANIZATIONS
The Women’s Studies Student Association and the Third Wave are actively involved student groups that present speakers, participate in colloquia and panel discussions and coordinate social and instructionally related programs among students who are part of the Women’s Studies program, and others who are interested in gender-related issues. The groups have sponsored campus events celebrating Women’s History Month, staged rock concerts and held “Take Back the Night” rallies. The students are actively engaged in social justice activism.

BACHELOR OF ARTS IN WOMEN’S STUDIES
The Bachelor of Arts in Women’s Studies requires a minimum of 120 units, which includes courses for the major, General Education, all university requirements and free electives.

The major consists of 39 units selected from the following categories:

Core Requirements (18 units)
Women’s Studies 205  Gender and Globalization  (3)
Women’s Studies/Philosophy 302  Introduction to Women’s Studies (3)
Women’s Studies 350 Research, Methodology and Writing (3)
Women’s Studies 450  Theory, Practice, Internship and Community Service (6) (capstone class)
Women’s Studies 480 Feminist Theories (3)

Breadth Requirements (chosen from the following)  (9 units)
American Studies 320  Women in American Society (3)
Anthropology 332  Women in Cross-Cultural Perspective (3)
Psychology 310  Psychology of Women (3)
Sociology 354  Gender, Sex and Society (3)
Philosophy/Women’s Studies 343  Philosophy of Feminism (3)
Women’s Studies 360 Politics of Sexuality (3)
Political Science/Women’s Studies 485 Women and Politics (3)

Elective Options (chosen from the following or from additional breadth requirement) (12 units):
Afro-Ethnic/Women’s Studies 306 American Indian Women (3)
Afro-Ethnic/Women’s Studies 310 Black Women in America (3)
Afro-Ethnic/Women’s Studies 311 Intracultural Socialization Patterns (3)
American Studies/Women’s Studies 312 Multicultural Identities and Women’s Experience (3)
American Studies 413 The Shifting Role and Image of the American Male (3)
American Studies 419 Love in America (3)
American Studies 420 Childhood and the Family (3)
Anthropology/Women’s Studies 316 Anthropology of Sex and Gender (3)
Art 401  Women in Art (3)

Asian American/Women’s Studies 308 Asian American Women (3)
Afro-Ethnic/Women’s Studies 306  American Indian Women (3)
Biology 360  Biology of Human Sexuality (3)
Chicano/Women’s Studies 313 La Chicana (3)
Criminal Justice 430  Women and Crime (3)
Economics/Women’s Studies 355  Economics of Gender and Work (3)
English 355T  Images of Women in Literature (3)
French 485 Senior Seminar in French Studies (3)*
German 485T  Senior Seminar in German Literature (3)*
History/Women’s Studies 332  Concepts and Approaches in Women’s History (3)
History 377  Women’s Image in American Film (3)
History 424T  Gender and Sexuality in History (3)
History 449  Race, Ethnicity and Gender in Latin America: A History (3)
Kinesiology 480  Gender Issues and Sport (3)
Linguistics 369  Language, Sex Roles and the Brain (3)
Music 305 Women in Music (3)
Nursing 303  Women’s Health and Healing (3)
Philosophy 325  Philosophy of Sex and Love (3)
Political Science 474  Civil Liberties (3)
Psychology 312  The Psychology of Human Sexual Behavior (3)
Sociology 355  Women in Contemporary Societies (3)
Sociology 381  Sociology of Sexualities (3)
Sociology 408  Sexual Abuse in American Society (3)
Women’s Studies 100  Introduction to Gender Studies (3)
Women’s Studies 101  Introduction to Ethnic Studies (3)
Women’s Studies 320  Gendered Techno-culture (3)
Women’s Studies 330  Women in Leadership (3)
Women’s Studies 360  Politics of Sexuality (3)
Women’s Studies 410  Women, Health and Aging (3)
Women’s Studies 470T  Topics in Women’s Studies (3)
Women’s Studies 480 Feminist Theories (3)
Women’s Studies 499 Independent Study (1-3)

Variable Topics (1-3 units) or Independent Study (1-3)
(can be arranged through various departments)

When listed in the schedule of classes with an emphasis on women

MINOR IN WOMEN’S STUDIES
The minor consists of 24 units, selected from the following categories:

Core Courses (6 units)
Women’s Studies 205  Gender and Globalization (3)
Women’s Studies 302  Introduction to Women’s Studies (3)
Breadth Courses (9 units)
Chosen from courses listed above under breadth requirements for major.

Elective Courses (9 units)
Chosen from list of elective options for major listed above.

WOMEN’S STUDIES COURSES
Courses are designated as WMST in the class schedule.

100 Introduction to Gender Studies in the Humanities (3)
Gender representation in the humanities, using primary texts from around the world that shape global perspectives on the human condition. Concepts studied include rationality, the moral dimensions of individuals and communities and the social construction of gender. One or more sections offered online.

101 Introduction to Ethnic Studies (3)
(Chosen as Afro-Ethnic Studies 101)

205 Gender and Globalization (3)
Prerequisite: completion of General Education (G.E.) Category III.B.1 or III.C.1. How globalization affects women’s lives through the distribution of wealth, knowledge and opportunity. Focuses on local and transnational responses to global processes and how activists can work within and between these movements. International in focus. One or more sections offered online.

302 Introduction to Women’s Studies (3)
Prerequisite: Philosophy 100, Biology 101, Psychology 100 or Sociology 100. Interdisciplinary introduction to intercultural women’s issues and research in relevant disciplines. One or more sections offered online. (Same as Philosophy 302).

306 American Indian Women (3)
(Same as Afro-Ethnic 306)

308 Asian American Women (3)
(Same as Asian American 308)

310 Black Women in America (3)
(Same as Afro-Ethnic 310)

312 Multicultural Identities and Women’s Experience (3)
(Same as American Studies 312)

313 La Chicana (3)
(Same as Chicano Studies 313)

316 Anthropology of Sex and Gender (3)
(Same as Anthropology 316)

320 Gendered Techno-culture (3)
Prerequisite: completion of G.E. Category III.B.1,2. Introduction to Arts and Humanities. Examines current technologies and their relationship to gender issues, combining theoretical considerations with practical applications. Students will learn some basic technologies to use as tools for their projects.

330 Women in Leadership (3)
Prerequisite: completion of G.E. Category III.B.2 or III.C.1. Women’s conceptions of corporate and grassroots leadership. Examines traditional notions of leadership, successful leaders in business, education and politics, and how women become strong leaders.

332 Concepts and Approaches in Women’s History (3)
(Same as History 332)

343 Philosophy of Feminism (3)
(Same as Philosophy 343)

350 Research, Methodology and Writing (3)
Prerequisite: Women’s Studies 302. Study and evaluation of various methodological approaches used to address gender issues, such as survey analysis, oral history, personal narrative and ethnography. Development of research skills, including computer applications. Development of writing skills, including research papers.

355 Economics of Gender and Work (3)
(Same as Economics 355)

360 Politics of Sexuality (3)
Prerequisite: completion of G.E. Category III.C.1. Critical examination of the cultural politics of sexuality within the United States and across national and cultural boundaries using feminist theories and methods. A focus on sexual controversies illuminates the relationship between sex, power and social change.

410 Women, Health and Aging (3)
Prerequisite: junior or senior standing. Critical analysis of influential gendered images found in literature, painting, films and advertising that depict disability and other health issues related to aging. (Same as Gerontology 410)

450 Theory, Practice, Internship and Community Service (6)
Capstone Course. Two-tiered course that studies and evaluates analysis of theory and practice, and incorporates a semester-long on-site community-based learning component. Applications of theory evaluated through in-class and Internet discussion and writing projects.
470T Topics in Women Studies (3)
Prerequisites: Women's Studies 205, 302, graduate status or instructor permission. Students will engage in discussion and analysis of current topics and issues from an interdisciplinary perspective. Current Topics include Feminism and Popular Culture; Sex, Gender and Rock and Roll. May be repeated once for credit when topic changes.

480 Feminist Theories (3)
Prerequisites: Women's Studies 302 or 343. Study of history and theories of feminism. Readings and discussions of theoretical developments in feminist thought and activism. Historical overview of connections between women as social actors and agents of social change and feminist theorizing.

485 Women and Politics (3)
(Same as Political Science 485)

499 Independent Study (1-3)
Prerequisite: approval by instructor teaching a Women's Studies class, or by Coordinator of Women's Studies. An opportunity to do extended research in Women's Studies, or to link an interest in another discipline to an interest in Women's Studies.
California State University Fullerton offers more than 100 undergraduate and graduate degrees in a wide variety of academic fields. Many of these disciplines also provide opportunities for concentrations and special emphasis areas within a given degree. Please see the applicable academic department or program descriptions beginning on the pages indicated below:

### Bachelor's Degrees: (55)

- American Studies – B.A. .......................................................... 154
- Anthropology – B.A. ............................................................... 159
- Athletic Training – B.S. ......................................................... 405
- Biochemistry – B.S. .............................................................. 212
- Biological Science – B.S. ....................................................... 191
- Business Administration – B.A. ........................................... 204
- Chemistry – B.A. and B.S. ..................................................... 211
- Child and Adolescent Development – B.S. ......................... 226
- Civil Engineering – B.S. ......................................................... 233
- Communications – B.A. ...................................................... 342
- Communicative Disorders – B.A. ......................................... 373
- Comparative Literature – B.A. ............................................. 317
- Computer Engineering – B.S. .............................................. 261
- Computer Science – B.S. ..................................................... 265
- Criminal Justice – B.A. ......................................................... 277
- Dance – B.A. ....................................................................... 595
- Economics – B.A. ............................................................... 281
- Electrical Engineering – B.S. ................................................ 296
- English – B.A. .................................................................... 317
- Ethnic Studies – B.A. with options in
  - Afro-Ethnic Studies ......................................................... 151
  - Asian-American Studies .................................................. 183
  - Chicano Studies ............................................................... 221
- European Studies – B.A. ....................................................... 329
- French – B.A. ..................................................................... 463
- Geography – B.A. .............................................................. 337
- Geology – B.S. ................................................................... 342
- German – B.A. .................................................................. 464
- Health Science – B.S. .......................................................... 355
- History – B.A. .................................................................... 364
- Human Services – B.S. ......................................................... 385
- International Business – B.A. ............................................. 402
- Japanese – B.A. .................................................................. 465
- Kinesiology – B.S. ............................................................... 407
- Latin American Studies – B.A. .......................................... 418
- Liberal Studies – B.A. .......................................................... 422
- Linguistics – B.A. ............................................................... 426
- Mathematics – B.A. ............................................................ 438
- Mechanical Engineering – B.S. ......................................... 449
- Nursing – B.S. ................................................................... 501
- Philosophy – B.A. .............................................................. 517
- Physics – B.S. .................................................................... 522
- Political Science – B.A. ....................................................... 528
- Psychology – B.A. ............................................................ 536
- Public Administration – B.A. ............................................ 544
- Radio-TV-Film – B.A. ......................................................... 548
- Religious Studies – B.A. ..................................................... 555
- Sociology – B.A. ............................................................... 575
- Spanish – B.A. .................................................................. 466
- Speech Communication – B.A. ................................. 373,592,593
- Theatre Arts – B.A. and B.F.A. ........................................... 605

### Master's Degrees: (48)*

- Accountancy – M.S. .......................................................... 145
- American Studies – M.A. .................................................. 155
- Anthropology – M.A. .......................................................... 161
- Art – M.A. and M.F.A. ......................................................... 173,174
- Biology – M.S. ................................................................. 195
- Business Administration – MBA ................................. 209
- Chemistry – M.S. .............................................................. 214
- Civil Engineering – M.S. .................................................... 235
- Communications – M.A. .................................................. 245
- Communicative Disorders – M.A. .................................. 375
- Computer Science – M.S. ................................................. 266
- Counseling – M.S. ............................................................ 272
- Economics – M.A. ............................................................ 282
- Education – M.S. with Concentrations in
  - Bilingual/Bicultural Education .................................. 306
  - Educational Technology ............................................... 307
  - Elementary Curriculum and Instruction ..................... 307
- Elementary Education .................................................... 308
- Educational Administration ............................................. 389
- Secondary Education ....................................................... 564
- Special Education ............................................................. 586
- T.E.S.O.L. ............................................................. 470
- Electrical Engineering – M.S. ......................................... 298
- English – M.A. ................................................................. 318
- Environmental Studies – M.S. ........................................ 326
- French – M.A. .................................................................. 468
- Geography – M.A. ............................................................ 399
- Geology – M.S. ................................................................ 342
- German – M.A. ................................................................. 468
- Gerontology – M.S. .......................................................... 351
- History – M.A. ................................................................. 364
- Information Systems – M.S. ............................................. 391
- Information Technology – M.S. (online only) .................. 394
- Instructional Design and Technology – M.S. (online only) 399
- Kinesiology – M.S. ............................................................ 411
- Library and Information Science – M.S. (thru San Jose State)* 370
- Linguistics – M.A. ............................................................. 427
- Mathematics – M.A. ........................................................ 440
- Mechanical Engineering – M.S. ...................................... 452
- Music – M.A. and M.M. ..................................................... 490
- Nursing – M.S. ................................................................. 503
- Physics – M.S. ................................................................. 523
- Political Science – M.A. ..................................................... 529
- Psychology – M.A. ............................................................ 537
- Psychology (Clinical) – M.S. ............................................ 538
- Public Administration – M.P.A ........................................... 545
- Public Health – M.P.H. ...................................................... 359
- Science (Teaching) – M.A.T. .............................................. 558
- Social Work – M.S.W. ......................................................... 570
- Sociology – M.A. .............................................................. 576
- Software Engineering – M.S. (online only) ....................... 581
- Spanish – M.A. ................................................................. 469
- Speech Communication – M.A. .................................... 375
- Taxation – M.S. ................................................................. 467
- Theatre Arts – M.F.A. ......................................................... 595

### Doctoral Degree: (1)

- Educational Leadership – Ed.D. ...................................... 290

*The M.S. in Library and Information Science is offered through San Jose State; it is not included in the master's degree count.
“More than anything else, the excellence of our programs can be seen in our people – the faculty, staff, students and graduates. Their presence is perhaps the strongest recommendation to be made for pursuing the arts at Cal State Fullerton.”

Dean Jerry Samuelson
COLLEGE OF THE ARTS

The learning opportunities within the College of the Arts are based on a commitment to artistic and academic excellence. We provide an environment that encourages individual achievement for performers, artists and scholars.

Within the broader university liberal arts environment, the College of the Arts offers intensive programs in Art, Music, Theatre and Dance. We are also committed to the enhancement of artistic awareness of all students.

We extend a warm welcome to you, and we promise that with your perseverance, we will do everything possible to further your goals and objectives in whatever field of the arts you choose.

Academic advisement is available through the departments. Faculty advisers are available to assist students with career decisions and degree requirements.

Several scholarships are available to students in the College of the Arts. Inquiries should be made to the respective department offices.

PROGRAMS OFFERED
Art, Bachelor of Arts
  Art History
  General Studio Art
  Teaching–Single Subject Preparation
Art, Bachelor of Fine Arts
  Ceramics
  Crafts
  Creative Photography
  Drawing and Painting
  Entertainment Art/Animation

DEAN
Jerry Samuelson

ASSOCIATE DEAN
Joseph Arnold

ASSISTANT DEAN, STUDENT AFFAIRS
Andi Sims

DEAN’S OFFICE
Visual Arts 199
657-278-3256

COLLEGE WEBSITE
http://www.fullerton.edu/arts
Graphic Design  
Illustration  
Printmaking  
Sculpture

Art, Minor

Art, Master of Arts
  Design
  Drawing and Painting (Printmaking)
  Sculpture
  Crafts (including Ceramics, Glass, Wood, Jewelry/Metalsmithing)
  Design (including Graphic Design, Illustration, Exhibition Design, Creative Photography)
  Art History

Art, Master of Fine Arts
  Drawing, Painting and Printmaking
  Sculpture
  Ceramics (including Glass)
  Crafts (including Jewelry/Metalsmithing and Woodworking)
  Design (including Graphic Design, Illustration and Exhibition Design)
  Creative Photography

Art, Museum Studies, Certificate

Dance, Bachelor of Arts

Music, Bachelor of Arts
  Liberal Arts
  Music Education
  Music History and Theory

Music, Bachelor of Music
  Composition
  Classical Guitar
  Instrumental
  Jazz and Commercial Music
  Keyboard
  Voice
  Accompanying

Music, Minor

Music, Master of Arts
  Music History and Literature
  Music Education
  Piano Pedegogy

Music, Master of Music
  Performance
  Theory-Composition
  Music, Single Subject (Secondary) Credential

Theatre Arts, Bachelor of Arts
  Liberal Arts
  Production/Performance
  Directing
  Playwriting
  Technical Production/Design
  Teaching

Theatre Arts, Bachelor of Fine Arts
  Acting
  Musical Theatre

Theatre Arts, Master of Fine Arts
  Acting
  Directing
  Design and Technical Production
“Welcome to the premier public university business school in Orange County. Our impact stems from our immense presence in the region and strong links to the economic progress of the area. As California’s largest AACSB-accredited business school, the college prepares an unmatched number of graduates for success in the workplace, and our faculty, staff and students work with business leaders to advance the fortunes of businesses in Orange County and Southern California.”

Dean Anil K. Puri
MIHAYLO COLLEGE OF BUSINESS AND ECONOMICS

VISION AND MISSION STATEMENTS

Vision Statement
We will be the choice of Southern California’s businesses and governments for college graduates, business solutions and professional development.

Mission Statement
We create and apply knowledge that transforms student lives, develops business leaders who shape the regional economy and advances the intellectual capital of our diverse region.

Mihaylo College’s educational program instills in our vast corps of graduates core business knowledge and flexible critical thinking and motivation, thereby putting our students in a position to contribute to the success of regional business. As the only Orange County business school with AACSB accreditation in Business Administration and Accounting at both the undergraduate and graduate level, we provide:

A practical and applied curriculum. When students receive their diplomas, they will be able to quickly translate their education into a good job and success in the workplace. Students and alumni of our program are “ready to work” and prepared to make contributions to their organizations from their first days on the job.

A global perspective. Students gain an international perspective from a culturally and ethnically rich student body, a diverse faculty and global academic and business community partners.

State-of-the-art technology. Students will keep pace with e-commerce and evolving business information systems through a mix of educational tools, instructional technology and technological partners.

Value. By being affordable, accredited and practical, Mihaylo College defines value in education and keeps pace with today’s economy.
PROGRAMS OFFERED
Accountancy, Master of Science
Business Administration, Bachelor of Arts
   Accounting
   Business Economics
   Entertainment and Tourism Management
   Entrepreneurship
   Finance
   Information Systems
   Management
   Management Science
   Marketing
   Joint Emphasis in Accounting and Finance
Business Administration, Minor
Business Administration (MBA)
   Accounting
   Business Economics
   Business Intelligence
   Entrepreneurship
   Finance
   Information Systems
   International Business
   Management
   Management Science
   Marketing
   Joint Emphasis in Accounting and Finance
Economics, Bachelor of Arts
Economics, Minor
Economics, Master of Arts
Entrepreneurship, Minor
Information Systems, Minor
Information Systems, Master of Science
   Decision Sciences
   Business Intelligence
Information Technology, Master of Science
International Business, Bachelor of Arts
   Chinese
   French
   German
   Japanese
   Portuguese
   Spanish
   Taxation, Master of Science

ACCREDITATION
The Mihaylo College of Business and Economics holds dual accreditation in business administration and accounting from AACSB International, the premier accrediting body for university business programs in the world. Our program is the only University in Orange County, and one of five in California to hold this prestigious level of dual accreditation. Our accreditation assures that students receive a high quality education, delivered by the most qualified faculty, all from a College that has met the highest standards in business education.

CENTERS OF EXCELLENCE
In support of our mission, the Steven G. Mihaylo College of Business and Economics sponsors Centers of Excellence that address issues in the community, provide services to government and business, and provide academic and practical learning experiences and connections for our students.

Center of Corporate Reporting and Governance
Center for Economic Education
Center for Entrepreneurship
Center for Insurance Studies
Center for International Business
Center for the Study of Emerging Financial Markets
Family Business Council
Center for the Forum for Advanced Security Technologies
Institute for Economic and Environmental Studies
International Center of Economics of Pharmaceuticals, Aging and Health
Real Estate and Land Use Institute
Sales Leadership Center
Small Business Development Center
Small Business Institute
MIHAYLO COLLEGE OF BUSINESS AND ECONOMICS

SCHOLARSHIPS

Michael A. Reagan Graduate Scholarship for Outstanding Incoming Graduate Students

The Michael A. Reagan Scholarship is awarded each semester to newly admitted graduate students in Mihaylo College of Business and Economics who have demonstrated academic excellence in their undergraduate studies. Recipients of these $4,000 non-need based scholarships receive this one-time award disbursed in two installments over consecutive semesters. Applicants to the MBA, MS in Accountancy, MS in Information Systems, MS in Information Technology, MS in Taxation and MA in Economics with outstanding undergraduate academic records are encouraged to apply. Multiple awards are given in both fall and spring semesters. For further information and application information, please go to www.business.fullerton.edu/graduateprograms/costs/Scholarships.htm or call the Graduate Programs Office at 657-278-3622.

General Scholarships

Stephen J. Barres Leadership Award
Dean’s Advisory Board Awards
College of Business and Economics Alumni Scholarship
Executive Council Outstanding Student Award
Faith Guthrie Endowed Memorial Scholarship
Samuel Mendoza Memorial Scholarship
Professor for a Day Scholarship
Theodore H. Smith Outstanding Graduate Student Award
Frank P. Stanek Continuing Junior Scholarship
Kathleen Taylor Business Scholarship
Francisco J. Valle Scholarship

For more awards listed under each department, please refer to www.fullerton.edu/financialaid/scholar/baehonor.htm. For further information and application information, please contact the Assistant Dean for Student Affairs at 657-278-4577.

BUSINESS HONORS PROGRAM

The Business Honors Program provides high-potential students special opportunities for academic challenge, unique in-class and out-of-classroom learning opportunities and individualized career planning and development. Students in the program take honor courses in the business program that are smaller than regular classes, where active discussion and imaginative learning experiences are encouraged, and individual attention from professors is the norm. Students also have special out-of-classroom opportunities to participate in seminars, study abroad, internships, service learning, and directed research projects.

Students in the Business Honors Program belong to an exclusive group of students who are among the most talented in Cal State Fullerton’s Mihaylo College of Business and Economics. Students who successfully complete the Business Honors Program receive special recognition on their diploma and transcripts visible for all future employers and shall be awarded Certificate of Honors upon graduation.

The Business Honors program is open to new entering freshmen and upper-division transfer students who have demonstrated prior academic excellence, leadership and service. For further information, eligibility requirements and procedures to apply, please visit the Business Honors website at www.business.fullerton.edu/honors

STUDENT ORGANIZATIONS

Chapters of the following national honor societies have been established on campus with membership open to qualified students: Beta Alpha Psi (Accounting), Beta Gamma Sigma (Business) and Phi Kappa Phi (all majors). In addition, students are encouraged to join the following clubs/organizations: Accounting Society (AS), American Marketing Association (AMA), Association of Information Technology Professionals (AITP), Delta Sigma Pi (DSP - Professional Business Fraternity), Economics Association (EA), Finance Association (FA), Future Business Leaders of America – Phi Beta Lambda (FBLA-PBL), Gamma Iota Sigma (GIS) – Insurance Risk Management, Latino Business Student Association (LBSA), MBA Association, Real Estate Association (REA), Society for the Advancement of Management (SAM) and Young Entrepreneur Society (YES). Students can also participate in the Business Inter-Club Council (BICC), the coordinating board for all the business clubs and organizations. The Council provides resources and assistance to club representatives and enforces guidelines and procedures for governance and registration. This Council interacts with other campus government boards.

STEVEN G. MIHAYLO HALL AND INFORMATION SERVICES

Opened in fall 2008, the Steven G. Mihaylo Hall is the new home for the College. Designed specifically to enhance learning and collaborative interaction, the building provides students and faculty with the most technologically advanced classrooms, interactive labs and collaborative working spaces.

The College’s Information Services department supports the full spectrum of technology services and solutions to students, faculty and administration. The department provides wireless access throughout, open computer labs, and access to the latest professional business software and data bases.
BUSINESS ADVISING CENTER
Undergraduate Program Advising - 
Steven G. Mihaylo Hall 1201

The Business Advising Center serves business administration, economics and international business majors. Information is available on admissions, curriculum and graduation requirements, as well as on registration and grading procedures, residence and similar academic matters. Transfer students must see an adviser immediately upon admission regarding transfer credit. For information on general education, consult the Academic Advisement Center.

Graduate Program Advising - 
Steven G. Mihaylo Hall 3280

Graduate advisers provide academic advising for the graduate programs in accountancy, business administration, information systems and taxation. Information is available on admissions, curriculum and graduation requirements, as well as on registration procedures, residence and similar academic matters. For information on admission, curriculum and graduation requirements for the M.A. in Economics, see the graduate program adviser in the Economics department.

Students should also consult the faculty advisers for the programs in accountancy, information systems and taxation.

INTERNSHIPS AND COOPERATIVE EDUCATION

Students may earn academic credit, first-hand work experience and financial remuneration as well. Opportunities exist in accounting and auditing; cost-benefit analysis and econometrics; finance and real estate; insurance and banking; management and industrial relations; marketing, sales and advertising; and business data systems. For more information, consult the internship adviser in your department or in the Center for Internships and Service Learning.

INFORMATION ON DEGREE REQUIREMENTS

Information on degrees is located in the following department and program listings:

Accounting:
- Accountancy, M.S.
- Taxation, M.S.

Business Administration:
- Business Administration, B.A.
- Business Administration, Minor
- Business Administration, MBA

Economics:
- Economics, B.A.
- Economics, Minor
- Economics, M.A.

International Business:
- International Business, B.A.

Information Systems and Decision Sciences:
- Information Systems, M.S.
- Information Technology, M.S.
College of Communications

“The College of Communications provides an excellent learning environment with nationally recognized faculty and modern laboratory facilities. Students are welcomed into a supportive environment that consists of computerized writing, editing photo and graphics labs; a cutting edge media facility providing digital content production, broadcast and streaming services; a speech and hearing clinic; a presentation lab and a newspaper and magazine production complex.”

Dean Rick D. Pullen
COLLEGE OF COMMUNICATIONS

The College of Communications is committed to advancing a democratic society by preparing students to function in a wide variety of communication professions. With a strong tradition in the liberal arts and social sciences, the academic programs of the College share a common theoretical base which identifies the elements of human communication and the principles governing their use in all communicative processes essential to contemporary society, namely, the spoken and written word and visual images. Specialized programs in advertising, argumentation and persuasion, communication theory and process, intercultural, interpersonal, organizational communication, communication studies, communicative disorders, journalism, photocommunications, public relations, entertainment and tourism and radio-television-film make up the basic curricula of the College. These programs of study lead to traditional academic degrees for undergraduates and graduates, to state credentials and licenses, to professional certification and to entry into graduate and professional degree programs.

Academic programs in the College of Communications prepare students to function as professionals in the fields of business, education, government, entertainment and in media and health related careers. Ancillary educational experiences are available through the campus daily newspaper, audio and video production, post-production studios, television facility, forensics program, speech and hearing clinic, the Center for Children who Stutter, Tusk magazine and internships in professional settings.

The College is dedicated to the principles of academic excellence and sees its fundamental mission as preparing citizens to function as effective communicators who practice their disciplines in accordance with the highest ethical codes of professional and personal conduct.
PROGRAMS OFFERED
Communications, Bachelor of Arts
  Advertising
  Entertainment Studies
  Journalism
  Photocommunications
  Public Relations
Communications, Minor
  Advertising
  Journalism
  Public Relations
Communications, Master of Arts
  Professional Communications
  Mass Communications Research and Theory
Communicative Disorders, Bachelor of Arts
  Speech Pathology
  Audiology
  Speech/Language Development
  Intercultural Clinic Practice
  Aphasia and Adult Therapy
  Phonology
Communicative Disorders, Master of Arts
Speech Communication, Bachelor of Arts
  Argumentation and Persuasion
  Intercultural Communication
  Interpersonal Communication
  Organizational Communication
Speech Communication, Minor
Speech Communication, Master of Arts
Radio-TV-Film, Bachelor of Arts
  Criticism
  Production
  Writing
Radio-TV-Film, Minor

STUDENT ORGANIZATIONS
The College of Communications supports a large number of student organizations and activities that provide a wide variety of preprofessional opportunities for academic advancement. They include: the Advertising Club; Comm Grads: Communications Week; Daily Titan; Debate (forensics); Entertainment and Tourism; International Association of Business Communicators; National Press Photographers Association; National Student Speech-Language-Hearing Association; Public Relations Student Society of America; Society of Professional Journalists; Titan Internet Radio; Tusk Magazine; and TV-Film Society.

ACCREDITATION
The Department of Communications is accredited by the Accrediting Council on Education in Journalism and Mass Communications. The Communicative Disorders program in the Department of Human Communication Studies is accredited by the American Speech-Language-Hearing Association.

INTERNSHIPS
A wide variety of student internships is available throughout Southern California. In the Department of Communications, students are required to complete an internship, unless specifically waived from doing so, normally as the culminating undergraduate experience. The Human Communication Studies’ internship is optional and normally taken sometime in the junior or senior year.

SCHOLARSHIPS AND AWARDS
Some $30,000 in scholarships and awards are presented annually to students in the College of Communications. Among the sponsors of scholarships are the Advertising Club of Orange County, the Los Angeles Angels of Anaheim, the Hearst Foundation, the Orange County chapter of the Public Relations Society of America and the Society of Professional Journalists. Awards annually are presented to students who excel in academic and pre-professional activities in the three departments.

FACILITIES
The College of Communications is equipped with modern laboratory facilities including a state-of-the-art speech and hearing clinic; photography studio; teaching labs for writing and graphics with more than 200 upgraded and networked workstations; television and sound studios and control rooms; video and audio production, postproduction, storage and streaming facilities; a daily newspaper newsroom and production area; Internet radio; dedicated multi-media network and quality video-on-demand and multicasting facilities.
“The mission of the College of Education is to prepare high quality educators and leaders who engage in research-based instruction and reflective practice, meet ethical and professional standards, participate in innovative collaborative endeavors, are committed to lifelong learning, are dedicated to making the world a better place through education, and whose actions reflect valuing diversity. The College has an exceptional and diverse faculty and staff committed to excellence in teaching, scholarship and service. Through rigorous inquiry, they look to expand the realm of knowledge about teaching, learning and educational leadership.”

Dean Claire C. Cavallaro
COLLEGE OF EDUCATION

The College provides educators, leaders and professionals in various learning environments with the ability to apply critical and informed thinking to professional practice and problem-solving and to use these skills and attributes to become change agents in their schools, communities and other work places. The College prepares undergraduate students to become active and critical thinkers in order to meet academic requirements related to university learning.

The College of Education is organized into the following departments: Educational Leadership, Elementary and Bilingual Education, Reading, Secondary Education and Special Education. In addition, there is an Instructional Design and Technology program for graduate students, and a Doctor of Education program.

PROGRAMS OFFERED
California Reading Certificate
Certificate, Instructional Design and Technology
Certificate, Postsecondary Reading and Learning
Doctor of Education in Educational Leadership
Education, Master of Science
  Bilingual/Bicultural Education (Spanish-English)
  Educational Administration
  Elementary Curriculum and Instruction Reading
  Secondary Education
  Special Education
Teaching English to Speakers of Other Languages (For further information refer to the Department of Modern Languages and Literatures section of this catalog.)

Master of Science in Instructional Design and Technology
Teaching Credential (See Teaching Credential Programs section of this catalog)

ACCRREDITATION
The College of Education offers high quality programs that meet state and national accreditation standards. The accreditation bodies for the college include:
- California Commission on Teacher Credentialing
- National Council for Accreditation of Teacher Education

STUDENT ORGANIZATIONS
The College of Education supports a variety of student organizations. These include: The Council of Educational Leadership Students; the Education InterClub Council; the Reading Educators Guild; Student California Teachers Association; and the Student Council for Exceptional Children.

SCHOLARSHIPS AND AWARDS
The College of Education offers the following scholarships:
- Alumni Association Scholarship for the College of Education: $1,000
- Ballentine Scholarship: $1000
- Emma Bauman Holmes – Master’s Program in Curriculum and Instruction: $1,000
- Emma Bauman Holmes – Multiple Subject Credential Program: $1000
- Brenneman Scholarship: $1000
- Marilyn C. Brewer Scholarship: $3,500
- The College of Education Book Scholarship: $500
- Cracchiolo Award: $1000
- Founders Scholarship: $1000
- Lorenz & Ruth Graham Memorial Scholarship: $500
- Lewis and Deborah Hancock Scholarship in Reading Education: $500 (dependent upon funding)
- Miriam K. Herman Scholarship: Two $500 awards (subject to funding)
- Honor an Educator Scholarship: $1000
- Dorothy C. Klausner Scholarship: $500 (dependent upon funding)
- Krausman Scholarship: $1000
- The Ernest G. Lake Endowed Scholarship: $400 (subject to funding)
- Robert Liebl Scholarship: $2000
- MSIDT Alumni Association Scholarship: $500
- Mildred Ransdorf Donoghue Education Scholarship for the Master’s in Elementary Curriculum & Instruction: $500 (subject to funding)
- Mildred Ransdorf Donoghue Education Scholarship for the Elementary Credential: $500 (subject to funding)
- Reading Educators Guild (REG) Scholarship: $500
- Fannie Shaftel Scholarship: $500 (subject to funding)
- The Bernhard J. and Vivian W. Strand Scholarship: $1000
- The California Retired Teachers Association Scholarship honoring Founder Laura E. Settle: $2000

Full details regarding scholarship requirements and application deadlines can be found at the College of Education Office (CP 500).

CREDENTIAL ADVISEMENT
Students seeking a Multiple Subject, Single Subject or Special Education credential should attend an overview before submitting an application. Information on overview schedules is available in CP 500 or at http://ed.fullerton.edu/adtep.

GRADUATE ADVISEMENT
Graduate students should consult the graduate adviser in their major department before registering for the first semester. No more than nine units may be completed before an approved study plan is filed.
"Our mission is simple. We want to educate engineers and computer scientists who will graduate with state-of-the-art knowledge in their chosen field and are ready to embark on careers in industry and government, or proceed to acquire advanced degrees in their own or related fields. More and more of our graduates are also interested in being entrepreneurs, thanks to the success of so many young people on the West Coast who have become successful in creating wealth via technology."

Dean Raman Menon Unnikrishnan
COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

The curricula of the College of Engineering and Computer Science are designed to prepare students for careers in engineering and computer science and for further study and specialization in graduate work. The faculty of the college is actively involved not only in instruction and scholarship but also in the advisement of students on topics relating to the planning of career and program goals. Cooperative education and internship programs are available.

PROGRAMS OFFERED
- Civil Engineering, Bachelor of Science
- Emphasis in Architectural Engineering
- Civil Engineering, Master of Science
- Concentration in Environmental Engineering
- Computer Engineering, Bachelor of Science
- Computer Science, Bachelor of Science
- Computer Science, Minor
- Computer Science, Master of Science
- Electrical Engineering, Bachelor of Science
- Electrical Engineering, Master of Science
- Option in Systems Engineering
- Mechanical Engineering, Bachelor of Science
- Emphasis in Manufacturing Engineering
- Mechanical Engineering, Master of Science
- Software Engineering, Master of Science
ENGINEERING

Engineering is the application of scientific principles to the solution of practical problems. Engineers are professionals who employ the empirical art and techniques of engineering to the benefit of the society. Throughout the ages, human progress has been able to flourish due to the brilliant minds of engineers. Historical works, such as the Egyptian pyramids, Roman aqueducts, and Greek and Persian monuments, are examples of engineering ingenuity. In the contemporary world, technological breakthroughs, such as computers, lasers and robots, have become reality due to the creativity and imagination of engineers.

People-made wonders, such as Hoover Dam, the Golden Gate Bridge, the Empire State Building and the Gateway Arch on the Mississippi River, are examples of engineering ingenuity. Great inventors like Leonardo da Vinci, Galileo, James Watt and Thomas Edison had exceptional engineering minds.

Engineers need a firm knowledge of the sciences and mathematics, and must be able to analyze complex situations involving people, money, machines and information in order to create workable and economical designs. Engineers often work with others in a team to develop systems and products. The increasing technological complexity of modern society offers opportunities, as well as challenges, to the engineering graduates of the future.

Engineers are employed in practically every field of human endeavor. This includes manufacturing, construction, education, government, health care and business. As society becomes increasingly more technological, an engineering education provides a background for careers that will extend well into the 21st century. There is a real need for more engineering professionals, and so there are tremendous opportunities for everyone, including women and underrepresented minorities, in this field.

The College of Engineering and Computer Science has developed a reputation for excellence in its undergraduate and graduate engineering and computer science programs. The college is committed to providing the student with a solid preparation in the fundamental principles of engineering, as well as the practical experience to use these principles in the solution of engineering problems. The bachelor's degrees in civil, electrical and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700.

Each engineering degree program incorporates the following three curricular areas: mathematics and basic science courses such as physics and chemistry; engineering topics courses such as thermodynamics, materials science and electrical circuits, which provide a bridge between basic math/science and engineering practice and engineering design courses in which a system, component, process or structure is devised to meet a specific need; general education courses in the arts, humanities and social sciences. Each undergraduate program prepares students for entry into the engineering profession or for further study and specialization in graduate study.

COMPUTER SCIENCE

Computer Science deals with all forms of information, including its representation, storage, structure, display and the processes by which it is transformed and used. Computer science professionals create new systems, such as an inventory control system for a large manufacturer, a navigational system for a new space vehicle or a decision support system for the management of a bank. These people use their technical skills to convert specific needs into specialized programs, procedures and systems that will actually do the job.

Students who pursue the Bachelor of Science in Computer Science degree at Cal State Fullerton are prepared for careers in a variety of fields in business, government and industry. The curriculum emphasizes fundamental concepts exemplified by various types of programming languages, computer architectures, operating systems and data structures.

The computer science program focuses on several curricular objectives that are designed to provide the student with the foundations of the discipline and the opportunity for specialization. The department faculty are well-versed in the discipline through education and work experience.

The Computer Science Department houses five large computer science laboratories with an extensive range of computers and related equipment for student use. The facilities provide ample space for a full range of state-of-the-art systems and equipment.

The Bachelor of Science program is accredited by the Computing Accreditation Association of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700.

UNDERGRADUATE STUDENT ADVISEMENT

Undergraduate students should call the department office of their major to arrange for advising and approval of their study plans. The College of Engineering and Computer Science has a policy of mandatory advising. Each undergraduate student must see an advisor at least once per year.

Students interested in programs in the college, but without a declared major should contact either the dean's office, for an interest in engineering, or the Computer Science Department office for advisement.

GRADUATE STUDENT ADVISEMENT

Graduate students should consult the graduate adviser in their major department before registering for the first semester. No more than nine units may be completed before an approved study plan is filed.

PROGRAM IN GENERAL EDUCATION

Because of high unit requirements for the Bachelor of Science degrees in Engineering, these programs have modified requirements for general education. Students should consult the department for requirements. Majors in the College of Engineering and Computer Science should take mathematics and other courses in related fields early. General education courses normally should be scheduled throughout the student's program of study.
CENTER FOR ACADEMIC SUPPORT IN ENGINEERING AND COMPUTER SCIENCE (CASECS)

CASECS is an academic support program designed to recruit, retain and graduate students. CASECS serves educationally disadvantaged students, to the extent possible by law and emphasizes participation by students from groups with low eligibility rates for four-year colleges.

MESA

The goal of the Mathematics, Engineering, Science Achievement (MESA) program is to create opportunities for educationally disadvantaged students, especially those from groups with low college acceptance rates, to prepare for and enter colleges and universities in majors such as engineering, computer science and other mathematics-based scientific fields.

STUDENT ORGANIZATIONS

There are 18 active student organizations in the college. These are student branches of the American Institute of Aeronautics and Astronautics (AIAA), American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), Association for Computing Machinery (ACM), Electrical Engineering Honor Society, Eta Kappa Nu (HKN), Institute of Electrical and Electronics Engineers (IEEE), IEEE Computer Society, Institute of Navigation (ION), Instrumentation Systems and Automation Society (ISA), Society of Mexican-American Engineers and Scientists (MAES), National Society of Black Engineers (NSBE), Society of Automotive Engineers (SAE), Computer Science Honor Society, Upsilon Pi Epsilon (UPE), California Chi Chapter of Tau Beta Pi, Society for the Advancement of Materials and Process Engineering (SAMPE), Society of Women Engineers (SWE), Society of Hispanic Professional Engineers (SHPE), Society of Manufacturing Engineers (SME) and Video Game Design Club (VGDC). These 18 societies form the college’s Interclub Council.

INTERNSHIPS IN ENGINEERING

Internships for Engineering provide practical work experiences which integrate with and supplement the student’s academic studies. Internship jobs are coordinated through the Center for Internships and Cooperative Education. In order to participate in this program, a student must register for EGGN 495 Professional Practice (1-3) for each semester of internship participation.

GENERAL ENGINEERING COURSES

Courses are designated as EGGN in the class schedule.

205 Digital Computation (3)
(Same as EGME 205)

308 Engineering Analysis (3)
Prerequisites: Physics 226, Math 250B or equivalent. Fundamentals and engineering applications of Fourier series, Fourier transforms, Laplace transforms, complex analysis, vector analysis; engineering applications. (Same as EGCE 308, EGEE 308 and EGME 308)

314 Engineering Economy (2)
Prerequisite: junior or senior standing in engineering. Development, evaluation and presentation of alternatives for engineering systems and projects using principles of engineering economy and cost benefit analysis. (Same as EGME 314)

403 Computer Methods in Numerical Analysis (3)
Prerequisites: Math 250B and EGGN 205 or equivalent. Use of numerical methods and digital computers in the solution of algebraic, transcendental, simultaneous, ordinary and partial differential equations.

495 Professional Practice (1-3)
Prerequisite: junior or senior standing in engineering. Professional engineering work in industry or government. Written report required. May be repeated for credit. Applicable towards bachelor’s degree programs. Not for credit in the graduate program.
College of Health and Human Development

“Our college offers programs that focus on areas of broad human concern – the health, development and well-being of people of all ages, from infancy to older adult years. I welcome you to the College of Health and Human Development and the opportunity to learn the knowledge and skills needed to make a lasting contribution to the world in which we live.”

Dean Roberta E. Rikli
COLLEGE OF HEALTH AND HUMAN DEVELOPMENT

Through its teaching, scholarship and service mission, the College of Health and Human Development provides students with an education that contributes to their intellectual, personal and professional development. Emphasis is placed on theory and practice, with special attention to the development of critical thinking and humanistic skills needed to function in a widely diverse and ever-changing society. Programs in the college lead to traditional academic degrees at the baccalaureate and graduate levels, as well as to a variety of specific certificates, credentials and licenses.

The College of Health and Human Development is organized into the following departments and programs: Child and Adolescent Studies, Counseling, Health Science, Human Services, Kinesiology, Military Science, Nursing and Social Work.

PROGRAMS OFFERED

- Child and Adolescent Development, Bachelor of Science
  - Early Childhood Development
  - Elementary School Settings
  - Adolescent/Youth Development
  - Family and Community Contexts

- Child and Adolescent Development, Minor

- Counseling, Master of Science

- Health Science, Bachelor of Science

- Health Science, Minor

- Human Services, Bachelor of Science

- Human Services, Minor

- Kinesiology, Bachelor of Science

- Kinesiology, Bachelor of Science in Athletic Training

- Kinesiology, Minor

- Kinesiology, Master of Science
Military Science, Minor
Second Lieutenant Commission, U.S. Army
Nursing, Bachelor of Science (RN to BSN)
Prelicensure to BSN
Nursing, Master of Science
Accelerated RN to MSN
Nurse Anesthetist
Nursing Leadership
Prelicensure to MSN
School Nursing
Women’s Health Care
Master of Public Health
Master of Social Work

ACCREDITATIONS/LICENSURES
The College of Health and Human Development offers high quality programs that meet state and national accreditation standards. Major accrediting bodies for college programs include:
- American College of Nurse Midwives
- American Association of Nurse Anesthetists
- California Board of Registered Nursing
- Califronia Commission on Teacher Credentialing
- Commision on Accreditation of Athletic Training Education
- Commission on Collegiate Nursing Education
- Council in Educaion for Public Health
- Council on Accreditation for Counseling and Related Educational Programs
- Council for Social Work Education
- Council for Standards in Human Services Education

RESEARCH CENTERS AND INSTITUTES
In addition to its academic degree programs, the college also sponsors the following interdisciplinary centers and institutes. For additional information, see the Research Centers section of the catalogue.
- Center for Cancer Disparities Research
- Center for Community Collaboration
- Center for the Promotion of Healthy Lifestyles and Prevention of Obesity
- Center for the Advancement of Responsible Youth Sports
- Center for Successful Aging
- Fall Prevention Center of Excellence
- Fibromyalgia Research and Education Center
- Health Promotion Research Institute
- Sports and Movement Institute

STUDENT ORGANIZATIONS
The College of Health and Human Development is proud of its active student organizations and honor societies. The following department-based organizations combine to form the College of H&HD Inter-Club Council:
- Alpha Lamda (ROTC)
- Child and Adolescent Studies Student Association
- Chi Sigma Iota Counseling Academic and Professional Honor Society, International, Kappa Omega Chapter
- Eta Sigma Gamma Honorary Society, Delta Rho Chapter, Health Science
- Graduate Counseling Student Association
- Human Services Student Association
- Kappa Omicron Nu Honor Society, Kinesiology
- Kinesiology and Health Science Student Association
- Nursing Students Association
“Students new to the College of Humanities and Social Sciences appreciate how friendly and helpful our faculty are. Classes are ‘student friendly’, and students discover many opportunities for participation with their teachers in research, projects, conference presentations and in service learning. Our faculty make a really positive difference in students’ lives.”

Dean Thomas Klammer
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

The College of Humanities and Social Sciences (H&SS) offers students the breadth of a traditional liberal arts education in the humanities and social sciences while preparing them for a wide range of professions, for graduate school and for advanced professional study in fields such as law, public administration, clinical psychology and business. In fact, the college is home to 20 different departments and programs, most offering both bachelor’s and master’s degrees. Our faculty and staff are student-centered and enjoy providing friendly, personal guidance and mentoring to our students. That’s why the College of H&SS is the right place for so many Cal State Fullerton students.

Many of our students intend to become teachers, and each of our programs includes a track that prepares students for entry into the elementary school teaching credential program. For those seeking to become high school teachers, we offer programs leading to secondary credentials in English/Language Arts, Foreign Languages and History/Social Science.

In the College of Humanities and Social Sciences, students know that “the name of your major does not have to be the same as the name of your career.” In fact, for most college students, it rarely is. All majors in H&SS provide students with the broad education and core skills (reading, writing, critical thinking, working in teams, public speaking) that will be attractive to employers in whatever career or field a graduate may later choose.

Majors in the Humanities and Social Sciences not only prepare students for the profession of their choice, but also help them to excel in coursework throughout their time at the university. If you’re a student working on an assignment that involves complex analysis, critical thinking or persuasive communication, your studies in one of the degree programs in the College of Humanities and Social Sciences will provide you with what you need to succeed in your classes at the university and in any professional field.

Of course, learning takes place outside of the formal structure of classes, as well. We give a high priority to involving students directly in faculty research and professional internships. And each of our departments includes one or more student clubs and organizations that promote life-long friendships, social activities and service projects.
The H&SS Interclub Council (ICC) provides additional leadership opportunities for students in the College, as well as promoting communication among more than 50 clubs and organizations run by and for Humanities and Social Sciences students.

Listed below are the many majors, minors and graduate degrees offered within the College of Humanities and Social Sciences. Academic advisement is provided by each of the college’s departments and programs, as well as in our Student Access Center located in Humanities 112.

**PROGRAMS OFFERED**

- Afro-Ethnic Studies (Option in B.A. Ethnic Studies)
- Afro-Ethnic Studies, Minor
- American Studies, Bachelor of Arts
- American Studies, Master of Arts
- American Studies, Minor
- Anthropology, Bachelor of Arts
- Anthropology, Master of Arts
- Anthropology, Minor
- Asian American Studies (Option in B.A. Ethnic Studies)
- Asian American Studies, Minor
- Asian Studies, Minor
- Chicana/o Studies (Option in B.A. Ethnic Studies)
- Chicana/o Studies, Minor
- Christian Studies, Minor
- Comparative Literature, Bachelor of Arts
- Criminal Justice, Bachelor of Arts
- Criminal Justice, Minor
- English, Bachelor of Arts
- English, Master of Arts
- English, Minor
- Environmental Studies, Master of Science
  - Environmental Sciences
  - Environmental Policy and Planning
  - Environmental Education and Communication
- Ethnic Studies, Bachelor of Arts
- European Studies, Bachelor of Arts
- European Studies, Minor
- French, Bachelor of Arts
- French, Master of Arts
- French, Minor
- Geography, Bachelor of Arts
  - Urban Geography
  - Environmental Analysis
- Geography, Master of Arts
- Geography, Minor
- German, Bachelor of Arts
- German, Master of Arts
- German, Minor
- Gerontology, Master of Science
- Gerontology, Minor
- Gerontology, Certificate
- History, Bachelor of Arts
- History, Master of Arts
- History, Minor
- International Politics, Minor
- Japanese, Bachelor of Arts
- Japanese, Minor
- Jewish Studies, Minor
- Latin American Studies, Bachelor of Arts
- Latin American Studies, Minor
- Law, Politics and Society, Minor
- Liberal Studies, Bachelor of Arts
- Liberal Studies, Minor
- Linguistics, Bachelor of Arts
- Linguistics, Master of Arts
  - Applied Linguistics
  - Anthropological Linguistics
  - Analysis of Special Language Structures
  - Communication and Semantics
  - Disorders of Communication
- Linguistics, Minor
- Philosophy, Bachelor of Arts
  - Social, Moral and Legal Philosophy for the Professions
- Philosophy, Minor
- Political Science, Bachelor of Arts
- Political Science, Master of Arts
- Political Science, Minor
- Portuguese, Minor
- Psychology, Bachelor of Arts
- Psychology, Master of Arts
  - Psychology, Master of Science Clinical
  - Psychology, Minor
- Public Administration, Bachelor of Arts

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES 43
Public Administration (M.P.A.)
  Criminal Justice
  Human Resources
  Public Finance
  Urban Management
Public Administration, Minor
Religious Studies, Bachelor of Arts
Religious Studies, Minor
Sociology, Bachelor of Arts
  Deviance and Socio-Legal Studies
  Education
  Family
  Gerontology
  Social Work
  Sociology of Class, Race and Gender
Sociology, Master of Arts
Sociology, Minor
Spanish, Bachelor of Arts
Spanish, Master of Arts
Spanish, Minor
Teachers of English as a Second Language (Certificate)
Teaching English to Speakers of Other Languages-TESOL
  (Concentration in M.S. Education)
Women's Studies, Bachelor of Arts
Women's Studies, Minor

**HUMANITIES COURSES**

**350T Life and Culture Abroad (3)**
Prerequisite: completion of General Education Categories III.B.1. and III.B.2. Interdisciplinary course to give students a broad background to culture and civilization abroad. Takes a social, historical and cultural approach to contemporary societies abroad. Examines traditions and institutions to help understand the 21st century way of life abroad. Related field trips. (Course only offered as part of CSUF Humanities Study Abroad Program.)
College of Natural Sciences and Mathematics

“We provide a comprehensive educational experience to all students through student-centered, inquiry-based instruction in the classroom and the laboratory. We view research experience for students as an essential and necessary component in the learning of science.”

Dean Steven N. Murray
COLLEGE OF NATURAL SCIENCES AND MATHEMATICS

The curricula of the College of Natural Sciences and Mathematics are designed to prepare students for careers in scientific, mathematical and other technical fields; for further study and specialization in advanced graduate work; and for entry into professional schools of medicine and other health-related disciplines. The faculty of the college is actively involved not only in instruction and research but also in the advisement of students in the college on topics relating to the planning of career and program goals. Cooperative education internship programs are available in each of the College’s Departments.

The College sponsors a variety of professional and educational programs at which students and faculty have an opportunity to meet with their counterparts. The College also has an external advisory council.

PROGRAMS OFFERED

- Biological Science, Bachelor of Science
- Biology, Master of Science
- Biochemistry, Bachelor of Science
- Biotechnology, Minor
- Chemistry, Bachelor of Arts
- Chemistry, Bachelor of Science
- Chemistry, Minor
- Chemistry, Master of Science
- Geology, Bachelor of Science
- Geology, Minor
- Geology, Master of Science
- Mathematics, Bachelor of Arts
Recommended Preparation

For a career in mathematics or science, a sound foundation is essential. High school preparation should include:
- At least three, preferably four, years of mathematics
- Chemistry and/or physics, preferably both
- Two or three years of foreign language

Community college preparation should include at least the minimum:
- College writing
- Calculus
- College chemistry
- First course in the major

Qualifying Examinations

Enrollment in introductory courses is restricted to those who are adequately prepared, as shown by performance on qualifying examinations. In addition, the Entry Level Mathematics (ELM) examination is required of all students unless exempt.

UNDERGRADUATE STUDENT ADVISEMENT

Undergraduate students should call the department office of their major to arrange for advising and approval of their study plan. University policy requires students to see an adviser each of their first two semesters and every year thereafter. Most departments prefer to advise their majors more frequently. Students interested in programs in the College, but without a declared major should call the Office of the Dean for advisement.

ADVISEMENT FOR HEALTH PROFESSIONS

It is important for any student interested in a career in the health professions to seek advisement at the Health Professions Office prior to registering for the first semester.

GRADUATE STUDENT ADVISEMENT

Graduate students should consult the graduate adviser in their major department before registering for the first semester. No more than nine units may be completed before an approved study plan is filed.

SCHOLARSHIPS AND AWARDS

General

Diefenderfer Award. Presented annually to an outstanding woman or minority student

College of Natural Sciences and Mathematics’ Alumni Association Scholarship for Scholastic Achievement

Jewel Plummer Cobb Scholarship for Scholastic Achievement. Awarded to an outstanding, underrepresented science major

Wolfram Award in Computational Science. Award offers a lifetime copy of Mathematica software to student who demonstrates greatest potential in computational science.

Health Professions

Miles McCarthy Health Professions Award. Annually awarded to the outstanding graduate from the program for the health professions

Kenneth Goodhue-McWilliams Award. For outstanding contributions to community service by a health professions student

Chemistry and Biochemistry

American Chemical Society Award. Recognizes a graduating senior chemistry-biochemistry major for exemplary academic achievement

American Institute of Chemists Award. Presented to a graduating senior who has demonstrated outstanding scholarship and undergraduate research

James Sternberg Scholarship. Awarded to an outstanding first-year graduate student

Glorya Welch Scholarship. Presented to an outstanding transfer student (from a local community college)

Glenn Nakaya Scholarship. Given to an outstanding, deserving undergraduate chemistry student based on academic achievement

The Lyle Wallace Award. For service to the Department of Chemistry and Biochemistry

The Hypercube Scholar Award recognizes a graduating senior for accomplishments in molecular modeling/computational chemistry

Other awards made by the Department of Chemistry and Biochemistry are the:

Freshman Chemistry Award and the Undergraduate Awards for Achievement in Organic Chemistry and in Analytical Chemistry

CSUF Institute of Gerontology Outstanding Student in Biochemistry Award. Given to an outstanding biochemistry student engaged in studies on aging

Mark Lackey Award. For graduate student teaching

Glenn Nagel Scholarship. To provide support for summer undergraduate research

Robert C. Belloli Future Chemistry Teacher Scholarship. To provide support for future junior high school or high school chemistry teachers.
Biology
Rachel Carson Award. A commemoration of the ideals of Rachel Carson
Biology Chair’s Undergraduate Research Scholarship for biology majors
Friends of the Arboretum, David L. Walkington Scholarship. For an outstanding biology student who has chosen botany for a career
Donald Gardner Memorial Scholarship to recognize individuals who have demonstrated a love of teaching biology
Dr. and Mrs. Donald B. Bright Environmental Scholarship. For students interested in careers in environmental biology
Stanley Hillman and Lon McClanahan Scholarship in plant or animal physiological ecology. For graduate students engaged in research in these subjects
Coppel Graduate Science Award. Awarded to biology graduate students
L. Jack Bradshaw Scholarship. Awarded to upper-division undergraduate or graduate students planning a career in immunology
Jerome Wilson Memorial Scholarship. Awarded to biology students with an interest in genetics
Kenneth Goodhue-McWilliams First Instar Award for Teaching Excellence. Awarded to promising new graduate student-teaching associate
Kenneth Goodhue-McWilliams Metamorphosis Award in Teaching Excellence. Awarded to a continuing graduate student teaching assistant
Dharm Vireo Pellegrini Memorial Research Grant. Awarded to biology students engaged in ornithological field research
Dr. and Mrs. Marvin J. Rosenberg Scholarship. Awarded to students in cell or molecular biology
Judith A. Presch Endowment Desert Research Scholarship. For students pursuing research in the Mojave Desert
David L. Walkington Memorial Scholarship. For upper-division or graduate biology students
Geology
Outstanding Service Award for graduating senior students in recognition of extraordinary service to the department community
Outstanding Major Award for academic achievement and collegiality
Outstanding Academic Achievement for academic achievement in geology coursework
John D. Cooper Field Camp Award. For outstanding field research performance
Prem K. Saint Hydrology Award. For research and study of hydrology
Marilyn A. Brown Scholarship
Margaret T. Woycki Scholarship. For geology majors
Mathematics
The Department of Mathematics recognizes excellent academic achievement and service by undergraduate and graduate students in a number of awards, including the Outstanding Teaching Award, the Outstanding Math Scholar, the Math Club Scholarship, the Lila B. Hromadka and Major Theodore Hromadka Award, and a Service Award.
Actuarial Studies Scholarship. Recognizes academic achievement for students in actuarial science
The Brandon Nghi Tran Memorial Scholarship
Santa Ana/CSUF Mathematics Scholarship. For Santa Ana High School students enrolling at CSUF
The Stiehl Prize for Excellent in Mathematics. For exceptional honor students
Rose Klein Award in Algebra and Probability for the Secondary Teacher
Physics
The Dan Black Scholarship provides support to a junior Physics major based on need and promise, and is renewable for the senior year
The Dan Black Physics/Business Scholarship assists students enrolled in the business emphasis of the physics major and promotes entrepreneurship with physics majors
The Department of Physics honors the memory of Edward Lee Cooperman, and a scholarship in his name goes to an outstanding student
The Constance Beech Eiker-Raymond V. Adams Creativity Award is given to a student who developed an outstanding set of instructional laboratory experiments
The Dr. Robert W. Kedzie Award recognizes the most improved Physics major
Norman Nitzberg Awards in Experimental Physics
Funded Research Opportunities
MARC (Minority Access to Research Careers)
This NIH-supported program develops six exceptional under-represented scholars in the biomedical sciences and prepares them for success in PhD programs.
REU (Research Experience for Undergraduates) Program
This NSF-funded program provides students interested in research and pursuit of PhD degrees in chemistry and biochemistry, with support to carry out research during the summer months. Applicants are accepted from all over the country and from local community colleges.
mHIRT (Minority Health & Health Disparities International Research Training) Program
This NIH-sponsored program provides minority students the opportunity to carry out research during the summer at laboratories in England, Mexico or Thailand.
Individual Faculty Research Projects
RECOMMENDED PROGRAM IN GENERAL EDUCATION

Majors in the College of Natural Sciences and Mathematics should take mathematics and other courses in related fields early in their academic careers. General education courses normally should be scheduled throughout the study sequence.

Because of high unit requirements for the Bachelor of Science in Chemistry, this program has modified requirements for general education. Students should consult the department for particulars.

CERTIFICATE IN PRE-HEALTH PROFESSIONS STUDIES

This certificate program provides the required and appropriate coursework for post-baccalaureate students who wish to change career direction and prepare for medical, dental or pharmacy professional schools. The program includes the facilities of an advising center with support for many issues related to the health professions. It is not for science majors wishing to improve their academic records or test scores in anticipation of application to professional schools.

Application Deadlines

Students are encouraged to apply for admission as soon as possible by submitting an online application starting on Oct. for fall admission and Aug. for spring admission (see http://www.csumentor.edu). Because of the limited number of students that can be accepted into this program, application deadlines may be changed based on enrollment projections.

Admission

Admission is competitive. Applicants will be evaluated based on the following:

1. Acceptable bachelor’s degree in a non-science-based discipline from an appropriately accredited institution;
2. Minimum grade point average of at least 3.0 in the last 60 semester units attempted, and applicant must be in good standing at last college attended;
3. A well-written, one-page statement of purpose.

Students with deficiencies in mathematics or who require additional science background in order to take the required courses are encouraged to complete the necessary coursework prior to enrolling in the certificate program. Under no circumstances will such coursework be credited towards the Pre-Health Professions Studies certificate program requirements.

Study Plan

The Certificate in Pre-Health Professions Studies requires a minimum of 50 units of approved coursework, most of which will be required by the professional schools. Other courses required for this program are either highly recommended by professional schools or important for standardized test preparation. Each student, in consultation with the Health Professions Coordinator or his or her representative, will develop a program for the student that will include the following courses or their equivalents:

- Biology 172 Cellular Basis of Life (5)
- Biology 273 Genetics and Molecular Biology (5)
- Chemistry 120A General Chemistry (5)
- Chemistry 120B General Chemistry (5)
- Chemistry 301A Organic Chemistry (3)
- Chemistry 301B Organic Chemistry (3)
- Chemistry 302 Organic Chemistry Lab (2)
- Chemistry 421 Biological Chemistry (3)
- Physics 211 Elementary Physics (3)
- Physics 211L Elementary Physics Lab (1)
- Physics 212 Elementary Physics (3)
- Physics 212L Elementary Physics Lab (1)
- Math 130 or 150A A Short Course in Calculus or Calculus (4)

In addition, seven to 11 units of appropriate coursework determined in consultation with the Health Professions Coordinator shall be taken from the following list of courses or their equivalents:

- Biology 302 General Microbiology (4)
- Biology 303 Intermediate Cell Biology (3)
- Biology 309 Intermediate Molecular Biology (3)
- Biology 361 Human Anatomy (4)
- Biology 362 Mammalian Physiology (4)
- Philosophy 314 Medical Ethics (3)
  OR Philosophy 316 Research Ethics (3)

For more detailed information or advisement, students should contact the Health Professions Advising Office.
# Degree Programs

California State University Fullerton offers more than 100 undergraduate and graduate degrees in a wide variety of academic fields. Many of these disciplines also provide opportunities for concentrations and special emphasis areas within a given degree. Please see the applicable academic department or program descriptions beginning on the pages indicated below:

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*The M.S. in Library and Information Science is offered through San Jose State; it is not included in the master's degree count.
University Requirements and Regulations
UNIT REQUIREMENTS

A. Total Unit Requirements

The minimum number of semester units necessary for a bachelor’s degree, including courses for the major, general education, all university requirements and free electives, exclusive of remedial courses (i.e., courses numbered 0-99), is as follows:

1. For the Bachelor of Arts degree.................................................................120
2. For the Bachelor of Fine Arts degree.........................................................132
3. For the Bachelor of Science degree.........................................................120-135
4. For the Bachelor of Music degree.............................................................132

B. Upper-Division Requirement

A minimum of 40 semester units of upper-division coursework is required for any CSUF bachelor’s degree. Courses offering upper-division credit are those numbered at the 300- and 400-levels.

All units from upper-division courses are applicable to the upper-division units requirement, including units from courses in the major, the minor and general education.

C. Special Unit Totals

The maximum number of special semester units accepted for a bachelor’s degree is as follows:

1. Transferable units from community or junior colleges .............................70
2. Transferable units from a four-year university or college, or from a combination of two- and four-year institutions for degrees requiring 120 units .................................................. 90
3. From credit by examination ........................................................................30
4. From extension and correspondence courses............................................24
5. From credit/no credit courses.................................................................36
6. From internship course.............................................................................6
7. From independent study courses..............................................................9
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RESIDENCE REQUIREMENTS

A minimum of thirty (30) semester units must be earned in courses taken at California State University, Fullerton. Twenty-four (24) of these units must be earned in upper-division courses. At least twelve (12) upper-division semester units in the major must be taken at this institution. Courses taken in extension (except for summer session and intersession courses offered as part of the special sessions program) and units earned through credit by examination may not be used to fulfill these requirements.
GRADE POINT AVERAGE REQUIREMENTS

Three grade point averages, each 2.0 or higher, are required for graduation:

1. An average based on all units attempted, including those attempted at other institutions.
2. An average based on all units attempted at CSUF.
3. An average based on all units attempted in the major.

DISTRIBUTION OF REQUIREMENTS

A. General Education

A minimum of 51 semester units are needed to complete CSUF’s general education requirements. See the "General Education" section of this catalog.

B. Major

The unit requirement in a major varies substantially from major to major. Refer to the Department listings for the specific requirements of any particular major.

C. Upper-Division Baccalaureate Writing Requirement

The university requires that every person completing a bachelor's degree under 1980-81 and later catalog requirements, demonstrate writing ability acceptable for graduation. The upper-division writing requirement has two parts; students must satisfy each:

Upper-division course requirement: Each major requires that students pass a specially designated upper-division course or courses of at least three semester units.

Examination requirement: The university faculty requires that each student pass the University Examination in Writing Proficiency (EWP), which has been designed to measure writing ability.

Courses

The University Board on Writing Proficiency must certify the course or courses that each major department designates to fulfill the requirement. Departments and programs may specify either a single course of at least three units that involves intensive instruction in writing, or two or more courses (a total of at least six units) in which students are required to write one or more lengthy papers, or several shorter ones, which involve the organization and expression of complex ideas. In these courses students will be given careful and timely evaluations of their writing and suggestions for improvement. An assessment of writing competence will be included in determining the final course grade.

Students must pass these courses with a grade of C (2.0) or better. A list of courses designated for each major will appear in the online Class Schedule each semester.

Examination

After completing 60 units toward the baccalaureate, students must take the Examination in Writing Proficiency (EWP). To avoid delaying graduation, students should not postpone taking the exam later than the junior year. The EWP consists of a 90-minute essay. The EWP is evaluated by faculty selected throughout the university who are trained specifically for this responsibility. A limited number of undergraduate students who have failed the EWP two or more times may apply for a specially designated non-credit writing course, English 199, Intensive Writing Review. Passing this course is equivalent to passing the examination. This course will not count toward graduation requirements, nor will it satisfy the upper-division writing course requirement described above. Information about registration for the EWP and testing dates is published in the online Class Schedule each semester.

Petitions

In certain cases, students may petition the University Board on Writing Proficiency for exemption from or modification of the requirement.

1. Transfer students and candidates for a second baccalaureate may be certified as meeting the requirement after they have submitted to the Board acceptable evidence of having completed the equivalent to CSUF's upper-division requirement.

2. Students may petition for substitution of an alternative to the EWP when exceptional circumstances (e.g., a clinically identified learning disability), make the examination inappropriate. Petitions must include documentation of the special circumstances and propose specific alternative means of demonstrating writing proficiency.

D. Minors

A minor is a means by which students can enrich their academic preparation through concentrated study of a discipline related to, or different from, their declared major. Although students can pursue multiple majors, many decide that declaring a major and a minor is a more desirable choice. A minor provides a structured selection of courses to augment or complement the student’s major by broadening a student’s academic experience or serving as preparation for a specific career. A minor can extend the student’s knowledge in two related areas (e.g., English and speech communication, anthropology and foreign languages, sociology and women's studies) or in two disparate ones (e.g., business administration and computer science, economics and foreign languages, mathematics and psychology). A minor can also enable students to systematically explore fields of knowledge about which they are curious or enthusiastic.

Students may wish to consult with an adviser in their major department for recommendations of suitable minor fields of study.

A minor is not required for the baccalaureate; however, students may elect to complete one or more minors from those available and have that noted on their records. In completing the requirements for a minor, a minimum of twelve (12) units, of which at least six (6) must be upper-division, must be distinct and different from the units used to complete the requirements of the major. Any units above this minimum requirement that can be used to satisfy both the requirements for the minor and for the major may be double counted. General education courses, however, may be used to meet minor requirements.
Below is a list of currently approved minors:

Advertising
Afro-Ethnic Studies
American Studies
Anthropology
Art
Asian Studies
Asian American Studies
Biotechnology
Business Administration
Chemistry
Chicano Studies
Child and Adolescent Development
Christian Studies
Computer Science
Criminal Justice
Economics
English
European Studies
French
Geography
Geology
German
Gerontology
Health Science
History
Human Services
Information Systems
International Politics
Japanese
Jewish Studies
Journalism
Kinesiology
Latin American Studies
Law, Politics and Society
Liberal Studies
Linguistics
Mathematics
Mathematics for Teacher Education
Military Science
Music
Natural Sciences
Philosophy
Physics
Political Science
Portuguese
Psychology
Public Administration
Public Relations
Radio-TV-Film
Religious Studies
Sociology
Spanish
Speech Communication
Women's Studies

E. Electives

After fulfilling the requirements in general education, and a specific major (and possibly a minor), each student is free to choose the rest of the courses needed to complete the semester units required for graduation. Different majors vary considerably in both the number of units they require in their own and related fields. They also vary considerably in the amount of latitude or choice they permit in selecting courses to satisfy the major requirement.

The general education requirement encourages freedom of choice within the natural sciences, social sciences, arts and humanities, and basic subjects. Students at the university use their electives to broaden their general education, deepen some aspect of their specialties, pursue work in related fields, and satisfy curiosities and enthusiasms for particular subjects or areas of interest.

Advisement on general education and electives is provided by the Academic Advisement Center.

F. Multiple Majors and Second Baccalaureate Degrees

Within the units required for the baccalaureate, it is possible for a student to complete the requirements for more than one major within one degree (for example a B.S.) when the additional major is within the same degree (in this case, another B.S.). At least 24 units, including 12 at the upper-division level, in each bachelor of arts major, or 36 units, including 18 at the upper-division level, in each bachelor of science major, must be applied exclusively to the respective major and may not be used to meet requirements in other majors. The student shall declare the additional major with the appropriate department not later than the beginning of the student’s final year of study.

The completion of additional majors will be noted at the time of graduation by appropriate entries on the academic record and in the commencement program.

It is possible for a student to complete a major in one degree (for example a B.S.) concurrently with an additional major from a different degree (for example a B.A.). This process is possible as long as the unit restrictions mentioned in the preceding paragraph, as well as minimum residence requirements, are met for both degrees. The completion of the second degree will be noted on the student’s academic record.

Second baccalaureate degrees:

First degree completed elsewhere, second at Fullerton.

Students seeking a bachelor’s degree from Fullerton after having received a baccalaureate from another institution may qualify for graduation with the approval and recommendation of the faculty upon completion of the following:
1. General education requirements: Students holding a baccalaureate degree from an accredited institution will be held to (a) the breadth requirements of Executive Order 595, i.e., 12 units in each of the areas of arts and humanities, social sciences, and math and science, (b) the statutory requirements and (c) the English Writing Proficiency requirements. Students will not be held to specific CSUF categories or courses.

2. All requirements in the major field of study

3. Residence and scholarship requirements

**Two baccalaureates from Fullerton (concurrent)**

Students seeking two bachelor's degrees concurrently (i.e., in two different degree programs such as B.S. and B.A.) may qualify for graduation with the approval and recommendation of the faculty upon completion of the following:

1. Minimum of 30 additional units in residence (a minimum of 30 units in residence is required for each bachelor's degree sought)
2. Minimum of 24 additional upper-division units among the 30 additional residence units mentioned above
3. A minimum of 12 units in residence in courses offered by each of the departments in which the two degrees are being sought
4. All requirements in major fields of study, general education, scholarship, the Examination in Writing Proficiency, and all other minimum unit requirements

**Two baccalaureates from Fullerton (sequential)**

With the approval and recommendation of the faculty, a student may qualify for a second baccalaureate under the following circumstances:

1. A minimum of 30 units have been earned in residence after the first degree has been granted
2. A minimum of 24 upper-division units have been earned among the 30 units mentioned above
3. A minimum of 12 units have been earned in courses offered by the department in which the second degree is being sought

Units included in second baccalaureate programs may not apply to graduate degrees or credential programs.

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**GRADUATION REQUIREMENT CHECK**

A candidate for graduation must file an application for a graduation requirements check after completion of 85 earned units and approximately 1 year prior to the student's anticipated graduation term. The $115.00 graduation and diploma fee is not required when the application is filed. However, the student is advised to pay the graduation fee as soon as possible after application. A student can apply for graduation online through the TITAN Online Student Center.

Candidates for the baccalaureate should refer to the Admissions and Records website for application filing dates. A student should have earned at least 85 units and a substantial portion of the major requirements before requesting a graduation check. If the candidate does not complete the requirements in the semester indicated, a request for change of graduation date must be submitted to the Office of Admissions and Records. The cost is $10.00.

**Faculty Approval and Recommendation**

Under provisions of the Academic Senate, the Office of Admissions and Records publishes a list of degree candidates twice a year: in the fall and in the spring (for both spring and summer graduates). After review and approval by the faculty, and upon verification of the completion of requirements, diplomas are issued with the last day of the respective term as the official date of graduation.

Annual commencement exercises are held at the end of the spring semester for those who completed degree requirements mid-year and for those completing degree requirements in the spring semester or summer session. The president of the university, with the authority of the Board of Trustees, confers all degrees, subject to the completion of remaining requirements.

*Note:* Students completing bachelor degree requirements who wish to continue their studies at the university for postbaccalaureate or graduate degree objectives must apply for admission declaring their new objectives, e.g., educational credential(s) or master's degree.
INTRODUCTION

The General Education program at Cal State Fullerton is the basis of a university education. It is the foundation upon which each and every major is built. The goal of the campus is to provide a well-rounded citizen, not only of the region and the nation but the world as well. Thus, this broad-ranging curriculum has been carefully planned to assure that every graduate is exposed to current thinking and scholarship that hopefully will provide a lifetime of appreciation of the liberal arts and sciences, as well as the ability to grow intellectually, ethically, morally and technologically well into the 21st century.

All students who graduate from Cal State Fullerton must complete a minimum of 51 semester units of General Education courses selected in accordance with the pattern designated on the following pages. General Education courses must be selected from an approved list. Students should refer to the latest university Schedule of Classes for the most up-to-date list of approved General Education courses. A student who has a break in enrollment for more than one semester in any calendar year may be held to new catalog requirements.

CSUF students may complete lower-division general education (G.E.) requirements at a community college. In choosing equivalent courses, students must follow the CSUF General Education (G.E.) plan and not the plan of the community college. Questions can be directed to the CSUF Academic Advisement Center, University Hall 123.

A score of 145 or higher on the English Placement Test (EPT), or completion of English 99 (EPT test required) with a grade of “CR” or better, is a prerequisite for enrollment in English 101 in G.E. Category I.B. Written Communication, for all students except those with an exemption.

A score of 50 or higher on the Entry Level Mathematics (ELM) examination is a prerequisite for enrollment in courses in G.E. Category III.A.1., Mathematics, for all students except those with an exemption.

TITAN DEGREE AUDIT

The Titan Degree Audit (TDA) serves as an advising tool for both students and academic advisers. The report provides information on student progress towards the completion of general education, major and other degree requirements. Students can access their TDA by logging on to TITAN Online and selecting the “Student Academics” tab. The student’s campus-wide ID number and PIN are required to log in.

GENERAL EDUCATION REQUIREMENTS

Unit Requirements
51 total units including:
- 9 units upper division taken as a junior or senior
- 9 units in residence at CSUF
- 3 units in cultural diversity (courses marked with an asterisk*)
- Limited to either 9 units or 3 courses from a single department, excluding courses in G.E. Category I, Core Competencies
• Each course counts in only one G.E. category, except those meeting Category V, Cultural Diversity

Academic Standards
• Letter grade required
• “C” (2.0) or better required in G.E. Categories I.A, I.B, I.C. and III.A.1. Thus, a grade of C– (1.7) is not sufficient to fulfill these requirements
• CR/NC allowed if it is the only grade option available

Courses in Your Major
• Courses offered by the department of the student’s major may NOT be used to fulfill the unit requirements of Categories III or IV, with the exception of categories offering choices from only one department.
• Courses that are cross-listed meet G.E. requirements for all majors except those in the home department of the cross-listed course. The “home” department is the one under which the course description appears in the catalog. For example, Afro-Ethnic Studies 311/ Human Services 311; therefore, it cannot be used by Afro-Ethnic majors to meet G.E. requirements.
• Upper-division courses offered by the department of the student’s major may not be used for G.E. credit.
• Upper-division G.E. courses are not applicable for graduate degree credit, regardless of the student’s major or the department offering the course.

Transfer Students
There are two General Education-Breadth patterns that California community college students can complete.

1. CSU General Education-Breadth Program
This program is a lower-division, 39-semester-unit pattern. Students must take specified courses in five specific areas. Students with full certification are required to complete a minimum of 9 semester units of upper-division general education in residence after transferring to CSUF. Students may be instructed to take those 9 units in specific areas in order to complete G.E. categories.

2. Intersegmental General Education Transfer Curriculum (IGETC)
All lower-division Cal State Fullerton G.E. requirements may be satisfied by the completion in its entirety of this transfer curriculum at a California community college. Information about IGETC is available at each campus. Upper-division G.E. requirements for IGETC-certified transfers are as follows:

Nine units of upper-division coursework from categories III.A.3., III.B.3, III.C.2., and/or IV with the following conditions:
• No more than six units from any one category
• No more than six units from any one department
• No units from the department of the student’s major

• A minimum of three units of a “cultural diversity” (identified with an asterisk * course, if not met prior to transfer.
• Using their student portal, students can access their Titan Degree Audit to get a summary of their G.E. requirements.

CSUF General Education Plans
Students who have checklists or worksheets for “Plan B” (G.E. requirements for those who entered or transferred between fall 1987 and spring 1999) should refer to the following chart to find corresponding lists of courses that satisfy G.E. requirements:

<table>
<thead>
<tr>
<th>G.E. Plan B (Fall 1987-Spring 1999)</th>
<th>G.E. Requirements (Fall 1999 or later)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.A.</td>
<td>Same</td>
</tr>
<tr>
<td>I.B.</td>
<td>Same</td>
</tr>
<tr>
<td>I.C.</td>
<td>Same</td>
</tr>
<tr>
<td>I.I.A.</td>
<td>Same</td>
</tr>
<tr>
<td>I.I.B.</td>
<td>Same</td>
</tr>
<tr>
<td>I.I.B.1.</td>
<td>Same</td>
</tr>
<tr>
<td>I.I.B.2.</td>
<td>Same</td>
</tr>
<tr>
<td>III.A.1.</td>
<td>III.A.2.a. or b</td>
</tr>
<tr>
<td>III.A.2.</td>
<td>III.A.2.c.</td>
</tr>
<tr>
<td>III.A.3.</td>
<td>Same</td>
</tr>
<tr>
<td>III.B.1.</td>
<td>Same</td>
</tr>
<tr>
<td>III.B.2.</td>
<td>Same</td>
</tr>
<tr>
<td>III.C.1.</td>
<td>Same</td>
</tr>
<tr>
<td>IV.A.1.</td>
<td>III.B.3.</td>
</tr>
<tr>
<td>IV.A.2.</td>
<td>III.C.2.</td>
</tr>
<tr>
<td>IV.B.</td>
<td>IV.</td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td>Same</td>
</tr>
</tbody>
</table>

(courses are marked with a star *)

Students under earlier G.E. plans or who need help with the above chart should contact the Academic Advisement Center, University Hall 123, at 657-278-3606.

CERTIFICATION POLICY
Under provisions of Title 5 and Executive Order 595, accredited colleges and universities may certify the completion of part of the 48-51 units required in general education. Within the policy of the Board of Trustees, Cal State Fullerton will accept such certification of general education up to a maximum of 39 semester units, but may accept no more in general education than the number of units required in each area.

Transfer students who are certified in any category with fewer than the required units will be subject to additional units and will be permitted to take the additional units in upper-division categories.

LOWER-DIVISION TRANSFER PATTERNS BY MAJOR
Lower-Division Transfer Patterns (LDTP) present potential transfer students with a set of “road maps” to follow that will ensure appropriate academic preparation for studies at CSU and decrease time to graduation once these students enter the CSU. The LDTP for each discipline or major has statewide as well as campus-specific
components. The statewide component of the LDTP is appropriate for any CSU campus that offers the major and is comprised of general education coursework as well as some courses within the discipline. The campus-specific component identifies discipline-related coursework relevant to the major at the specific CSU campus where the student intends to transfer. Together these components for an LDTP will typically total at least 60 units, which is the number of units needed to transfer to CSUF as an upper-division student.

**THE GOALS OF GENERAL EDUCATION**

General education is central to a university education and should enhance students' awareness of themselves in a complex universe, drawing upon multiple points of view. As a result of general education experience, students should acquire knowledge of diverse disciplinary and cultural perspectives and skill in comparing, contrasting, applying and communicating effectively these perspectives in tasks considered appropriate to particular courses.

The G.E. Program at California State University, Fullerton, is divided into five categories:

I. **Core Competencies**
II. **Historical and Cultural Foundations**
III. **Disciplinary Learning**
IV. **Lifelong Learning.**
V. **Cultural Diversity**

These G.E. categories consist of lower-division (100- and 200-level) courses in areas fundamental to a university education and upper-division (300- and 400-level) courses that draw upon, integrate, apply, and extend the knowledge and skills that are the goals of the lower-division courses.

Category V includes goals for learning in the area of cultural diversity. Student work in Categories III and IV must include at least one three-unit course, identified with an asterisk (*), that meets the learning goals for Category V, Cultural Diversity.

The goals of Category I, Core Competencies, are essential goals for the entire program of general education. Specifically, G.E. courses will include student writing assignments appropriate to the course. Writing assignments in G.E. courses should involve the organization and expression of complex data or ideas, and careful and timely evaluations of writing so that deficiencies are identified and suggestions for improvement and/or for means of remediation are offered. Assessments of the student’s writing competence shall be used in determining the final course grade.

The learning goals specified in this document identify ideal student learning objectives for each G.E. category and subcategory. Except where otherwise specifically provided for, no single course should necessarily be expected to pursue every goal specified for that course’s category or subcategory, but the more goals that a particular course addresses the more appropriate that course will be as a general education offering.

**I. CORE COMPETENCIES**

Courses in Core Competencies (Oral and Written Communication and Critical Thinking) include the following overall goals for student learning:

- To organize one's thoughts and communicate them clearly and effectively, using language that demonstrates sensitivity to gender and cultural differences.
- To select and present clearly and effectively information and arguments for a variety of purposes and audiences.
- To recognize and evaluate with rigor the features, functions and contexts of language that express and influence meaning.
- To compare and contrast with care and accuracy the relative merits of alternative or opposing arguments, interpretations, assumptions and cultural values.
- To reflect in an open-minded manner on one's own thinking in relation to the ideas of others.
- To work effectively as a member of a collaborative team.

**A. Oral Communication**

Courses in Oral Communication include the following goals for student learning:

- To develop and present a clearly spoken message in English.
- To practice effective listening and speaking in a dialogue.
- To present an oral message clearly and effectively using relevant and adequate supporting evidence.
- To understand the influence of culture and context on oral communication.
- To understand and value difference in communication styles.
- To negotiate cooperative action and solutions to problems.
- To select and use effectively appropriate techniques and materials to support ideas and to motivate and persuade others.

**B. Written Communication**

Courses in Written Communication include the following goals for student learning:

- To develop and present a clearly written message in English.
- To express and advocate ideas clearly and effectively in writing.
- To support written arguments with relevant and adequate evidence.
- To demonstrate sensitivity to matters of style in written language.
- To assess with insight one’s own writing by critiquing the writing of others.
- To synthesize learning through the medium of writing.
C. Critical Thinking
Courses in Critical Thinking include the following goals for student learning:
- To identify the relevant evidence and experiences needed to make a decision, solve a problem or create new knowledge.
- To clarify the facts, concepts, evidence and relationships that contribute to addressing questions and solving problems.
- To evaluate the quality and sufficiency of evidence and other forms of support for a position.
- To revise arguments and findings based on critical reflection.
- To recognize the explicit and implicit features in communication.
- To assess accurately similarities and differences in points of view.
- To monitor one’s own comprehension and apply various strategies to clarify one’s own thoughts and actions.
- To be organized, persistent and focused in thinking, inquiry and communication.

II. HISTORICAL AND CULTURAL FOUNDATIONS
Historical and Cultural Foundations include the Development of World Civilization and American History, Institutions and Values, the latter consisting of American history and government.
A. The Development of World Civilization
Courses in Development of World Civilization include the following goals for student learning:
- To understand holistically the origins and historical development of world civilizations within a global context.
- To describe and analyze critically the reciprocal influence of Western and non-Western institutions, values and ideas.
- To recognize the forces that contributed to the particular development of diverse societies and shaped our present world.
- To recognize and understand the contributions of ethnic and gender groups to past and present societies in contexts of accommodation and resistance.
- To understand and describe critically major political, economic, intellectual and cultural themes recurring throughout the history of the world.

B. American History, Institutions and Values
Courses in American History, Institutions and Values include the following overall goals for student learning:
- To understand critically the historical development of American institutions and values and their impact on the individual and collective lives of Americans.
- To assess critically how the Constitution of the United States and government under the Constitution have shaped American democracy and contemporary American society.
- To understand critically the political culture of citizen participation, including political parties, pressure groups, public opinion and the electoral process.

1. American History
Courses in American History include the following as principal goals for student learning:
- To recognize the significance of important cultural, intellectual, moral and political struggles that have shaped contemporary American society.
- To recognize the significance of the contributions of various ethnic and gender groups to American history, political institutions and values within contexts of cultural accommodation and resistance.

2. Government
Courses in Government include the following as principal goals for student learning:
- To assess critically the Constitutions of the United States and of California, and the operation of representative democratic government under those Constitutions.
- To explain the processes and interaction between and among local, state and national government, with particular reference to California.
- To understand critically the structures, functions, and processes of the three branches of government and resulting public policies.
- To assess critically behavior and institutional practices in United States and California politics.

III. DISCIPLINARY LEARNING
Disciplinary Learning includes Mathematics and Natural Sciences (12 units minimum), Arts and Humanities, and Social Sciences.
A. Mathematics and Natural Sciences
1. Mathematics
Courses in Mathematics include the following goals for student learning:
- To understand and appreciate the varied ways in which mathematics is used in problem-solving.
- To understand and appreciate the varied applications of mathematics to real-world problems.
- To perform appropriate numerical calculations, with knowledge of the underlying mathematics, and draw conclusions from the results.
- To demonstrate knowledge of fundamental mathematical concepts, symbols and principles.
- To solve problems that require mathematical analysis and quantitative reasoning.
- To summarize and present mathematical information with graphs and other forms that enhance comprehension.
- To utilize inductive and deductive mathematical reasoning skills in finding solutions, and be able to explain how these skills were used.
To explain the overall process and the particular steps by which a mathematical problem is solved.

To demonstrate a sense of mastery and confidence in the ability to solve problems that require mathematical concepts and quantitative reasoning.

2. Natural Sciences

Natural Sciences include the following overall goals for student learning:

- To understand how different themes of science make connections within and between the different scientific disciplines. Examples of unifying themes are:
  
  | Energy               | Patterns of Change        |
  | Stability            | Scale and Structure       |
  | Evolution            | Science as Inquiry        |
  | System and Interactions | Science and Society |

- To apply scientific methodology through active experimental methods and experiences (laboratory/activity).
- To evaluate the validity and limitations of theories and scientific claims in interpreting experimental results.
- To understand the dynamic and evolving nature of the sciences.
- To recognize the importance of scientific paradigms and methods in understanding scientific concepts.
- To solve theoretical or experimental problems that require knowledge of science concepts and scientific reasoning.
- To understand the issues raised by science for contemporary society and to appreciate the relevance and application of science in everyday life.
- To understand that there is synergism between science and technology – advances in science drive new technologies and new technologies make possible new advances in science. The principles of science provide the underpinnings of technology and, consequently, technology should be taught in conjunction with content directly linked to the scientific disciplines.

b. Earth and Astronomical Sciences

Earth and Astronomical Sciences include the following goals for student learning:

- To understand appropriate science and technological concepts and principles as follows:

  Major Ideas in Earth and Astronomical Sciences
  - Earth materials and structures are organized in interacting systems; the earth itself is part of a planetary system.
  - The earth changes continuously and is part of a universe that itself is changing. Energy and matter flow and cycle through earth and astronomical systems.
  - Changes within an earth or astronomical system may affect other earth or astronomical systems. Humans are part of and may affect or be affected by these systems.
  - Earth and astronomical systems can be understood by applying the basic principles of the physical and life sciences.

- To understand appropriate science and technology (see previous note) concepts and principles as follows:

  Major Ideas in Life Science
  - Living things are made of smaller structures whose functions enable the organism to survive.
  - Living things depend on each other and the physical environment as they interact to obtain, change and exchange matter and energy.
  - The great diversity of living things is the result of billions of years of evolution of organisms through the mechanisms of heredity, random change and natural selection.

3. Implications and Explorations in Mathematics and Natural Sciences

Courses in this category draw upon, integrate, apply and extend knowledge and skills previously acquired in Category III.A. Disciplinary Learning: Mathematics and Natural Sciences. These courses have a substantial scientific and/or mathematical content and require completion of appropriate courses in Categories III.A.1 and III.A.2 as prerequisites to enrollment. In addition, courses in III.A.3. Implications and Explorations in Mathematics and Natural Sciences include the following goals for student learning:

- To understand broad, unifying themes in mathematics and/or science from cross-disciplinary perspectives.
- To solve complex problems that require mathematical and/or scientific reasoning.
- To relate mathematics and/or science to significant social problems or to other related disciplines.
- When deemed appropriate, to apply disciplinary concepts from mathematics and the natural sciences in a variety of settings, such as community-based learning sites and activities.
B. Arts and Humanities

The Arts and Humanities include Introduction to the Arts, Introduction to the Humanities, and Implications, Explorations, and Participatory Experience in the Arts and Humanities.

1. Introduction to the Arts

Introduction to the Arts include the following goals for student learning:
- To understand and appreciate one or more of the traditional artistic disciplines (art, dance, drama and music).
- To recognize the historical relationship between the arts and the development of civilization.
- To recognize the social and cultural role that the arts play in a culturally diverse contemporary world.
- To understand creativity in the arts through direct participation either in the making or performing of art forms or through the experience of such a process by direct observation (such as attending dance or music concerts, plays or museums).
- To distinguish between subjective and objective responses to a work of art, and be able to articulate an informed opinion about the values of and differences between those responses.

2. Introduction to the Humanities

Introduction to the Humanities include the following goals for student learning:
- To understand the distinctive characteristics of the humanistic perspective.
- To understand the historical and cultural factors, in a global context, that led to the development of the humanistic perspective.
- To understand the differences between the humanistic and other perspectives, as well as the differences among the humanistic disciplines.
- To understand and appreciate the contributions of the humanities to the development of the political and cultural institutions of contemporary society.
- To be familiar with and understand major texts (both written and oral), key figures, significant traditions and important themes in the humanities.
- To analyze the meaning of major texts (both written and oral) from both Western and non-Western cultures, either in English or, if appropriate, in the language of the texts being analyzed.
- To apply the humanistic perspective to values, experiences and meanings in one’s own life, and demonstrate how understanding the humanities can shed light on what it means to be human today.

3. Implications, Explorations, and Participatory Experience in the Arts and Humanities

Courses in this category draw upon, integrate, apply, and extend knowledge and skills previously acquired in Category III.B.

Disciplinary Learning: Art and Humanities, and require completion of appropriate courses in Categories III.B.1 and III.B.2 as prerequisites to enrollment. In addition, courses in III.B.3. Implications, Explorations and Participatory Experience in the Arts and Humanities include the following goals for student learning:
- To understand broad, unifying themes in the arts and/or humanities from cross-disciplinary perspectives.
- To solve complex problems that require artistic or humanistic understanding.
- To relate the arts and/or humanities to significant social problems or to other related disciplines.
- When deemed appropriate, to apply disciplinary concepts from the arts and/or humanities in a variety of settings, such as community-based learning sites and activities.
- In arts courses, to deepen previously acquired artistic appreciation and understanding through participation either in the making or performing of art forms or through the experience of such a process by direct observation.

C. Social Sciences

Introduction to the Social Sciences include the following goals for student learning:

1. Introduction to the Social Sciences

Introduction to the Social Sciences include the following goals for student learning:
- To reflect on what it means to be a social being.
- To understand the role that cultural diversity plays in defining what it means to be a social being: the past and present processes of cultural differentiation in our own society or elsewhere.
- To understand the origins, workings and ramifications of social and cultural change in our own society or elsewhere.
- To understand what makes a social science different from other disciplines.
- To understand and compare the distinctive methods and perspectives of two or more social science disciplines.
- To understand major concepts, methods, theories and theorists in one or more of the social sciences.
- To apply these methods, perspectives and concepts to everyday, “real life” situations.
- To appreciate the relevance of the social sciences to social, political and/or economic institutions and behavior.
- To analyze and evaluate critically social science concepts and theories as applied to particular problems or themes.

2. Implications, Explorations and Participatory Experience in the Social Sciences

Courses in this category draw upon, integrate, apply, and extend knowledge and skills previously acquired in Category III.C. Disciplinary Learning: Social Sciences, and require completion of
appropriate courses in Category III.C.1 as a prerequisite to enrollment. In addition, courses in III.C.2. Implications, Explorations and Participatory Experience in the Social Sciences include the following goals for student learning:

- To understand broad, unifying themes in the social sciences from cross-disciplinary perspectives.
- To solve complex problems that require social scientific reasoning.
- To relate the social sciences to significant social problems or to other related disciplines.
- When deemed appropriate, to apply disciplinary concepts from the social sciences in a variety of settings, such as community-based learning sites and activities.

IV. LIFELONG LEARNING

Lifelong Learning provides the opportunity for students to integrate the elements of their university experience (core competencies, historical and cultural foundations, and disciplinary learning) in attempting to address the complex context and trajectory of human life. Courses in this category include the following goals for student learning:

- To understand the human being as an integrated physiological, sociocultural and psychological organism.
- To understand the course of human life, that is, how human life and experience are constructed and altered through biological, psychological, social, scientific, technological and cultural influences.
- To understand conceptions of the course of human life from different cultural perspectives.
- To understand the importance of a lifelong commitment to physical activity and a healthy manner of living for both personal well-being and civic responsibility.
- To understand the basis and the means by which individuals and society make decisions.

V. CULTURAL DIVERSITY

Students must complete at least one three-unit course that includes all of the following learning goals for cultural diversity:

- To understand that culture is socially constructed and fundamental to social interaction.
- To appreciate the complex relationships that gender, ethnicity and class bring to a discussion of society and culture.
- To understand that because we live in an inter-connected world, we need to understand the diversity and relationships within and among cultures.
- To recognize and evaluate how one’s cultural history affects one’s sense of self and relationship to others.

Courses in General Education that meet these learning goals will be identified by an asterisk (*) in appropriate publications.
3. Implications, Explorations and Participatory Experience in the Arts and Humanities (3 units minimum)

C. Social Sciences (6 units minimum)

1. Introduction to the Social Sciences (3 units minimum)

2. Implications and Explorations in the Social Sciences (3 units minimum)

IV. Life-Long Learning (3 Units Minimum)

V. Cultural Diversity

One three-unit course identified with an asterisk (*) from Categories III.B.3, III.C.2, or IV must be taken.
INTRODUCTION

From its earliest days to the present, teacher preparation has been one of the chief missions of the university. Today, California State University, Fullerton offers a full range of nationally accredited and state-approved credential programs leading to careers in education. Students pursuing a teaching credential in California must navigate a number of specific requirements. Credential requirements are established by the Legislature and enforced by the California Commission on Teacher Credentialing (CCTC). The Commission also reviews and approves all university credential preparation programs. An academic major in education is not permitted in California, thus students seeking teaching credentials must do so in conjunction with, or after the completion of, a baccalaureate degree program in an academic area outside of education.

CSUF offers programs leading to basic teaching credentials, specialist credentials and services credentials. The specialist and services credentials, described briefly below, are more advanced programs designed to be taken in conjunction with graduate study.

In addition to the $55 CSU Application Fee, all applicants to a credential program at CSUF will pay a $50 Teacher Education Credential Program Application and Processing Fee. Instructions for applying to a Credential Program and submitting the fee can be obtained at the Admissions to Teacher Education Center, located in College Park 540, or by calling 657-278-3352, or visiting the website at http://ed.fullerton.edu/adtep.

In this section of the catalog, information is presented regarding:

A. Center for Careers in Teaching
B. Basic Credential Programs
C. The Multiple Subject Credential
D. Streamlined Teacher Education Program (Integrated Teacher Education Program)
E. The Single Subject Credential and Subject Matter Preparation Programs
F. Education Specialist Credentials
G. Administrative Services Credential Programs
H. Clinical Rehabilitative Services

A. CENTER FOR CAREERS IN TEACHING
Humanities 113
657-278-7130
www.fullerton.edu/cct

The Center for Careers in Teaching provides up-to-date, accurate information to students planning to become elementary, middle school, high school and/or special education teachers. Undergraduate students are encouraged to go to the center for early academic advising and counseling to best prepare for the credential programs at Cal State Fullerton. The Center for Careers in Teaching provides informative seminars throughout the semester where students learn about the various credential program requirements and how to efficiently blend requirements for General Education, a major
The Center for Careers in Teaching also works with local community colleges to facilitate the transition of transfer students who are planning to become teachers. The center's staff members meet with community college counselors to develop specific transfer plans for prospective teachers and are available to give classroom presentations upon request. Transfer students are encouraged to attend a seminar at the Cal State Fullerton campus even while attending the community college. See the Center for Careers in Teaching website at www.fullerton.edu/cct for the current seminar schedule.

B. BASIC CREDENTIAL PROGRAMS

In California, there are three basic teaching credentials: the Multiple Subject Credential, Single Subject Credential and the Education Specialist Credential. The Multiple Subject Credential authorizes a person to teach in a classroom where many different subjects are taught by a single individual, such as in elementary schools. The Single Subject Credential authorizes a teacher to teach in a classroom where only one subject is taught, such as a classroom in departmentalized high schools and junior highs. Thus the person interested in elementary school teaching should pursue the program designed for the Multiple Subject Credential, and the person interested in teaching a specific subject at the junior high or high school level should pursue the program for the Single Subject Credential.

The Education Specialist Credentials are designed for persons interested in working with children and adults with disabilities. Those who work with K-12 students should pursue the Mild/Moderate or the Moderate/Severe Credential. Persons interested in working with infants, toddlers and preschoolers should pursue an Early Childhood Special Education/Specialist Credential.

In California, a prospective teacher first earns a preliminary credential and then completes a two-year induction program. The preliminary credential is the initial credential for the beginning teacher.

Minimum Requirements for a Preliminary Multiple Subject, Single Subject or Education Specialist Credential

Although it is possible to complete the minimum requirements for a preliminary basic teaching credential along with a baccalaureate degree in four years, it generally takes a strong student with accurate academic advising about four and a half years full time to complete all the requirements for a preliminary basic teaching credential and a baccalaureate degree. The minimum requirements for a preliminary basic credential include:

1. A baccalaureate degree in an academic field other than professional education from a regionally accredited college or university.
2. An approved program of professional teacher preparation, including supervised student teaching and passing teacher performance assessments. A two-semester or three-semester program may be taken during the fourth and/or fifth year of study. Cal State Fullerton offers nationally accredited and state-approved professional preparation programs through the College of Education. Further information about internships, including admission and prerequisite requirements, is provided in this catalog under the Departments of Elementary and Bilingual Education, Secondary Education, and Special Education.
3. Demonstration of basic skills competencies. The most common method is the passage of the California Basic Education Skills Test (CBEST). Please check with the Admission to Teacher Education Office (College Park 540) for more information.
4. Demonstration of subject matter knowledge appropriate to the specific credential being authorized. For single subject candidates, this can be achieved either by passing a state-approved subject matter examination, which is the California Subject Examination for Teachers (CSET), or by completing a state-approved subject matter preparation program. Multiple subject candidates must demonstrate subject matter competence by passing the Multiple Subjects CSET. Mild/Moderate and Moderate/Severe education specialist candidates must demonstrate subject matter competence. Please check with the Admission to Teacher Education (CP 540) or the admissions coordinator for the Department of Special Education for updated information.
5. Satisfactory completion of at least two semester units of work on the provisions and principles of the U.S. Constitution, or passage of an examination on this area from a regionally accredited college or university, or a B.A./B.S. degree awarded by a CSU campus.
6. Passage of the Reading Instruction Competence Assessment (RICA), a state-mandated examination for reading instruction. This is required for the Multiple Subject Credential and the Education Specialist Credentials, but not for the Single Subject Credential.

Overview sessions offered by the College of Education are helpful to those students who are interested in applying to a credential program. Schedules for these sessions are available in CP 540 or on the hotline at 657-278-3412 (listen for overview promptings). Overview schedules and podcasts are also available at http://ed.fullerton.edu/adtep/overview.htm.

Internship Programs - All Credentials

CSUF offers internship programs in Elementary and Bilingual, Secondary and Special Education Credential Programs. Candidates must be enrolled in the credential program prior to seeking an internship-credential.

C. MULTIPLE SUBJECT CREDENTIAL

In California, professional teacher preparation is a two- or three-semester program taken during the fourth and/or fifth year of college; there is no major in education. Since students devote their first three years of work to completing general education, major and subject matter preparation requirements, it is essential that students consider their selection of an academic major carefully.
The Center for Careers in Teaching, in conjunction with various departments, has developed sample academic plans that show students how to efficiently blend the requirements for graduation and admission to the credential program for a wide variety of majors. These plans are posted on the Center for Careers in Teaching website (www.fullerton.edu/cct). According to California law, any major (other than education) can be selected.

**D. STREAMLINED TEACHER EDUCATION PROGRAM (INTEGRATED TEACHER EDUCATION PROGRAM)**

Designed for freshmen planning to be teachers, students in the Streamlined Teacher Education Program (STEP) combine their bachelor’s degree requirements with credential program courses to earn both the degree and the preliminary credential in an efficient, well-planned program. Students in STEP complete the requirements for the bachelor’s degree in either Child and Adolescent Development or Liberal Studies and the requirements for a Professional (preliminary) Multiple Subject Credential (for teaching elementary school) and/or an Education Specialist Credential (for teaching students with Mild/Moderate or Moderate/Severe disabilities at the K-6 level). A STEP option is available in English for students who want to teach English at the high school level.

Students in STEP benefit from early field experience in K-12 classrooms, regular contact with faculty members from their major departments and from the education departments and regular advisement and support throughout the program. Students in STEP also have multiple opportunities to meet and work with other students in the program, facilitating their social connections with other students with similar career aspirations.

Transfer students may also participate in STEP. To be well-positioned to participate in the program, they must seek advisement from their community college counselor as early in their academic careers as possible. Students in this program must take a particular pattern of courses to satisfy General Education Program requirements. Also, community college students may follow the Lower-Division Transfer Pattern (LDTP) for Integrated Teacher Preparation. Transfer students should check the Center for Careers in Teaching website for more information.

For further information about STEP, please visit the Center for Careers in Teaching website at www.fullerton.edu/cct or visit the Center in H-113.

**E. SINGLE SUBJECT CREDENTIAL AND SUBJECT MATTER PREPARATION**

Although a person seeking a Single Subject Credential may complete any academic major, most people decide to complete the degree major closest to the subject field in which they wish to be authorized to teach. CSUF offers a Single Subject Credential program in each of the following state-authorized subject fields.

- Art
- Biology
- Chemistry
- English (English, Theater)
- Foundational Level Math (FLM)
- Foundational Level General Science
- French
- German
- Geology
- Japanese
- Mathematics
- Music
- Physical Education
- Physics
- Spanish
- Social Science (includes History)

To demonstrate subject matter competence, a person must either pass the appropriate state-approved examination (CSET), or complete a state-approved subject matter preparation program. These subject matter preparation programs generally coincide sufficiently with the degree major to make it possible to complete major requirements and subject matter preparation requirements using many of the same courses. But degree programs and subject matter preparation programs serve different purposes; taking one is not a guarantee that you will have satisfied the requirements of the other.

For students seeking Single Subject Credentials, please discuss the option of the test or subject matter preparation program with the adviser for your academic major. CSUF offers subject matter preparation programs associated with many of the above credentials.

Good advising and careful planning are crucial. Transfer students seeking a CSUF subject matter preparation program should seek a transcript evaluation from the adviser in their academic major. Single subject matter preparation programs are in transition because of changes in the state standards. See www.fullerton.edu/cct for current information.

**F. EDUCATION SPECIALIST CREDENTIALS**

CSUF offers several state-approved programs leading to basic specialized credentials. These specialist credentials are oriented toward post-baccalaureate coursework and coincide with master’s degree programs. The State is currently revising requirements for the Education Specialist Credentials. Please visit the Admission to Teacher Education website for current information.

CSUF offers the following Specialist Credential programs:

1. Mild/Moderate Disabilities - to teach persons with mild/moderate disabilities. See Department of Special Education, College of Education.
2. Moderate/Severe Disabilities - to teach persons with moderate/severe disabilities or who have multiple disabilities. See Department of Special Education, College of Education.
3. Early Childhood Special Education - to teach infants, toddlers and preschoolers with or at risk for disabilities or developmental
delays, ages birth through five years of age and their families. See Department of Special Education, College of Education.

4. Resource Specialist (Certificate of Competency) - to serve as a resource specialist in programs serving special education students, their parents and their regular teachers. See Department of Special Education, College of Education.

5. Reading and Language Arts Specialist - to teach reading to students of diversified grade and ability levels and to assist all teachers in being better reading teachers. See the Reading Department, College of Education.

G. ADMINISTRATIVE SERVICES CREDENTIALS

CSUF offers the following Administrative Services Credential programs:

1. Administrative Services (Preliminary Level) - the first step of the two-step administrative services credential structure, authorizing service as a school site administrator, principal or other administrative officer of a school district. See Department of Educational Leadership, College of Education.

2. Administrative Services (Professional Level) - the second step of the two-step administrative services credential structure. See Department of Educational Leadership, College of Education.

H. CLINICAL REHABILITATIVE SERVICES

1. Clinical Rehabilitative Services Credential in Language, Speech and Hearing - provide services to students with disorders in language, speech and hearing. See Department of Human Communication, College of Communications.

2. Special Class Authorization - to become a classroom teacher to students with severe disorders of language. See Department of Human Communication, College of Communications.

3. School Nurse Services Credential – to become a school nurse. See Nursing Department in the College of Health and Human Development.
CURRICULA INFORMATION

Course Descriptions
Course Numbering Code
Student-to-Student Tutorials
Independent Study
Cross-Disciplinary Programs
Air Force Reserve Officer Training Corps
Master of Library and Information Science Degree Program
Library Course
University Studies Courses

COURSE DESCRIPTIONS

Course descriptions briefly describe the content or subject matter to be covered and provide additional information on units of credit, the level of instruction (see course numbering code), prerequisites and the type of course (lecture, laboratory, activity, seminar and individually supervised work).

An honors section of a course shall use the letter H. A laboratory course which accompanies another course should use the letter L. A variable topics course shall use the letter T.

A controlled entry course is one that has enrollment requirements in addition to any prerequisite courses. Additional requirements include prior approval of the instructor, special academic advisement, a qualifying exam, a placement test, an audition, a teaching credential, or similar special qualifications. Controlled entry courses are designated in the class schedule by using an appropriate explanatory class note.

COURSE NUMBERING CODE

The first number in each course designation is intended to indicate the level of complexity of the course. In addition, the first number also is a rough index of the student’s year of study at the university. The following are guidelines for course numbering.

001-099
Courses that carry no credit toward a degree or credential. Generally developmental, remedial, or pre-college in content.

100-199
Lower-division courses designed primarily for freshman level, but also open to other students. These courses are generally introductory in nature and are usually designed without prerequisites.

200-299
Lower-division courses designed primarily for sophomore level, but also open to other students. Although there is no clear distinction between lower-division courses listed at the 100 or 200 level, there is an inherent assumption that students in these courses have acquired skills appropriate to the second year of university-level work.

300-399
Upper-division courses designed primarily for juniors, but also open to other students. Third year or junior-level coursework is likely to emphasize specialization in the disciplines. It is expected that specific prerequisites are used to indicate the necessary competencies required for study at this level. These courses do not give graduate credit.

400-499
Upper-division courses designed primarily for seniors, but also open to other students. Prerequisite work is required. Coursework is intended to provide depth of understanding or additional focus appropriate to the disciplines. Courses at the 400 level are sufficiently sophisticated for inclusion on graduate study plans if additional assignments are given to graduate students.
Courses designed for graduate students who are enrolled in advanced degree programs. The courses of study are advanced and specialized in nature and require substantial undergraduate preparation. Undergraduate students may enroll if they have reached senior status, have the prerequisites required for entry into the course, and have gained consent of the instructor. Courses at the beginning 500 level may be used on joint doctoral study plans if the approved program provides for such use.

Courses designed for graduate students beyond the master's level who are enrolled in joint-doctoral programs. The courses of study take up advanced topics using sophisticated approaches that presume prior study at the graduate level within the same, or a closely related, discipline. Master's program students may enroll only with consent of both the instructor and the graduate adviser. Closed to undergraduates.

Course numbers for graduate and post-baccalaureate students (including those seeking a credential) to maintain continuous enrollment during a particular semester, when they are not enrolled in regular courses. These numbers do not represent courses and do not therefore grant credit.

Courses specifically designed for professional groups seeking vocational improvement or career advancement. Credit for these courses does not apply to undergraduate degrees, graduate degrees or vocational improvement or career advancement. Credit for these courses is not counted toward an undergraduate degree program. The course can be taken on a credit/no credit basis by the tutor.

For uniformity, certain types of courses have been listed by all departments and colleges with the same numbers: 499 and 599 are used respectively for undergraduate and graduate independent study; 496 for student-to-student tutorials; 497 and 597 for a project; and 598 for a graduate thesis.

Certain notations are uniformly used in the course descriptions in this catalog.

1. The figure in parentheses following the course title indicates the number of semester units for the course. Courses offered for varying units are indicated as (1-3) or (3-6).

2. A course listing such as Afro-Ethnic Studies 108 (Same as Linguistics 108) indicates that a student taking the course may enroll in either of those two disciplines.

3. A notation such as (Formerly 433) following the course title and the number of units indicates the same course previously was numbered 433.

The student-to-student tutorial provides a formal way to encourage students to learn through teaching. It also provides tutoring to all students who need and want tutorial assistance.

In those departments that choose to offer such courses, the courses are numbered 196 or 496 and carry one to three units of credit. The prerequisites include a grade point average of at least 3.0 and/or consent of the instructor. The tutor and tutee(s) will work in mutually advantageous ways by allowing all involved to delve more carefully and thoroughly into the materials presented in this specific course.

One to three students may be tutored by the tutor unless the instructor decides that special circumstances warrant increasing the usual maximum of three tutees. Three hours of work per week are expected for each semester unit of credit, and this work may include, apart from contact hours with tutees, such other activities as: tutorial preparations; consulting with instructors; reporting, analysis and evaluation of the tutorial experiences; and participation in an all-university orientation and evaluation program for tutors.

A maximum of three units may be taken each semester. No more than three units of any combination of tutorial courses (496) may count toward an undergraduate degree program. The course must be taken as an elective and not counted toward general education, major or minor requirements. The course can be taken on a credit/no credit basis by the tutor.

Requests for tutors must be initiated by tutees and can be initiated up until the official university census date. Tutors electing to respond to such requests will receive credits at the end of the semester and can register in the course until the official university census date. Both tutors and tutees must submit written reports, analyses and evaluations of their shared tutorial experience to the instructor, and both must participate in an all-university orientation program, as well as in any conference or critique that the instructor of the course may require.

Further information can be obtained from the department in which the student is interested in a student-to-student tutorial.

By registering for an independent study course, a student may pursue topics or problems of special interest beyond the scope of a regular course under the supervision of a faculty adviser. The work is of a research or creative nature, and normally culminates in a paper, project, comprehensive examination, or performance. Independent study units shall not be granted for teaching duties, administering classes, tutoring students or grading courses; or for internships. For independent study used on graduate study plans, 300-level courses may not be used as the sole basis for 499 Independent Study. 300- and 400-level coursework may not be used as the sole basis for 599 Independent Study. 100- and 200-level courses may not be used as any part of the basis for 499 or 599 Independent Study.
Before registering, the student must get a topic approved by the instructor who will be supervising independent study and by the department chair. Independent study used on a graduate study plan must also be approved by the departmental graduate program adviser.

A student may take no more than six units of independent study at the undergraduate level (299 and 499 numbered courses) in a given semester. No more than nine units of independent study may be applied toward completion of the baccalaureate degree.

A graduate student may apply no more than six units of independent study (499 or 599 numbered courses) toward completion of the master’s degree.

CROSS-DISCIPLINARY PROGRAMS

A cross-disciplinary program is an endeavor involving two or more existing academic departments which need not be within the same college. Such programs are administered by program councils composed of representatives elected by participating departments.

Current programs include:

College of Humanities and Social Sciences

Asian Studies, Minor
Asian American Studies Option, B.A.
Ethnic Studies
Asian American Studies, Minor
Environmental Studies, M.S.
European Studies, B.A. and Minor
Gerontology, M.S. and Minor
Latin American Studies, B.A. and Minor
Women’s Studies, B.A. and Minor

The program descriptions are located within the departmental section of this catalog.

AIR FORCE RESERVE OFFICER TRAINING CORPS (AFROTC)

Through arrangements with Loyola Marymount University in west Los Angeles, California State University, San Bernardino, the University of Southern California, and the University of California, Los Angeles, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. Aerospace studies classes and leadership laboratories are conducted at various times during the week on the main campuses of LMU, CSU San Bernardino, USC and UCLA.

AFROTC offers a variety of two, three and four-year scholarships, many of which pay the full cost of tuition, books, and fees. Successful completion of as little as four semesters of AFROTC academic classes and leadership laboratories can lead to a commission as a second lieutenant in the United States Air Force.

For more information, contact the Department of Aerospace Studies (AFROTC) at one of the following universities: Loyola Marymount University at 310-338-2770; CSU, San Bernardino at 909-537-5440; USC at 213-740-2670; or UCLA at 310-825-1742.

MASTER OF LIBRARY AND INFORMATION SCIENCE DEGREE PROGRAM

Pollak Library (South Wing) 67
657-278-2064

The Master of Library and Information Science (MLIS) degree program is offered on the Cal State Fullerton campus by San Jose State University’s College of Library and Information Science. Accredited by the American Library Association in 1969, the SJSU College of Library and Information Science (SLIS) was accorded its most recent accreditation update in January 2000, making it the only ALA-accredited program in the 23-campus California State University system.

San Jose State began offering classes at Cal State Fullerton in 1989 and has enjoyed continuous growth since that time. Applicants are screened and admitted by San Jose State even though they plan to take classes through the distance education program at Cal State Fullerton.

The program requires the successful completion of 42 units, and it may be taken in its entirety at Fullerton. In addition to the MLIS, the program also offers an accredited School Library Media Credential, as well as an emphasis in archival studies.

For further information, call MLIS’s Cal State Fullerton office at the above number or visit the school’s website at http://slisweb.sjsu.edu.

LIBRARY COURSE

Course is designated as LIBR in the class schedule.

302T Library Research Methods for Specific Majors (1)

Library research methodology and introduction to library resources in special subject areas such as business, education and science.

UNIVERSITY STUDIES COURSES

Courses are designated as UNIV in the class schedule.

100 Introduction to University Studies (1-3)

Designed for first-time freshmen in learning communities. Provides support in transition from high school to university study. Introduction to higher education structure and expectations, general education, roles and responsibilities of university students. The seminar is offered for 1, 2 or 3 units in the fall and/or spring semester. Extensive reading and writing assignments related to the first year college experience are required. Three units maximum.

496 Student-to-Student Tutorial (1-3)

Prerequisites: a 2.75 or higher grade point average and simultaneous assignment as a peer mentor in section of University 100. Instructional assistance to incoming freshmen by advanced peer mentors. In collaboration with faculty member and a student affairs professional, peer mentors assist in a variety of instructional and student support activities, including tutoring, developing topics and modules for University 100, and the analysis and evaluation of the first-year experience.

499 Independent Study (1-3)

Prerequisite: consent of instructor and approved learning plan. Independent research or applied project, under the direction of a faculty member. May be repeated for a maximum of nine total units of credit.
INTRODUCTION

Each student is responsible for meeting the requirements printed in the university catalog and all published regulations of the university.

The university establishes certain academic policies and requirements that must be met before a degree is granted. These include major and unit requirements and prerequisites. While advisers, directors, deans and faculty will provide a student with information and advice, responsibility for meeting these requirements rests with the student. Since failure to satisfy these requirements may result in the degree being withheld, it is important for each student to become thoroughly acquainted with all regulations. The catalog and the semester online class schedule at www.fullerton.edu are the best sources of information on current policy and regulations.

The student also has the responsibility for securing the consent of the instructor before enrolling in a course with prerequisites that the student has not completed.

To ensure receipt of timely information from the university, each student must keep the Office of Admissions and Records informed of changes in personal data, including changes in name, address and program of study. Enrollment corrections and changes must be reported to the Office of Admissions and Records by the 20th day of classes each semester. During weeks one and two of the semester, changes may be made using TITAN Online. During the third and fourth weeks, corrections must be made using the appropriate form, and a $20 administrative late fee will be required to make such change. Other corrections should be reported on forms provided by and returned to the Office of Admissions and Records. Check with the office of Admissions and Records for specific deadlines.

COMMITMENT TO CIVILITY

At Cal State Fullerton we foster a climate where civility is valued, appreciated and expected, and where all members of the community are treated with dignity, respect and care. Civility is apparent when we are aware of the impact that our communications, practices and behaviors have on others and when we acknowledge each person’s worth, cultural perspective and unique contributions to the community.

Establishing a civil climate is a shared responsibility of all university community members – students, faculty, staff and administrators. Civility is the expression of respect for others and for the tasks we share. Therefore, we believe that civility is a cornerstone of our university mission and values, and we reaffirm our commitment to civility on the campus – both inside and outside the classroom.

ENROLLMENT REGULATIONS

Units of Credit

Each semester unit represents three hours of university work per week for one semester. Courses are of three types:

Lecture: one hour in class plus two hours of study.
Activity: two hours of class plus one hour of study.
Laboratory: three hours of laboratory activity in class plus one hour of study outside class.

Some courses may combine two or more of these types. All required courses carry unit credit.
Class Levels
Undergraduate students who have completed 0-29 semester units of work are classified as freshmen, 30-59 semester units as sophomores, 60-89 semester units as juniors, and 90 or more as seniors.

Maximum Number of Units
Undergraduate students' requests to enroll for more than 19 units in the fall or spring semester must be approved by the student's adviser and the department chair of the major. If such requests are denied, appeals may be made to the appropriate college dean. (Undeclared majors must receive the approval of the director of Academic Advising Services.) The minimum full-time program is 12 units.

Consistent with university policy for the fall and spring semesters, the following individual student enrollment limits are assigned for summer (YRO) sessions:
- No more than seven units in any five- or six-week session, or
- No more than nine units in an eight-week session, or
- No more than twelve units in a ten-week session, or
- No more than sixteen units in the entire summer (YRO) term

A student whose academic record justifies a study list in excess of the normal may request to be allowed to enroll for extra units. Request forms may be obtained from the Office of Admissions and Records. In general, only students with superior academic records are allowed to enroll for more than the maximum. In addition, the need to enroll for the extra study must be established. Factors such as time spent in employment or commuting, the nature of the academic program, extracurricular activities and the student's health should be considered in planning a study program.

The minimum and maximum units of a full-time program of study for graduate students are defined in the “Graduate Regulations” section of this catalog.

Graduate-Level Courses
Graduate-level (500) courses are organized primarily for graduate students. Undergraduate students may be permitted to enroll in a graduate-level course if:
1. they have reached senior standing (completed a minimum of 90 semester units)
2. have academic preparation and prerequisites required for entry into the course
3. gain the consent of the instructor

Students wishing to use 500-level coursework taken during their undergraduate degree toward a master's degree should read “Enrollment in 500-Level Courses by Seniors” and “Postgraduate Credit” in the “Graduate Enrollment Policies” section of this catalog.

CLASS ATTENDANCE
While class attendance is not recorded officially by the university, students are expected to attend all classes. The policy on class attendance is within the discretion of the individual faculty member and shall be included in the class syllabus distributed at the first class meeting of the semester.

Students who must miss class to represent the university or to participate in a university-sponsored activity must notify the class instructor in writing a minimum of two weeks in advance of the absence. Given prior notice, instructors are encouraged to allow students to make up class work, complete class work in advance of the class absence, or complete an alternative assignment without penalty. In case of a disagreement about whether an activity constitutes a university-sponsored activity, the appropriate administrator will make the determination.

INITIAL CLASS MEETING
It is especially important that students attend the first meeting of a class. Students absent from the first meeting must notify the instructor or departmental office of the absence no later than 24 hours after the class meeting in order to preserve their places in the class. Instructors may deny admission to the class to absentees who fail to contact the instructor or office, in order to admit persons on waiting lists.

INSTRUCTOR-INITIATED DROPS
A student who registers for a class should attend all class meetings in the first week. If a student decides not to continue enrollment in a class, either before or after instruction begins, it is the student's responsibility to follow appropriate procedures for dropping the class; however, if a student is absent without notifying the instructor or departmental office within 24 hours after any meeting missed during the first week, the student may be dropped administratively by the instructor. Students should not assume that this will be done for them and should take the responsibility to ensure that they have been dropped, by following the appropriate procedures for dropping classes.

An instructor may also administratively drop a student who does not meet prerequisites for the course. These administrative withdrawals shall be without penalty and must be filed by the instructor with the Office of Admissions and Records no later than the end of the second week of instruction (the specific date is published in the online class schedule each semester).
GRADING POLICIES
Grading System
Administrative Symbols
Student Records

GRADING SYSTEM
Every student of the university will have all coursework evaluated and reported by the faculty using letter grades or administrative symbols.

The university uses a combination of traditional and nontraditional grading options as follows:

Traditional (Letter Grade Option) – Plus/minus may be assigned to letter grade.

Letter grades, defined as:
A - outstanding performance
B - above average performance
C - average performance
D - below average performance, though passing
F - failure

Nontraditional (Credit/No Credit Option)

CR (Credit) for satisfactory (equivalent to "C" (2.0) or better in undergraduate courses; "B" (3.0) or better in graduate courses) and NC (No Credit) for less than satisfactory work.

When, because of circumstances, a student does not complete a particular course, or withdraws, certain administrative symbols may be assigned by the faculty. Grades and symbols are listed in a chart on the following page together with grade point values. The chart also illustrates the academic bookkeeping involved for all grades and symbols used.

Selection of Grading Option
Selection of a grading option, with certain exceptions, is the responsibility of the student. Graduate students must use the letter grade option for courses that are on study plans leading to master’s degrees. Undergraduates must use the letter grade option for major, minor and general education requirements.

Exceptions are those courses designated by the faculty to be graded solely on either a letter grade only or Credit/No Credit basis.

These courses will be so designated in the online class schedule (and shall not be changed by the faculty after publication of the online class schedule) for each semester and may be included in major, core or special program requirements.

Students shall inform the Office of Admissions and Records up to the end of the second week of classes regarding the selection of grading options in designated courses. If a student does not do so, the letter grade option will be used. Students are not permitted to change grading options after the university mini-census date except, by petition, changes from Credit/No Credit to letter grade, which will bring the student into compliance with major, minor and general education requirements.

The faculty shall grade all students using the traditional A, B, C, D or F grades except in Credit/No Credit (only) courses, and the Office of Admissions and Records shall make the necessary changes from A, B, C, D or F, converting C (2.0) or better to Credit, and C- or below to No Credit in undergraduate courses and B (3.0) or better to Credit, and B- or below to No Credit in graduate courses. In those courses offered only
on a Credit/No Credit basis, the instructor shall assign grades of CR or NC or appropriate administrative symbols.

**Nontraditional Grade Option**

A nontraditional grading option is available to undergraduate students, nonobjective graduate students and to classified graduate students for courses not included in the approved study plan. Any student attempting a course using the nontraditional grading option must meet the prerequisites for that course. Each student shall be permitted to select courses in subjects outside of the major, minor and general education requirements for enrollment on a Credit/No Credit basis. The phrase "major requirements" shall be taken to include core plus concentration (or option) requirements in departments using such terms, and professional course requirements in teacher education curricula.

A student in any one term may take one course under the Credit/No Credit option. In addition, he or she may enroll in a required course offered only under Credit/No Credit; however, a maximum of 36 units of Credit/No Credit courses, including those transferred from other institutions, may be counted toward the baccalaureate.

Under the Credit/No Credit option, the term "Credit" signifies that the student's academic performance was such that he or she was awarded full credit in undergraduate courses with a quality level of achievement equivalent to a "C" (2.0) grade or better, unless the catalog course description states otherwise.

In all graduate-level and professional education courses, Credit signifies academic performance equivalent to "B" (3.0) or better grades. No Credit signifies that the student attempted the course but that the performance did not warrant credit toward the objective.

Ordinarily, a student shall be limited to one non-major course per term using this option, exclusive of courses offered only on a Credit/No Credit basis.

When an undergraduate student changes his or her major field of study to one where he or she has completed courses with CR grades, such lower-division courses shall be included in major requirements. Upper-division courses may be included at the option of the department upon petition by the student.

<table>
<thead>
<tr>
<th>Grade or Symbol</th>
<th>GPA Units</th>
<th>Units Earned</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional (letter grades and their corresponding values)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A+</td>
<td>Yes</td>
<td>Yes</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>Outstanding</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>A-</td>
<td>Yes</td>
<td>Yes</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>Yes</td>
<td>Yes</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B-</td>
<td>Yes</td>
<td>Yes</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>Yes</td>
<td>Yes</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>Acceptable</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>C-</td>
<td>Yes</td>
<td>Yes</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>Yes</td>
<td>Yes</td>
<td>1.3</td>
</tr>
<tr>
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<td>Poor</td>
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<td>Yes</td>
</tr>
<tr>
<td>D-</td>
<td>Yes</td>
<td>Yes</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
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</table>

<table>
<thead>
<tr>
<th>Nontraditional</th>
<th>GPA Units</th>
<th>Units Earned</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR.................</td>
<td>* Yes</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>NC.................</td>
<td>* No</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Administrative Symbols**

I (Incomplete Authorized).......... † Yes No 0
IC (Incomplete Charged)........... Yes No 0
U (Unauthorized Incomplete) ††† Yes No 0
W (Withdrawal)..................... No No None
WF (Withdrawal) ††................. Yes No 0
WU (Withdrawal Unauthorized)........ Yes No 0
AU (Audit)......................... No No None
SP (Satisfactory Progress) ††† No No None
RD (Report Delayed)................ No No None
RP (Report in Progress)............ No No None
Totals.................. Used Counted Used In In Toward GPA Objective GPA

*Credit/No Credit course units are not included in GPA computations.
†If not completed within one year, I will be changed to an IC (or NC).
††Effective fall 1991, this symbol is no longer assigned.
†††Effective fall 2002, this symbol is no longer assigned

**ADVISORY CAUTION:** Undergraduate students who plan to pursue graduate or professional studies later are advised to be selective in opting for courses on a Credit/No Credit basis. As a general rule (advisory only), coursework that is preparatory or prerequisite to advanced specialized study should be completed and evaluated on a letter grade basis and not Credit/No Credit.

**ADMINISTRATIVE SYMBOLS**

**Incomplete Authorized (I)**

The symbol "I" (Incomplete Authorized) indicates that a portion of required coursework has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements which must be satisfied to remove the Incomplete. A final grade is assigned when the work agreed upon has been completed and evaluated.

An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned.

This limitation prevails whether or not the student maintains continuous enrollment. Failure to complete the assigned work will result in an “I” being converted to an “IC” (or “NC”) symbol, unless the faculty member assigns a specific letter grade at the time the Incomplete is assigned, which would replace the "I" in the student’s record after the calendar year deadline.
A grade of Incomplete may be given only when, in the opinion of the instructor, a student cannot complete a course during the semester of enrollment for reasons beyond the student’s control.

Such reasons are assumed to include: illness of the student or of members of the student’s immediate family, extraordinary financial problems, loss of outside position and other exigencies. In assigning a grade of “I,” the instructor shall file with the department for future reference and student access a Statement of Requirements for Completion of Coursework. The requirements shall not include retaking the course. The instructor will also designate a time limit (up to one year) for completing requirements.

Upon request, a copy of the document will be furnished to the student. The student should review this statement at the earliest opportunity.

The statement of requirements will include an indication of the quality of the student’s work to date. This not only provides an interim evaluation for the student but assists the department chair in assigning a final grade in those instances where the instructor is no longer available.

When the specific requirements are completed, the instructor will report a change of grade. The responsibility for changing the incomplete grade rests with the instructor.

Incomplete Charged (IC)

The IC symbol may be used when a student who received an authorized incomplete (I) has not completed the required coursework within the allowed time limit. The IC replaces the I and is counted as a failing grade for grade point average and grade point computation.

Withdrawal (W)

The symbol “W” indicates that the student was permitted to withdraw from the course after the second (day/week) of instruction with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average or progress points. Undergraduate students may withdraw from no more than 18 semester units. The limits apply only to units attempted at the campus.

Students may withdraw from class during the first two weeks of instruction without record of enrollment. After that time, students should complete all courses in which they are enrolled.

The university authorizes withdrawal after the first two weeks of instruction and prior to the last three weeks of instruction only with the approval of the instructor and the department chair (and, in some cases, the college associate dean). All requests for permission to withdraw during this period and all approvals shall be made in writing on the Withdrawal Request form, which shall be filed at the Office of Admissions and Records by students or their proxies.

Authorization to withdraw after the second week of instruction shall be granted for only the most serious reasons i.e., a physical, medical, emotional or other condition that has the effect of limiting the student’s full participation in the class. Such reasons must be documented by the student. Poor academic performance is not evidence of a serious reason for withdrawal. Signatures of the instructor and department chair are required for each course. In some departments, the signature of the associate dean is also required. Withdrawal from a class is signified by a grade of “W.” Such grades are not included in grade point average calculations.

Students may not withdraw during the final three weeks of instruction except in cases, appropriately documented, such as accident or serious illness, where the assignment of an Incomplete is not practicable. Ordinarily, withdrawals of this nature will involve withdrawal from all classes except that Credit or Incomplete Authorized (I) may be assigned for courses in which students have completed sufficient work to permit an evaluation to be made. Requests for permission to withdraw from all classes under these circumstances, with authorizations as described above, shall be submitted with Change of Program forms by the students (or their proxies) to the Office of Admissions and Records.

Withdrawal Unauthorized (WU)

The symbol WU indicates that an enrolled student did not withdraw from the course but failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible. For purposes of grade point average computations, this symbol is equivalent to an F.

Students may petition for retroactive withdrawal from individual courses or from an entire semester, provided they can document both the serious and compelling reasons or circumstances that required the withdrawal and the date of such withdrawal. Such a petition must be filed within 30 days after the first class day of the following semester.

ADVISORY NOTE: Students who unofficially withdraw and who are receiving financial aid or benefits which are dependent on completion of specified course units are advised that they may have such benefits suspended and may be subject to repayment of allowances received after date of unofficial withdrawal.

Audit (AU)

The symbol AU is used by the Office of Admissions and Records in those instances where a student has enrolled in a course either for information or other purposes not related to the student’s formal academic objective. Enrollment as an auditor is subject to the permission of the instructor, provided that enrollment in a course as an auditor shall be permitted only after students otherwise eligible to enroll on a credit basis have had an opportunity to do so. Auditors are subject to the same fee structure as credit students, and regular class attendance is expected. Once enrolled as an auditor, a student may not change to credit status unless such a change is requested no later than the last day to add classes in that term. A student who is enrolled for credit may not change to audit after the second week of instruction. An auditor is not permitted to take examinations in the course; therefore, there is no basis for evaluation nor a formal grade report.
Report in Progress (RP)
The "RP" symbol is used in connection with courses that extend beyond one academic term. It indicates that work is in progress but that assignment of a final grade must await completion of additional work. Cumulative enrollment in units attempted may not exceed the total number applicable to the student’s educational objective. Work is to be completed within one year except for graduate degree theses or projects for which the time may be longer, but may not exceed the overall limit for completion of all master’s degree requirements.

Report Delayed (RD)
The RD symbol is used where a delay in the reporting of a final grade is due to circumstances beyond the control of the student. The symbol is assigned by the Office of Admissions and Records and will be replaced as soon as possible. An RD shall not be included in calculation of a grade point average.

STUDENT RECORDS
Grade Reports to Students
A report of the final grades assigned in classes is available to each student at the end of each semester. Many students leave self-addressed post cards for instructors of specific courses to send them earlier reports. Grades are available at the end of each term through the TITAN Online feature of the Cal State Fullerton website.

Examinations
Final examinations, if required by the instructor, will be given at times scheduled by the university. Once established, the final examination schedule may not be changed unless approved by the dean of the college. No makeup final examination will be given except for reason of illness or other verified emergencies.

Credit by Examination (Challenge Examinations)
Students may be granted credit toward the baccalaureate and to meet curriculum requirements in certain designated courses by the satisfactory completion of challenge examinations in the courses. The examinations are to be comprehensive and administered by the sponsoring departments. Well in advance of the semester in which a challenge examination is to be administered, the student, using the appropriate university form, will secure written approval of his or her major adviser and the chair of the department in which the course is offered. In general, prior work or academic experience will be required.

Courses to be offered as challenge examinations will be determined by the academic departments. Matriculated students may either enroll in these courses during registration or add them during the first three weeks of the semester. The examination must be administered not later than the end of the third week of instruction.

Upon successful completion of the examination, the instructor will report the grade of CR. Students who fail the challenge examination may elect to continue the course for credit or may officially withdraw from the course through the normal class withdrawal procedure. The challenge examination for any course may be administered only once.

A maximum of 30 credits can be earned by challenge examination, including those earned by advanced placement. Credit by examination may not be used to fulfill the minimum residence requirements.

Grade Point Averages
The numerical grade point values in the grading system chart are intended to give an exact determination of a student’s scholastic standing. To compute the grade point average for coursework at Fullerton, the grade point value of each grade, with the exception noted in the “Repetition of Courses” section, is multiplied first by the unit value of each course to obtain a total of all grade points earned. The total is then divided by the total units attempted in all courses in which grades of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F, IC, WU and WF were received. The resulting figure is the grade point average.

Repetition of Courses
Undergraduate students may repeat courses at California State University, Fullerton for which C- (1.7) or lower grades were earned either at Cal State Fullerton or at other institutions; in repeating such courses, the traditional grading system shall be used. In computing the grade point average of a student who repeats courses in which he or she received C- (1.7) or lower grades, only the most recently earned grades and grade points shall be used for the first 16 units repeated (e.g., “grade forgiveness”). Nevertheless, the original grade on the academic record shall not be changed or eradicated. Persons who plan to seek professional school admission, e.g., law, medicine should note that all grades may be calculated for admission regardless of local application of the CSUF repetition of course policy.

Undergraduate students may repeat an individual course for grade forgiveness no more than two times.

In exercising this option, an undergraduate student must repeat the course at Cal State Fullerton and may request application of this policy when a course has been repeated. This should be accomplished using the appropriate form, immediately following the term in which the course has been completed, so that the student’s grade point average can be revised.

This policy may also be applied to courses in which WU, U or WF grades were assigned, as a means of eliminating such marks from grade point average computations.

In the case of any repetition beyond the 16-unit limit or in courses for which a C or better grade was awarded, both grades are considered in computing grade point averages. Successful repetition of a course originally passed carries no additional unit credit toward a degree or credential except for certain courses such as independent study, practicum, or other courses specified in this catalog as "may be repeated for credit." Campuses may permit undergraduate students to repeat an additional 12 semester units (18 quarter units), i.e., units in addition to the 16 semester units (24 quarter units) for which grade "replacement" (e.g., "forgiveness") is permitted. In
such instances the repeat grade shall not replace the original grade; instead, both grades shall be calculated in the student's overall grade point average.

Students transferring from other colleges where courses were taken and repeated may be eligible for consideration under this policy. In general, the policy of the college where the course was repeated shall be followed.

Subject to the following restrictions, if a graduate or post-baccalaureate student (excluding students with a second bachelor's degree objective) repeats courses for which a grade of WU (withdrawal unauthorized) was received, only the most recently earned grade(s) and grade points shall be used in computing the grade point average; however, the original WU grade(s) will remain on the permanent record. This policy may be applied only to grades earned during the first semester in which WU grades are received. Repeated courses must be taken at Cal State Fullerton using the traditional grading system. Students who have successfully repeated WU-graded courses must notify the Admissions and Records office using the appropriate form if they wish adjustment to their grade point averages.

Grade Changes

The university recognizes the long-standing prerogatives of faculty to set standards of performance and to apply them to individual students. The university will seek to correct injustices to students but at the same time believes that the instructor's judgment at the time the original grade is assigned is better than a later reconsideration of an individual case. Equity to all students is of fundamental concern. The following policies apply to changes of grades except for changes of Incomplete Authorized and Withdrawal Unauthorized symbols.

1. In general, all course grades are final when filed by the instructor in the end-of-term course grade report. Each student may view the grades he/she earned during the term via TITAN Online, and these grades become a part of the official record.

2. A change of grade may occur only in cases of clerical error, administrative error, or where the instructor reevaluates the original course assignments of a student and discovers an error in the original evaluation. A clerical error is an error made by the instructor or an assistant in calculating or recording the grade. A change of grade shall not occur as a consequence of the acceptance of additional work or reexamination beyond the specified course requirements.

3. A request for a change of grade shall be initiated by the student affected and shall be directed to the instructor within 60 calendar days of the first day of classes of the regular semester following the award of the original grade. If the instructor determines that there is a valid basis for the change, a Change of Grade form shall be used to notify the Office of Admissions and Records. These forms are available in department offices and are not to be handled by students. If the instructor determines that there is not a valid basis for the change and denies the student's request, the instructor's decision is final. The student may file a petition with the Academic Appeals Board on the basis of unfair or prejudicial treatment by the instructor. (See "Academic Appeals" in the "Student Affairs" section of this catalog)

4. The Change of Grade form completed and signed by the instructor, noting the basis for the change, shall not be accepted by the Office of Admissions and Records unless approved separately by the department chair and college dean.

5. If a request for change of grade is initiated after 60 calendar days into the following semester, it will be approved only in extraordinary circumstances. An explanation of such circumstances must accompany the request and must be approved separately by the instructor, department chair and the dean before acceptance by the Office of Admissions and Records.

6. In extraordinary circumstances, the University Records Office may refer requests for grade changes to the Office of the Associate Vice President for Academic Programs.

Academic Dishonesty

Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism, and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill which he or she does not possess.

Cheating is defined as the act of obtaining or attempting to obtain credit for work by the use of any dishonest, deceptive, fraudulent or unauthorized means. Examples of cheating include, but are not limited to: using notes or aids or the help of other students on tests and examinations in ways other than those expressly permitted by the instructor, plagiarism as defined below, tampering with the grading procedures, and collaborating with others on any assignment where such collaboration is expressly forbidden by an instructor.

Plagiarism is defined as the act of taking the specific substance of another and offering it as one's own without giving credit to the source. When sources are used, acknowledgment of the original author or source must be made following standard scholarly practice.

The initial responsibility for detecting and dealing with academic dishonesty lies with the instructor concerned. An instructor who believes that an act of academic dishonesty has occurred is obligated to discuss the matter with the student involved. The instructor should possess reasonable evidence, such as documents or personal observation. However, if circumstances prevent consultation with the student, the instructor may take whatever action, subject to student appeal, the instructor deems appropriate.

An instructor who is convinced by the evidence that a student is guilty of academic dishonesty shall:

1. Assign an appropriate academic penalty. This may range from an oral reprimand to an F in the course. To the extent that the faculty member considers the academic dishonesty to manifest the student's lack of scholarship and to reflect on the student's academic performance and academic integrity in a course, the student's grade should be adversely affected. Suggested guidelines for appropriate actions are an oral reprimand in cases where
there is reasonable doubt that the student knew that his or her action constituted academic dishonesty; an F on the particular paper, project or examination where the act of dishonesty was unpremeditated, or where there were significant mitigating circumstances, or an F in the course where the dishonesty was premeditated or planned.

2. Report to the student involved, to the department chair, and to the vice president for Student Affairs the alleged incident of academic dishonesty, including relevant documentation, and make recommendations for action that he or she deems appropriate.

The vice president for Student Affairs shall maintain an academic dishonesty file of all cases of academic dishonesty with the appropriate documentation. Students shall be informed when their names are inserted into the file and provided with copies of any appeals or disciplinary procedures in which they may become involved. The vice president for Student Affairs or his or her designees may initiate disciplinary proceedings under Title 5, California Code of Regulations, Section 41301, and Chancellor's Executive Order 970; when two or more incidents involving the same student occur, he or she shall do so. Opportunities for appeal regarding sanctions resulting from disciplinary proceedings are provided by Executive Order 970.

A student may appeal any action taken on a charge of academic dishonesty under the University Policy Statement 300.030, “Academic Appeals.” See “Academic Appeals” in the “Student Affairs” section of this catalog.

Academic Renewal

In 1974, the Board of Trustees of the California State University adopted an academic renewal policy that became part of Executive Order No. 213 issued by the Chancellor’s Office. The Board of Trustees made it clear at the time Executive Order 213 was approved that the purpose of this policy was not to raise grade point averages, but to ensure that able students were not required to stay on after completion of all course requirements simply to remove a deficiency.

The university may disregard up to two semesters or three quarters of previous undergraduate coursework taken at any college or university from all considerations associated with requirements for the baccalaureate when a student meets the mandatory condition that “there is every evidence that the student would find it necessary to complete additional units and enroll for one or more additional terms in order to qualify for the baccalaureate if the request were not approved.”

Final determination that one or more terms shall be disregarded in the determination of eligibility for graduation shall be based upon a careful review of evidence by the Review Committee for Academic Renewal and shall be made only when the mandatory condition stated above is met and when:

1. Five years have elapsed since the most recent work to be disregarded was completed;
2. The student has requested the action formally and has presented evidence that work completed in the terms under consideration is substandard and not representative of present scholastic ability and level of performance;
3. The level of performance represented by the terms under consideration was due to extenuating circumstances;
4. The student has completed at Cal State Fullerton, since the most recent work to be disregarded was completed, 15 semester units with at least a 3.0 grade point average, or 30 semester units with at least a 2.5 GPA, or 45 semester units with at least a 2.0 GPA. Work completed at another institution cannot be used to satisfy this requirement.

When such action is taken, the student’s permanent academic record shall be annotated so that it is readily evident to all users of the record that no work taken during the disregarded terms, even if satisfactory, may apply towards the meeting of baccalaureate requirements. All work must remain legible on the record ensuring a true and complete academic history.

This policy is not intended to merely allow students a means by which they may improve their overall grade point averages for graduation with honors, admission to graduate and professional schools or to meet eligibility criteria for other awards, employment or acceptance into military and other programs.

Transcripts

Official transcripts of courses taken at the university are issued only with the written permission of the student concerned. Partial transcripts are not issued. A fee of $4 for each transcript must be received before the transcript can be released.

Normally, transcripts are available within three working days, except at the end of the semester when the student should allow about 10 days after the last day of the semester.

Transcripts from other institutions, which have been presented for admission or evaluation, become a part of the student’s permanent academic file and are not returned or copied for distribution. Students desiring transcripts covering work attempted elsewhere should request them from the institutions concerned.
GOOD STANDING

Good standing indicates that a student is eligible to continue and is free from financial obligation to the university. A student under academic disqualification, disciplinary suspension or disciplinary expulsion is not eligible to receive a statement of good standing on transcripts issued by the university or on other documents.

CONTINUOUS ATTENDANCE AND CATALOG RIGHTS

Students who have been enrolled either at a California Community College or a CSU campus for at least one semester or two quarters of consecutive calendar years are considered to be “in continuous attendance.”

This concept is important because continuous attendance affects the requirements you must meet to graduate from a CSU campus. Institutions occasionally modify graduation requirements. If you have been in continuous attendance, you may choose to meet the CSU campus graduation requirements in the CSU catalog that was in effect:

- at the time you began continuous attendance at the California Community College,
- at the time you transferred to the CSU campus, or
- at the time you graduate from the CSU campus

By maintaining continuous attendance and selecting option (1) or (2), you can be assured that your CSU campus graduation requirements will not change. Your right to choose one of these options is called “catalog rights.”

If you do not remain in continuous attendance, you will reestablish catalog rights at the time you reenroll in any California Community College or begin attending a CSU campus. If you are unsure about your catalog rights, you should consult your community college counselor.

STOP-OUT POLICY

With certain exceptions, undergraduate students may be absent for one semester and maintain their continuing student status. This includes election of curriculum requirements for graduation and eligibility to register for the next semester. The exceptions are as follows:

- Disqualified Students - Students who are disqualified at the end of a semester and have not been reinstated will not receive a registration appointment; they must apply for readmission, and if admitted, may be subject to new curricula requirements.

- Foreign-Visa Students - Students with foreign visas are required to maintain continuous enrollment. The stop-out policy is not applicable to “visa” students.

Students absent for more than one semester must apply for readmission should they wish to return to Fullerton. Election of catalog requirements will not be jeopardized for certain students. Students should consult an evaluator in the Office of Admissions and Records.

LEAVE OF ABSENCE

A leave of absence may be granted based on certain documented extenuating circumstances (e.g., illness or disability, active duty in the armed forces of the U.S.) and...
normally is granted for not more than one year. Undergraduate and postbaccalaureate unclassified graduate students qualify for a leave if they have completed at least one semester in residence at Cal State Fullerton and are in good academic standing. Forms to request a leave of absence are available at the Admissions and Records Service Center.

Such an approved leave of absence authorizes the student to return without reapplying to the university and continue under the catalog requirements that applied to the enrollment prior to the absence.

Undergraduate and graduate students on approved leaves of one year (two academic semesters) or less are eligible to register for the semester immediately following the end of the leave.

The leave of absence policy for conditionally classified and classified graduate students and credential students is defined in the "Graduate Regulations" section of this catalog.

WITHDRAWAL FROM THE UNIVERSITY

Students who find it necessary to withdraw from Cal State Fullerton after enrolling for any academic term are required to follow the official withdrawal procedures. Failure to follow formal withdrawal procedures defined in the class schedule for that semester may result in the assignment of failing grades in all courses and the need to apply for readmission before being permitted to enroll in another academic term. Information on withdrawal procedures is available from the Admissions and Records Service Center, Langsdorf Hall 114; P.O. Box 6900, Fullerton, CA, 92384-6900, 657-278-7601.

Students who are receiving financial aid funds must consult with the Financial Aid Office prior to withdrawing from the university regarding required return or repayment of grant or loan assistance received for that academic term. If a recipient of financial assistance under federal Title IV financial aid programs withdraws from the institution during a payment period, the amount of grant or loan assistance received is subject to return and repayment provisions governed by federal law.

See the “Refund of Fees” section in this catalog for possible refunds. No student may withdraw after the date shown on the university calendar as the last day of instruction.

RETENTION, PROBATION AND DISQUALIFICATION

For purposes of determining a student’s ability to remain in the university, both quality of performance and progress towards the educational objective will be considered.

Academic Probation

An undergraduate student shall be placed on academic probation if in any semester the cumulative grade point average or the grade point average at Fullerton falls below 2.0 (grade of C on a four-point scale). The student shall be advised of probation status promptly and, except in unusual instances, before the start of the next consecutive enrollment period.

An undergraduate student shall be removed from academic probation and restored to clear standing upon achieving a cumulative grade point average of 2.0 in all academic work attempted, in all such work attempted at Fullerton, and is making satisfactory progress towards his or her educational objective.

A postbaccalaureate student (credential, unclassified, or undeclared status; but not second baccalaureate degree students) shall be subject to academic probation if, after attempting 12 or more graded units, his or her postbaccalaureate cumulative grade point average for units attempted at California State University, Fullerton falls below a 2.50 average. The GPA will determine whether a student is subject to probation only when the student has attempted 12 semester units of graded coursework.

A graduate student enrolled in a graduate degree program in either conditionally classified or classified standing shall be subject to academic probation if he or she fails to maintain a cumulative grade point average of at least 3.0 (grade of B on a four-point scale) in all units attempted.

Academic Disqualification

An undergraduate student on academic probation shall be subject to academic disqualification if:

1. As a freshman (fewer than 30 semester hours of college work completed), the student falls below a grade point average of 1.50 in all units attempted or in all units attempted at this institution; or

2. As a sophomore (30 through 59.9 semester units of college work completed), the student falls below a grade point average of 1.70 in all college units attempted or in all units attempted at this institution; or

3. As a junior (60 to 89.9 semester units of college work completed), the student falls below a grade point average of 1.85 in all college units attempted or in all units attempted at this institution; or

4. As a senior (90 or more semester units of college work completed), the student falls below a grade point average of 1.95 in all college units attempted or in all units attempted at this institution.

A graduate student enrolled in a graduate degree program shall be subject to disqualification if, while on probation, a sufficient grade point average is not achieved to remove probationary status. Disqualification may be either from further registration in a particular program or from further enrollment in the university, as determined by appropriate campus authority.

A postbaccalaureate student who is on probation shall be subject to disqualification if he or she fails to maintain at least a 2.50 cumulative grade point average after attempting 12 units of graded coursework (not including CR/NC) at California State University, Fullerton, in postbaccalaureate status. Disqualification may be either from further registration as a postbaccalaureate, credential or certificate program student or from further enrollment at California State University, Fullerton, as determined by the vice president for Academic Affairs or designee.
STUDENT CONDUCT

Students are expected to make themselves aware of and abide by the university community’s standards of behavior as articulated in this section, the Student Handbook, and other regulations of the university. Students accept the rights and responsibilities of membership in the CSUF community when they are admitted to the university. At the university, as elsewhere, ignorance of the standards is not an acceptable justification for violating community standards.

Because the functions of a university depend on honesty and integrity among members, the university expects from its students a higher standard of conduct than the minimum required to avoid disciplinary action.

Activities of students may result in violation of law, and students who violate the law may incur penalties prescribed by civil authorities. However, the university reserves the right to review such incidents independent of action by civil authorities, recognizing that the university’s authority and its disciplinary process serve its educational mission and interest, a function separate from action by civil authorities.

The Trustees of the California State University are authorized by the Education Code to establish student disciplinary procedures. The president of California State University, Fullerton has designated the associate dean of students, judicial affairs, as the university’s student conduct administrator. The administrator is responsible for administering the student discipline system and implementing the following procedures as mandated in Executive Order No. 970 Student Conduct Procedure (Student Handbook) and CSUF President’s Directive Number Nine: Regarding the Use of Attorneys in Student Disciplinary Proceedings.

Unacceptable student behavior by students or by applicants for admission is subject to discipline as provided in Section 41301 of Title 5, California Code of Regulations.

Title 5 California Code of Regulations 41301.
Standards for Student Conduct.

The university is committed to maintaining a safe and healthy living and learning environment for students, faculty and staff. Each member of the campus community must choose behaviors that contribute toward this end. Student behavior that is not consistent with the Student Conduct Code is addressed through an educational process that is designed to promote safety and good citizenship and, when necessary, impose appropriate consequences.

(a) Student Responsibilities

Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their university, to be civil to one another and to others in the campus community, and to contribute positively to student and university life.

(b) Unacceptable Student Behaviors

The following behavior is subject to disciplinary sanctions:

(1) Dishonesty, including:

(A) Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage.

(B) Furnishing false information to a university official, faculty member, or campus office.

(C) Forgery, alteration, or misuse of a university document, key, or identification instrument.

(D) Misrepresenting one’s self to be an authorized agent of the university or one of its auxiliaries.

(2) Unauthorized entry into, presence in, use of, or misuse of university property.

(3) Willful, material and substantial disruption or obstruction of a university-related activity, or any on-campus activity.

(4) Participating in an activity that substantially and materially disrupts the normal operations of the university, or infringes on the rights of members of the university community.

(5) Willful, material and substantial obstruction of the free flow of pedestrian or other traffic, or leading to campus property or an off-campus university related activity.

(6) Disorderly, lewd, indecent, or obscene behavior at a university related activity, or directed toward a member of the university community.

(7) Conduct that threatens or endangers the health or safety of any person within or related to the university community, including physical abuse, threats, intimidation, harassment or sexual misconduct.

(8) Hazing, or conspiracy to haze, as defined in Education Code Sections 32050 and 32051:

“Hazing” includes any method of initiation or pre-initiation into a student organization, or any pastime or amusement engaged in with respect to such an organization which causes, or is likely to cause bodily danger, physical harm, or personal degradation or disgrace resulting in physical or mental harm, to any student or other person attending any school, community college, college, university or other educational institution in this state; but the term “hazing” does not include customary athletic events or other similar contests or competitions.

A group of students acting together may be considered a ‘student organization’ for purposes of this section whether or not they are officially recognized. Neither the express or implied consent of a victim of hazing, nor the lack of active participation while hazing is going on is a defense. Apathy or acquiescence in the presence of hazing is not a neutral act, and is also a violation of this section.

(9) Use, possession, manufacture, or distribution of illegal drugs or drug-related paraphernalia, (except as expressly permitted by law and university regulations) or the misuse of legal pharmaceutical drugs.
(10) Use, possession, manufacture, or distribution of alcoholic beverages (except as expressly permitted by law and university regulations), or public intoxication while on campus or at a university related activity.

(11) Theft of property or services from the university community, or misappropriation of university resources.

(12) Unauthorized destruction, or damage to university property or other property in the university community.

(13) Possession or misuse of firearms or guns, replicas, ammunition, explosives, fireworks, knives, other weapons, or dangerous chemicals (without the prior authorization of the campus president) on campus or at a university related activity.

(14) Unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose.

(15) Misuse of computer facilities or resources, including:
   (A) Unauthorized entry into a file, for any purpose.
   (B) Unauthorized transfer of a file.
   (C) Use of another's identification or password.
   (D) Use of computing facilities, campus network, or other resources to interfere with the work of another member of the university community.
   (E) Use of computing facilities and resources to send obscene or intimidating and abusive messages.
   (F) Use of computing facilities and resources to interfere with normal university operations.
   (G) Use of computing facilities and resources in violation of copyright laws.
   (H) Violation of a campus computer use policy.

(16) Violation of any published university policy, rule, regulation or presidential order.

(17) Failure to comply with directions or, or interference with, any university official or any public safety officer while acting in the performance of his/her duties.

(18) Any act chargeable as a violation of a federal, state, or local law that poses a substantial threat to the safety or well being of members of the university community, to property within the university community or poses a significant threat of disruption or interference with university operations.

(19) Violation of the Student Conduct Procedures, including:
   (A) Falsification, distortion, or misrepresentation of information related to a student discipline matter.
   (B) Disruption or interference with the orderly progress of a student discipline proceeding.
   (C) Initiation of a student discipline proceeding in bad faith.
   (D) Attempting to discourage another from participating in the student discipline matter.
   (E) Attempting to influence the impartiality of any participant in a student discipline matter.
   (F) Verbal or physical harassment or intimidation of any participant in a student discipline matter.
   (G) Failure to comply with the sanction(s) imposed under a student discipline proceeding.
   (H) Violation of a campus computer use policy.

(20) Encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.

(c) Procedures for Enforcing This Code

The Chancellor shall adopt procedures to ensure students are afforded appropriate notice and an opportunity to be heard before the university imposes any sanction for a violation of the Student Conduct Code.

(d) Application of This Code

Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the university is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with Education Code Section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.

41302. Disposition of Fees: Campus Emergency; Interim Suspension.

The president of the campus may place on probation, suspend or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such student for the semester, quarter, or summer session in which he or she is suspended or expelled shall be refunded. If the student is readmitted before the close of the semester, quarter, or summer session in which he or she is suspended, no additional tuition or fees shall be required of the student on account of the suspension.

During periods of campus emergency, as determined by the president of the individual campus, the president may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The president may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the president or designated representative, enter any campus of the California State University other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.
University Alcohol and Drug Policies

California State University, Fullerton has specific policies related to the use of alcohol and other drugs, including President's Directive Number One: University Policy Regarding the Possession, Manufacturing, Sale, Furnishing Without Charge, and Consumption of Alcoholic Beverages and Other Drugs in a University Workplace or Residence Facility. The full text of this policy and other policies related to the use of alcohol and other drugs can be found online at http://www.fullerton.edu/alcohol_drug_info.

PARKING ON CAMPUS

Semester parking permits or daily permits are required 7 a.m. to 10 p.m., Monday through Thursday and 7 a.m. to 5 p.m., Friday. Posted 30-minute spaces and parking zones are enforced during these time periods. Red curbs/fire lanes, spaces designated for disabled persons, service/maintenance spaces, state-vehicle-only spaces, loading zones (white and yellow curbs and posted time limits) and all other university and California Vehicle Code parking regulations are enforced 24 hours a day. It is a violation to stop, stand or wait in parking facility drive aisles for a parking space; vehicles will be cited. There is not a grace period at the start of a semester; vehicles not displaying a current parking permit will be cited. Parking permits are also required during intersession, summer session and when university offices are open. Parking permits are not transferable and are valid only when purchased from CSUF Parking and Transportation. Vehicles displaying a lost or stolen parking permit will be cited.

Student semester parking permits are valid in the following parking facilities: lots A, B, E, G, S, all parking structures and Irvine Campus student parking spaces. After 6 p.m. semester permits are valid in faculty/staff lots A-South, C-West, C-East, E-West, J and the College Park faculty/staff parking area. Faculty/staff parking lots F, H, and J are designated for faculty/staff only.

Semester permits are available for purchase online by logging in to the campus portal, and accessing the Parking tab. Daily permits can be purchased from permit dispenser machines located in lots A, E, G, Arts Drive and on levels 2, 4 and 6 of the State College Parking Structure. Daily Permits are also available at the Irvine Campus. Daily permits are valid all day in student lots A, B, E, G, S, all parking structures and Irvine Campus student parking spaces. After 6 p.m., daily permits are valid in faculty/staff lots A-South, C-West, C-East, E-West, J and the College Park faculty/staff parking areas.

A current DMV disabled person placard or license plate and valid CSUF Fullerton parking permit must be displayed in a vehicle while parked in a space designated for disabled persons.

Parking fees and regulations are subject to change without notification. Go to the Parking and Transportation Services website at www.parking.fullerton.edu for current information.

Use of Bicycles and Skateboards on Campus

The university’s policy concerning the use of bicycles, skateboards and other forms of non-motor vehicle transportation is set forth in President’s Directive No.16.

1. Bicycles, scooters and roller skates may be used on campus under the following conditions:
   a. Pedestrians have the right-of-way at all times.
   b. Individuals using bicycles, scooters or roller skates must comply with all applicable laws and regulations, exercise due care, and use reasonable caution to prevent injury and damage to property.
   c. Bicycles, roller skates and scooters may not be stored inside any building, including the residence halls, without written authorization.
   d. Bicycles, roller skates and scooters may not be stored in the quad for instructional purposes or whenever parking fee requirements are not enforced.

2. Skateboards and motorized skateboards may not be used on campus, including parking structures.

3. Motorized bicycles and scooters may only be operated on campus roadways.

4. Bicycles, scooters, motorized bicycles and motorized scooters may not be stored inside any building, including the residence halls, without written authorization.

5. Bicycles, motorized bicycles, motorized scooters and motorized skateboards may not be stored inside any building, including the residence halls, without written authorization.

6. Non-motor vehicle forms of transportation may be used on campus or any property controlled by the university to accommodate a disability with written authorization.

UNIVERSITY POLICE

Building 48
Business: 657-278-2515
Campus Emergency - dial 911 or extension 3333

The University Police is a full service police department serving Cal State Fullerton and the Irvine Campus. The Department is made up of the following units:
- Police Administration
- Patrol Operations
- Investigations
- Emergency Preparedness
- Crime Prevention
- Lost & Found
- Key Issuance
- Livescan Fingerprinting Service

The department’s various units provide a wide range of services, both traditional and nontraditional. In addition, all CSUF police officers are sworn police officers that are graduates of State accredited Police Academies. We investigate all crimes on campus and strictly enforce Penal Code and Vehicle Code violations. Our department
Crime Prevention Programs

Crime prevention is citizen awareness and participation. It is a willingness to look out for one another, to report suspicious activities immediately to the University Police Department and to become involved in the safety and security of the campus.

The University Police Department, in conjunction with the Women's/Adult Reentry Center, provides presentations on personal safety and rape awareness (R.A.D.) several times throughout the school year. Other crime prevention programs that are offered include drug and alcohol awareness, stalking, date rape, and hazing. In addition, programs are offered in prevention of campus violence.

Each school year brings with it some different and unique crime problems. When these incidents occur, the University Police Department circulates flyers and runs articles in the Daily Titan newspaper to advise the community and create an awareness of any problems. Neighborhood (dorm) Watch also is an ongoing program at residence housing, which includes regular meetings with residence advisers and distribution of flyers or posters to communicate crime or other safety issues that may be of interest to the residents.

How to Contact Us

The California State University, Fullerton Police Department is located at the corner of State College Boulevard and Gymnasium Drive. The Police Department is open 24 hours a day, seven days a week, including holidays. The campus is never without police protection, including both uniform police officers and plain-clothes detectives.

Suspicious Activities

Many criminals escape detection and arrest because a citizen will observe suspicious persons or possible criminal activities and fail to report them. Members of the campus community can help by becoming aware of their surroundings and developing a perception of what seems out of place or out of the ordinary. It may be something as simple as a door-to-door salesperson attempting to solicit at the residence halls, a vehicle parked in an unusual location late at night, or someone just hanging around. What one reports may be an innocent activity. However, it could also be serious criminal activity about to happen or actually occurring. Report suspicious activities immediately to the University Police Department. We want you to call, and we don’t mind if the incident doesn’t turn out to be a crime in progress. Only if you call, can we respond and suppress potential criminal activity.

How to Summon Assistance

Emergency assistance on campus may be obtained by dialing 911 from any office or campus phone, your cell phone, or from any residence or pay phone. Dialing this number connects the caller immediately with the University Police Department, which will respond with whatever assistance is needed (i.e., paramedics, ambulance, fire department, first-aid or police assistance).

If you are outside on the campus grounds when an emergency occurs and a telephone is not available, you may use one of the numerous emergency telephones located throughout the campus. The emergency telephones are identifiable as blue speaker telephone light towers, with blue lights atop, which are wired directly to the University Police Department for immediate response.

Annual Campus Security Report

Under the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, the university annually collects and reports information about campus crime and sets forth its security policies. This report is available for review on the Web at police.fullerton.edu/annualsecurityreport.htm. Printed copies of this report are also available upon request at the University Police Department (48).

FEES AND DEBTS OWED TO THE INSTITUTION

Should a student or former student fail to pay a fee or a debt owed to the institution, the institution may “withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt” until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381).

Prospective students who register for courses offered by the university are obligated for the payment of fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees including any tuition for the reservation of space in the course.

The institution may withhold permission to register or to receive official transcripts of grades or other services offered by the
institution from anyone owing fees or another debt to the institution. If a person believes he or she does not owe all or part of an asserted unpaid obligation that person may contact the campus business office. The business office, or another office on campus to which the business office may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions. Additional collection action may be taken including collection agency referral, reporting to a credit bureau, and/or submittal for offset of future state tax refunds, including any applicable costs of collections.

**STUDENT RIGHTS**

**Nondiscrimination and Harassment Policies**

The California State University (CSU) does not discriminate on the basis of race, color, national origin, sex, gender or sexual orientation, disability or age in the educational programs or activities it conducts. Such programs and activities include but are not limited to admission, academic programs, non-academic programs, participation in intercollegiate athletics, and employment. Discrimination, including harassment on the basis of race, color, national origin, sex, disability or age, is prohibited by Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Sections 504 and 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and various state laws and all subsequent amendments by the U.S. Department of Education.

The CSU is responsible for providing a reliable, prompt and equitable response to a complaint of discrimination. Inquiries concerning the CSU’s compliance with these Acts, application of these laws to programs and activities of the CSU, campus policies, complaint resolution and/or appeals processes, and discrimination/harassment complaint filing procedures may be addressed to the CSU officers assigned the administrative responsibility of reviewing such matters or directly with the U.S. Department of Education.

**United States Department of Education**

50 Beale Street, Suite 7200
San Francisco, CA 94105
415-486-5555, FAX 415-486-5570
TDD 877-521-2172

Applicants for admissions or employment should contact the Office of Diversity and Equity Programs (DEP) for information on how to file a complaint or refer to the DEP website to obtain a copy of the complaint resolution procedure via http://www.fullerton.edu/diversity/policies.asp.

**Sexual Harassment**

It is the policy of California State University, Fullerton and the California State University to maintain a working and learning environment free from sexual harassment of its students, employees and those who apply for student or employee status. Sexual harassment is illegal under Title VII of the Civil Rights Act of 1962, Title IX of the Higher Education Amendments of 1972, and the California Education Code 89535. Executive Order 927 - Systemwide Policy on Prohibiting Harassment in Employment and Retaliation for Reporting Harassment or Participating in a Harassment Investigation also prohibits sexual harassment within the California State University system. The university will not tolerate sexual harassment and will take action to eliminate such behavior. Information concerning campus sexual harassment policies and procedures can be obtained from the Office of Diversity and Equity Programs, College Park 770, 657-278-3951 or http://www.fullerton.edu/diversity/policies.asp.

**Right of Petition**

Students may petition for review of certain university academic regulations when unusual circumstances exist. It should be noted, however, that academic regulations, when they are contained in Title 5, California Code of Regulations, are not subject to petition.

Petition forms are available in the Office of Admissions and Records. The University Petitions Committee will take action on the petition based on recommendations provided by appropriate officers and the student will be notified of the decision in writing. Results of the action will be placed in the student’s file in the Office of Admissions and Records.

The petitions committee members shall consist of the associate dean of each college, or designee, an academic programs representative, the director of the Academic Advising Center, one faculty member of the University General Education Committee, and the university registrar, who will serve as the secretary.

**Right of Nonparticipation**

University activities either within or outside of the classroom involve varying degrees of risk to the participants. It is university policy that the instructor directing such activities reviews with potential

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**Right of Nonparticipation**

University activities either within or outside of the classroom involve varying degrees of risk to the participants. It is university policy that the instructor directing such activities reviews with potential
participants the specific nature of such risks and obtains from them their expressed or implied consent prior to undertaking activities.

The student who at any time comes to believe that the risks, whether physical or psychological, are excessive has the responsibility to withdraw from participation at the time and to inquire of the instructor if there are alternative means of fulfilling the requirements without penalty. If there are none, the student may petition for withdrawal from the course without penalty or appeal for an appropriate modification of the activity. The appeal may be made either to the chair of the department concerned or to the chair of the Institutional Review Board, or both.

Right of Academic Appeal

Please see "Academic Appeals" in the “Student Affairs” section of this catalog.

PRIVACY RIGHTS OF STUDENTS IN EDUCATION RECORDS

The Family Educational Rights and Privacy Act affords students certain rights with respect to their educational records. They are:

1. The right to inspect and review their education records.

2. The right to request the amendment of their education records to ensure that they are not inaccurate, misleading or otherwise in violation of their privacy or other rights.

3. The right to consent to disclosures of personally identifiable information contained in their education records, except to the extent that FERPA authorizes disclosure without consent. FERPA permits disclosures without consent to “school officials” with “legitimate educational interests.” “School officials” include university employees (including law enforcement unit and health personnel); agents of the university (such as an attorney or collection agent); or individuals, including students, serving on official committees or assisting a school official perform his/her tasks. A school official has a “legitimate educational interest” if the official needs to review an educational record to fulfill his/her professional responsibility. Upon request, the university discloses education records without consent to officials of another school in which a student seeks to enroll. California State University, Fullerton has designated as “Directory” information a student’s name, date and place of birth, permanent and local address, university-recognized e-mail address(es), photograph, telephone number, class level, enrollment status, major, minor, dates of attendance, degrees and awards received, previous educational institutions attended, past and present participation in recognized activities, and weight and height if an athletic team member. Unless restricted by the student, the campus may release Directory information at any time to any requesting party, including the military and for the development of the university-affiliated marketing programs. Students may choose to limit the release of their Directory information in one four ways:

A. Permit release of all directory information for any purpose. No further action by the student is required.

B. Permit release of only “Verification” information. This sub-category of Directory information consists of student’s name, major, minor, degree and awards received, and university-recognized e-mail address(es). The university will release this information for classroom use; in response to requests, including those from financial lenders, employers or insurance companies for verification of degree and enrollment status; and for inclusion in Commencement and honors material. Students who release only “Verification” information will be excluded from all university directories.

C. Permit release of only “Class” information. This sub-category of Directory information consists of a student’s name, major, minor, degree and awards received, and university-recognized e-mail address(es). The university will release this information for classroom use and for inclusion in Commencement and honors material. Students who release only “Class” information will be excluded from all university directories, and the university will not respond to requests, including those from financial lenders, employers or insurance companies, for verification of degree, dates of attendance or enrollment status.

D. Withhold the release of all Directory information. Withholding the release of all Directory information means that the student will be excluded from all university directories and publications including Commencement and honors material, and the university will not verify degree, dates of attendance or enrollment status without the prior written consent of the student. Students may prevent the release of this information without a specific prior written authorization by logging on to www.fullerton.edu/titanonline or appearing in person at the Admissions and Records Service Center, room 114 on the first floor of Langsdorf Hall. Unless a student designates otherwise, the university will assume that a student has chosen to permit access to their Directory Information for any purpose.

4. The right to file with the U.S. Department of Education a complaint concerning alleged failures of the California State University, Fullerton to comply with the requirements of FERPA. The Office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, DC 20202-5920.

5. The right to obtain a copy of the California State University, Fullerton’s student records policy. A copy of this policy may be obtained from the Office of the Vice President for Student Affairs.
USE OF SOCIAL SECURITY NUMBER

Applicants are required to include their correct social security numbers (taxpayer identification numbers) in designated places on applications for admission pursuant to the authority contained in Section 41201, Title 5, California Code of Regulations, and Section 6109 of the Internal Revenue Code. The Internal Revenue Service requires the university to file information returns that include the student's social security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. That information is used to help determine whether a student, or a person claiming a student as a dependent, may take a credit or deduction to reduce federal income taxes. The social security number is also required by the Franchise Tax Board for collection of returned checks.

For other records and services, the university uses an assigned Campus Wide Identification number (CWID) which may also be referred to as a SID (Student Identification Number) as the student’s account number. A student's TitanCard number is not his or her identification number.

Students are required to write their student identification numbers on personal checks submitted for any payment to the university. Payment by personal check is consent by the student for the university to write the student's identification number on the check if it is not referenced. If a student prefers that his or her student identification number not be on the check, then the student must submit payment by cashier's check, money order, or when appropriate (other than mail-in or drop-off registration), cash. Use of the student identification number assures credit to the correct student university account.