CSUCI

California State University Channel Islands

From Dream To Reality

2002-2003 Catalog

Message from the President

It is with profound pride that I welcome you to California State University Channel Islands. Our journey has indeed taken us from a dream to reality as we prepare to admit our first class of transfer students in the fall of 2002. You will find our campus to be a 21st century institution that is rich in history and cultural heritage. We are the newest member of the California State University system, the largest system of higher education in the country. Our thirteen original faculty have been selected to offer the highest quality education and to foster a student-centered learning environment.

As a community, we are committed to preparing our students for the challenges and opportunities that lie ahead. Our small class sizes and low student-to-faculty ratio help us achieve this goal. Additionally, our faculty are committed to providing each student the opportunity and the means to excel in the field of their choice.

Located in Ventura County, our community boasts over 40 miles of coastline, making it a marvelous place to reside and pursue a college experience. With beautiful Spanish Mission-style architecture, we invite you to 'come to the islands' and partake in all that we have to offer. Our 670-acre campus is nestled in the hills and farms of Camarillo, just a few miles from the gorgeous California coast.

I bring to this university a solid commitment to academic excellence. I believe we are an exceptional institution and I look forward to the future of CSU Channel Islands as the newest star in the CSU system. I believe the college experience is invaluable for success in today's society, and I thank you for your interest in Channel Islands.

Richard R. Rush
President

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UNIVERSITY MISSION

California State University Channel Islands provides undergraduate and graduate education that facilitates learning within and across disciplines through integrative approaches, emphasizes experiential and service learning, and graduates students with an international prespective that includes facility in two languages. To accomplish its mission, the university strives to create learning communities that involve all elements of the university, integrate community and university resources, build community-university partnerships, engage the educational community from preschool through community college, provide opportunities for adult education and lifelong learning, and preserve and enhance the culture and environment of the region.

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS
CALENDAR FOR THE 2002-2003 ACADEMIC YEAR

Fall 2002 Semester

August 21-23, 2002	Wednesday – Friday	Faculty Orientation/Late Student Registration
August 24	Saturday	Saturday classes begin
August 26	Monday	First official day of classes
September 2	Monday	Labor Day Holiday; all offices closed
November 28-29	Thursday – Friday	Thanksgiving Recess; all offices closed
December 6	Friday	Last day of formal instruction except for Saturday classes; Thursday & Friday may be used for review.
December 9-14	Monday – Saturday	Final examinations
December 16-17	Monday – Tuesday	Department meetings and conferences
December 18	Wednesday	Evaluation Day
December 19-20	Thursday – Friday	Instructors' grades due
December 20	Friday	Last day of semester
December 23-January 1	Monday – Wednesday	CAMPUS CLOSED

Spring 2003 Semester

January 23-24, 2003	Thursday – Friday	Faculty Orientation/Late Student Registration
January 27	Monday	Classes begin
March 31	Monday	Cesar Chavez Holiday; all offices closed
April 14-18	Monday – Friday	Spring Recess; no instruction
May 16	Friday	Last day of formal instruction, except for Saturday classes meeting once weekly. Thursday & Friday may be used as review days.
May 19-24	Monday – Saturday	Final examination
May 23	Friday	Commencement
May 26	Monday	Memorial Day Holiday; all offices closed
May 29-30	Thursday – Friday	Instructors' grades due
May 30	Friday	Last day of academic year

University Holiday Schedule

September 2, 2002	Monday	Labor Day
November 28, 2002	Thursday	Thanksgiving Day
November 29, 2002	Friday	Admission Day Observed
December 23, 2002	Monday	Columbus Day Observed
December 24, 2002	Tuesday	Veterans' Day Observed
December 25, 2002	Wednesday	Christmas Day
December 26, 2002	Thursday	Lincoln's Birthday Observed
December 27, 2002	Friday	Washington's Birthday Observed
December 30, 2002	Monday	Campus Closed
December 31, 2002	Tuesday	Campus Closed
January 1, 2003	Wednesday	New Year's Day
January 20, 2003	Monday	Martin Luther King, Jr. Day
March 31, 2003	Monday	Cesar Chavez Day
May 26, 2003	Monday	Memorial Day Observed
July 4, 2003	Friday	Independence Day

Saturday Classes

Fall 2002
August 24, 31
September 7, 14, 21, 28
October 5, 12, 19, 26
November 2, 9, 16, 23
December 7

Spring 2003
February 1, 8, 15, 22
March 1, 8, 15, 22, 29
April 5, 12, 26
May 3, 10, 17

Campus History

HISTORY OF CSU CHANNEL ISLANDS

Located near the Pacific, where the Oxnard Plain meets the Santa Monica Mountains, the 670-acre site of the new California State University Channel Islands (CSUCI) in Camarillo is truly dramatic. The main entrance to the campus is a country road that cuts through fields, orchards, coastal scrub, and astounding crag-topped foothills with spectacular rock formations. Equally dramatic is the architectural environment provided by the old Camarillo State Hospital (CSH), which is being reused, adapted, and further built upon to create the new university. Previously one of the nation's largest state hospitals, its institutional presence is characterized by sprawling Spanish revival buildings of the 1930s, cloistered hallways, a bell tower, tiled fountains, open space, and too many courtyards to count.

The campus site represents a significant and interesting slice of Southern California history. Contained here are stories of Chumash peoples, Californio ranchos and American ranchers, captains of agribusiness and laborers, those associated with Camarillo State Hospital, politicians of local, state, and national importance, and finally, those who will continue to build a university based in Ventura County. In their stories we find vision, power, and struggle.

Chumash Peoples
In 1878, pioneer California archaeologist Stephen Bowers asked, "what has become of this once populous race? In Cabrillo's day they swarmed in multiplied thousands on the islands south of Santa Barbara Channel and on the shore of the mainland." The Calleguas Creek and Santa Monica Mountains connected the campus site to foothill and coastal settlements such as Muwu at Point Mugu and Round Mountain which was a gathering place for celebrating the Summer Solstice. Other archaeological sites found here are thought to be "base camps" for the Solstice rituals. Both Round Mountain and Calleguas Creek give character to the land, and these natural gifts were significant to the numerous Chumash who captured Bowers' imagination. There are three official archeological sites on or close to the campus, as well as many others in the surrounding area.

Californio Ranchos and American Ranchers
After secularization of the missions, large parcels of land were given to wealthy Californios, and Ventura County was divided into nineteen ranchos. The campus site was part of Rancho Calleguas, sandwiched among the much larger Ranchos: El Conejo, Simi, Las Posas, El Rio de Santa Clara o La Colonia, and Guadalasca. Cattle ranching was the foundation for Southern California's economy, first as the basis for trading hide and tallow and, after the Gold Rush, as a significant source of beef for northern Californians.

It became increasingly difficult for individuals to retain ownership of such large parcels of land in the years spanning the late 1850s to the 1930s as California became a national model for corporate farming. Adolfo Camarillo bought the 10,000 acre Rancho Calleguas in 1857 which was subsequently divided. Remains of the great rancho today are 4.5 acres of land, a historic Camarillo Ranch House which is open to the public, and a city which bears the family's name. By 1930, the present campus site was included in an 8,000 acre parcel known as the Lewis Ranch, which included 3,500 acres of cultivated land. Soon after, the Lewis family was evicted by the Citizen's National Bank of Los Angeles which owned and operated the business. In 1932 the bank sold a portion of the land to the state for the purpose of building a hospital.

Captains of Agribusiness and Laborers
As ranching declined in California, agribusiness in the Santa Clara River Valley and the Oxnard Plain became as important as the oil developed in Ventura after 1860. Farmers grew barley and grains, lima beans, lemons, sugar beets, and strawberries. With completion of the coastal railroad in 1887, Venturans turned southward in their business dealings instead of toward San Francisco, and the population of Ventura County towns almost doubled every twenty years. Henry Oxnard and his brothers built a sugar beet refining factory in 1897, and in 1903, residents incorporated the city of Oxnard. At the same time, Nathan Blanchard and Charles Teague developed organizational and marketing innovations which made them nationally leading citrus producers. The city of Camarillo was not incorporated until 1964.

Ventura County agribusiness became extremely profitable because of easily exploited and poorly paid immigrant workers, especially those from Japan, from the midwest in the 1930s, and from Mexico throughout the rest of the twentieth-century. Though California's agribusiness has changed substantially in the twentieth-century, and despite farmworker success in unionizing, field workers still are immigrants performing difficult labor for low wages. Agriculture remains significant to the campus site, and is evident in the surrounding fields of crops and orchards (and beekeeping). This land, as in other California counties, is one of mixed and often contrary economies--both agricultural and residential, with encroaching suburban sprawl.

Camarillo State Hospital (CSH)
Hidden by curved roads and rocky foothills are those dramatically styled buildings of the Camarillo State Hospital (1936-1997), now to be converted for use by the univeristy. Along with Round Mountain, Calleguas Creek, and adjacent fields of crops, the buildings are the most obvious monument to the past. Among the first workers hired by the State were ranch hands, many of whom had worked for Camarillo and Lewis, or had come from Oklahoma in the 1930s.

By 1952, most of the hospital's buildings were completed. There had been more than a decade of additions built as state planners tried desperately to keep pace with the increasing number of patients. The state hospital system historically was so overwhelmed that Mental Hygiene Director E.H. Crawfis wrote in his 1953 report to the legislature, "it is most realistic to speak in the comparative terms of 'overcrowded, badly overcrowded, and terribly overcrowded.'"

The decade of the fifties, under the direction of the military trained Superintendent Dr. F.H. Garrett, was pivotal and defining for CSH. The newest hospital of its size in California and likely in the nation, hospital staff found themselves with traditional training in the very physical care of patients, yet facing new ideas of "modern" psychiatry and the increasing use of drugs to control behavior. It was in the fifties that the past most directly confronted the present, so to speak, resulting in significant changes that would provide a foundation for the flourishing reforms of the sixties and early seventies. There was growing emphasis on the proactive treatment of patients' behaviors so they could return to the community; drug treatments for schizophrenia; a world renown program of behavioral modification for schizophrenics; the separation of children and adolescents from the rest of the patients in one of the nation's first "Children's Units;" education for children and youth; and the development of a dynamic program for the autistic.

The fifties were one of those magical moments when citizens of California, faced with such dreary prospects of overcrowding and public exposés like the film "Snakepit" (1948), found resolve to change conditions with commitment of spirit and money. The Receiving and Treatment Center (RT) at Camarillo, completed in 1952, was the first of its size built in California. The RT building has symmetrical sides, matching male and female wards and admitting units, with surgical suite, pharmacy, morgue, and autopsy room centrally located. One feels the promise of order imposing systematically on disorder when looking at this building, as well as a strong sense of faith in medical authority.

Camarillo State Hospital first opened at the height of institutional psychiatric care, and it expanded with newer ideas of medical treatments. At the opening of the RT building, State Superintendent Dr. Frank F. Tallman claimed the new treatment center "gives us the opportunity to offer them [patients] the first in psychiatric medicine. . . . Every phase of the modern hospital is at our fingertips." In other words, this "unit is a splendid example of the stream-lined advancement of psychiatric treatment at its best." Father Francis Koene gave the benediction: "This Camarillo State Hospital may be for the sick a welcome oasis in the parched desert of mental distress, fatigue and hopelessness; a lymphid fountain with beaded bubbles breaking o'er the brim, to bring refreshing waters to the arid tired mind, torn and tortured and taut with the stress and strain and strife of modern living."

It is significant that CSH was built outward, not upward as Utica or other nineteenth-century, eastern institutions. Its sprawl reflected that of Los Angeles, which by 1930 had become the nation's fourth largest metropolitan area. If there was need for respite from the "stress and strain and strife of modern living," it was here, outside the world's archetype modern city. Camarillo and nearby towns grew alongside Los Angeles, a city characterized by a rapid rise in population, urban and industrial growth, and an atypical suburban spatial pattern enabled by use of the automobile.

Such change and continued reform up through the seventies did not by any means make Camarillo a perfect place; yet it is safe to say hope and belief in the possibilities for change must have touched the lives of many. CSH was faced with another period of public exposé with a grand jury investigation of suspicious deaths in 1976. As in the earlier decade, many met this challenge with new ideas and programs. CSH developed training programs for health care professionals and new methods of improved care in a context of a rapidly declining patient population, which in itself must have allowed staff to better do their jobs. However, the lack of financial commitment on the part of State directors, now focused more on community based treatments, resulted in hospital closures. Camarillo State Hospital closed in 1997.

Politicians of Local, State, and National Importance
CSH became a direct colony of the State as many of the local communities preferred to ignore its massive and hidden presence. The site was thus isolated from local and regional politics as it was administered by the State. In the 1990s, the local search for an acceptable site for a university campus in Ventura County, alongside the declining number of patients and lack of state financial support, all dovetailed to close the hospital so the site could be converted to a university. Politicians such as Congressman Bob Lagomarsino, whose papers are now kept at California State University, Channel Islands, were aggressive and persistent in their fight for a local university.

The fight had begun in the early 1970s with the establishment of a CSU Northridge (CSUN) distance learning campus in Ventura. Tireless work and commitment on the part of staff and long-time Director Dr. Joyce Kennedy, not to mention the students themselves, built an organization adapted to Ventura County and increasing numbers of enrolled students. In the Fall of 1999, an excited student body and staff moved the CSUN Campus Center to its home in Camarillo.

Those Who Will Continue to Build a University in Ventura County
Handel Evans took early leadership of CSUCI, also beginning work at the Ventura Center before the move. Located on campus but apart from the CSUN center of university life until very recently, Evans and California State University Channel Islands planners were consumed with the incredible task of acquisition of the site as well as questions of initial programs. New President Richard Rush began his term in 2001, along with a group of initial faculty members. California State University Channel Islands will begin teaching its first classes in the Fall of 2002 as the CSUN @ CI Center begins to phase out.

CAMPUS TOURS

Prospective students may contact the Office of Outreach and Recruitment to arrange an individual or group tour. In addition to campus tours, the Office of Outreach and Recruitment offers monthly information meetings. Tours can be arranged Monday-Friday by contacting Outreach Services. Please contact 805-437-8520 to reserve your spot for an information meeting or to arrange a campus tour.

General Information

THE CALIFORNIA STATE UNIVERSITY

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972 the system became The California State University and Colleges, and in 1982 the system became The California State University. Today the campuses of the CSU include comprehensive and polytechnic universities and, since July 1995, the California Maritime Academy, a specialized campus.

The oldest campus—San José State University—was founded in 1857 and became the first institution of public higher education in California. The most recently opened campus—California State University, Monterey Bay, began admitting students in the fall of 1995. A new site has been conveyed and a 23rd campus, CSU Channel Islands, will open in Fall 2002 to upper-division transfer students. It is located in Ventura County.

Responsibility for The California State University is vested in the Board of Trustees, whose members are appointed by the Governor. The Trustees appoint the Chancellor, who is the chief executive officer of the system, and the Presidents, who are the chief executive officers of the respective campuses.

The Trustees, the Chancellor, and the Presidents develop systemwide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of the California State University, made up of elected representatives of the faculty from each campus, recommends academic policy to the Board of Trustees through the Chancellor.

Academic excellence has been achieved by The California State University through a distinguished faculty whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character, all campuses, as multipurpose institutions, offer undergraduate and graduate instruction for professional and occupational goals as well as broad liberal education. All the campuses require for graduation a basic program of "General Education Requirements" regardless of the type of bachelor's degree or major field selected by the student.

The CSU offers more than 1,600 bachelor's and master's degree programs in some 240 subject areas. Many of these programs are offered so that students can complete all upper division and graduate requirements by part-time, late afternoon and evening study. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California.

Enrollments in fall 1999 totaled 359,719 students, who were taught by over 20,600 faculty. The system awards more than half of the bachelor's degrees and 30 percent of the master's degrees granted in California. Some 1.94 million persons have been graduated from CSU campuses since 1960.

TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

EX OFFICIO TRUSTEES

The Honorable Gray Davis	State Capitol
Governor of California	Sacramento 95814
The Honorable Cruz Bustamante	State Capitol
Lieutenant Governor of California	Sacramento 95814
The Honorable Herb Wessen	State Capitol
Speaker of the Assembly	Sacramento 95814
The Honorable Delaine Eastin	721 Capitol Mall
State Superintendent of Public Instruction	Sacramento 95814
Dr. Charles B. Reed	401 Golden Shore
Chancellor of The California State University	Long Beach 90802-4210

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APPOINTED TRUSTEES

Appointments are for a term of eight years, except student, alumni, and faculty trustees whose terms are for two years. Terms expire in the year in parentheses. Names are listed in order of appointment to the Board.

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Correspondence with Trustees should be sent:
c/o Trustees Secretariat
The California State University
401 Golden Shore
Long Beach, California 90802-4210

OFFICE OF THE CHANCELLOR

The California State University
401 Golden Shore
Long Beach, California 90802-4210
(562) 951-4000

Dr. Charles B. Reed	Chancellor – CSU System
Dr. David S. Spence	Executive Vice Chancellor and Chief Academic Officer
Mr. Richard P. West	Executive Vice Chancellor and Chief Business Officer
Ms. Jackie McClain	Vice Chancellor, Human Resources
Ms. Christine Helwick	General Counsel
Mr. Louis Caldera	Vice Chancellor, University Advancement

THE CALIFORNIA STATE UNIVERSITY CAMPUSES

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9001 Stockdale Highway
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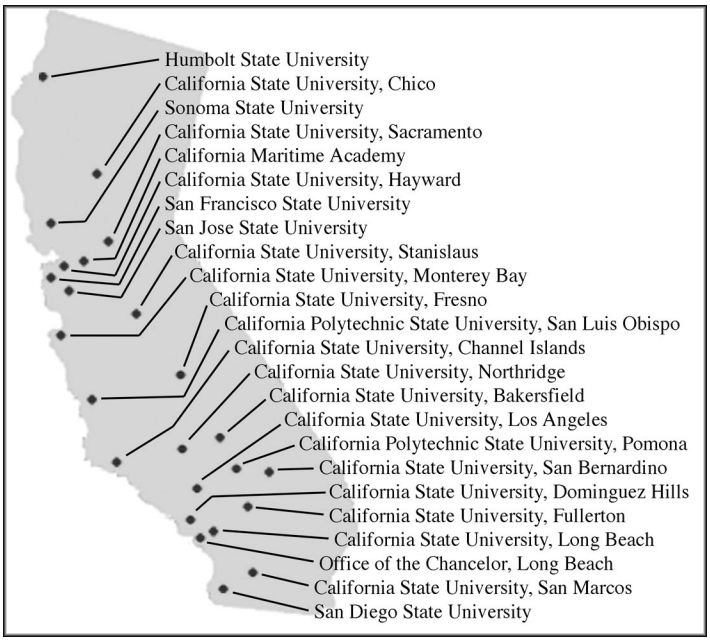
Dr. Tomás A. Arciniega, President
(661) 664-2011



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801 West Monte Vista Avenue
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Dr. Marvalene Hughes, President
(209) 667-3122

THE CALIFORNIA STATE UNIVERSITY INTERNATIONAL PROGRAMS

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. More than 12,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad. The International Programs serves the needs of students in over 100 designated academic majors. Affiliated with more than 70 recognized universities and institutions of higher education in 16 countries, the International Programs also offers a wide selection of study locales and learning environments.

Australia	The University of Western Sydney
Canada	The universities of the Province of Quebec including: Université de Montréal Concordia University Université Laval McGill University Université du Quebec system Bishop's University
Chile	Pontipicia Universidad Católica de Chile (Santiago)
Denmark	Denmark's International Study Program (the international education affiliate of the University of Copenhagen)
France	Institut des Etudes Françaises pour Étudiants Étrangers, Université de Droit, d'Economie et des Sciences d'Aix-Marseille (Aix-en-Provence) Mission interuniversitaire de coordination des échanges franco-américains, Universités de Paris III, Institute
	IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, the of Oriental Languages and Civilizations, and Evry.
Germany	Universität Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg
Israel	Tel Aviv University The Hebrew University of Jerusalem
Italy	CSU Study Center (Florence) Universitá degli Studi di Firenze La Accademia di Belle Arti Firenze
Japan	Waseda University (Tokyo)
Korea	Yonsei University (Seoul)
Mexico	Instituto Tecnológico y de Estudios Superiores de Monterey, Campus Querétaro
New Zealand	Lincoln University (Christchurch) Massey University (Palmerston North)
Spain	Universidad Complutense de Madrid Universidad de Granada
Sweden	Uppsala Universitet
Taiwan	National Chengchi University (Taipei)
United Kingdom	Bradford University Bristol University Hull University Kingston University Sheffield University University of Wales, Swansea
Zimbabwe	University of Zimbabwe (Harare)

International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all personal costs, such as transportation, room and board, living expenses, and home campus fees. Participants remain eligible to receive any form of financial aid (except work-study) for which they can individually qualify.

To qualify for admission to the International Programs, students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs in France, Germany, and Mexico. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained on campus, or by writing to The California State University International Programs, 401 Golden Shore, Sixth Floor, Long Beach, California 90802-4210. Visit us on the World Wide Web at www.gateway.calstate.edu/csuienet/.

CHANGES IN RULES AND POLICIES

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the California State University, by the Chancellor or designee of the California State University, or by the President or designee of the institution. Further, it is not possible in a publication of this size to include all of the rules, policies and other information which pertain to the student, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

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Student Affairs

THE DIVISION OF STUDENT AFFAIRS

Dr. Wm. Gregory Sawyer
Vice President for Student Affairs

MISSION

The mission of the Division of Student Affairs is to promote and enrich students' education through a seamless learning environment that blurs the distinction between inside and outside classroom experiences. This is fostered through teaching, mentoring, advising and counseling by way of ongoing direct contact with students in their every day lives. Student Affairs educates students in responsible community living, social intelligence, appreciation for the arts, leadership skills, ethical behavior, coping with adversity, health and wellness, valuing diversity, trusteeship, character development, problem-solving, responsible choices, and adaptive skills for living in an ever changing pluralistic society.

CAREER DEVELOPMENT SERVICES

Location: Bell Tower Building, Room 1415
Phone: (805) 437-8510, TDD (805) 437-8510
Fax: (805) 437-8529

Career Development Services: The mission of Career Development Services is to assist students in reaching their educational, career, and employment goals. Students have an array of career planning and job preparation resources available to them. These include the following:

- Computer Assisted Guidance (EUREKA and CAREER CHOICE)
- Career Counseling
- Career Library
- Resume Writing Workshops
- Interview Strategies Workshops
- Internship Opportunities
- Student Employment
- Graduate Leadership Opportunity
- Community Volunteer Opportunities

STUDENT HEALTH SERVICES

Location: Health Center Building on San Luis Avenue
Phone: (805) 437-8828
Fax: (805) 437-8828

The mission of Student Health Services is to enhance the student's educational experience by promoting good physical and emotional health. Emphasis is placed on the prevention of illness through education. All regularly enrolled students are offered basic health services paid through student tuition fees. These services include the following:

- Diagnosis and Treatment of Acute Illness and Injuries
- Physical Examinations
- Family Planning
- Immunizations (Measles and Rubella)
- PAP Smears
- TB Testing
- HIV Testing
- STD Screening and Treatment
- Pregnancy Testing
- Emergency Care
- Hepatitis Testing
- Student Health Insurance
- Health Education Program
- Student Health Advisory Board

DISABILITY ACCOMMODATIONS

Location: Bell Tower Building, Room 1417A
Phone: (805) 437-8510, TDD (805) 437-8510
Fax: (805) 437-8529

Disability Accommodations provides a broad range of support services to assist students with physical, psychological, and learning disabilities. Qualified students may obtain help with the following:

- Completing University admission applications
- Orientation to services for students with disabilities
- Priority registration to classes
- Program change assistance
- Disability parking
- Referral to on- and off-campus resources
- Disability management counseling
- Special test-taking accommodations
- Note takers
- Readers
- Interpreters (sign language)
- Computer access and training services to introduce students with disabilities to computers and specialized assistive technologies
- Liaison with the Department of Rehabilitation and referral to on-campus and off-campus resources

FINANCIAL AID OFFICE

Location: Bell Tower Building, Room 1420
Phone: (805) 437-8513, TDD (805) 437-8510
Fax: (805) 437-8529

The mission of the financial aid/scholarship office is to assist students in locating and obtaining financial aid resources to meet their educational costs for a postsecondary education. To apply, the student must complete and submit a Free Application for Federal Student Aid (FAFSA). Financial Aid applications can be obtained in the Student Affairs main office, Room 1415. There are a variety of financial aid resources available for students, including grants, loans, and scholarships. By completing and submitting the FAFSA, students are considered for the following:

Grants: Federal or state funds that do not have to be repaid.

Loans: Federally guaranteed student loans with low interest rates.

Scholarships: The University, in participation with the community, has an endowment that provides scholarships which are based on academic excellence and community service.

OFFICE OF ORIENTATION AND STUDENT LIFE

The office of Orientation and Student Life assists new students with their successful transition to CSUCI while providing opportunities for enrolled students in leadership and other co-curricular and extracurricular activities. Orientation programs are offered to freshmen and transfer students for each semester of enrollment. These programs inform students about services and opportunities at CSUCI while assisting them with the initial advising and registration process. Students are strongly encour-

aged to attend the New Student Orientation.

ASSOCIATED STUDENTS

All registered students are members of Associated Students, Incorporated, (ASI), and pay an associated student fee as a part of their registration. ASI is the official student government of the University. Elected student leaders include a president, vice president, and senate members. The senate sets policy, governs financial matters, provides student service programs, provides input on University policies, and recommends students to serve on University advisory boards.

CAMPUS CLUBS AND ORGANIZATIONS

Students are encouraged to join in the extra-curricular activities sponsored by student clubs and organizations that are coordinated through Associated Students, Inc. For information on specific campus clubs and organizations, contact the ASI office.

RECREATION AND LEISURE SERVICES

Recreation and Leisure services programs are sponsored by Associated Students, Inc. These programs include intramural and club sports as well as recreational, leisure and wellness activities for all students. A variety of open recreational programs are available to students, including basketball, soccer, volleyball, softball, and hiking.

STUDENT LOUNGE

The Student Lounge is located in the west wing of the Bell Tower building adjacent to the campus library. The lounge is a great place to meet other students, engage in a friendly game of pool, a quiet game of chess, or just to hang out. It is equipped with a big screen TV, a game room, computers, a quiet reading room, and a kitchen and snack area.

COUNSELING AND TESTING SERVICES

Location:	Bell Tower Building, Room 1415
Phone:	(805) 437-8510, TDD (805) 437-8510
Fax:	(805) 437-8529

Counseling and Psychological Services provide high quality, confidential, short-term counseling free of charge to our students. Our staff is committed to helping students develop their maximum potential while pursuing their educational and personal goals. We provide alternative testing arrangements for students under section 504 of the Rehabilitation Act of 1973 and the Americans Disability Act of 1990.

HONORS CONVOCATION

Honors Convocation is among the most honored events held on the campus. It brings together University and local community members to celebrate the accomplishments of our students. For more information about the University Honors Convocation, call (805) 437-8510.

Admissions

ADMISSION PROCEDURES AND POLICIES

Office: Admissions and Records
Location: Bell Tower Building
Phone: (805) 437-8500
Fax: (805) 437-8509

Requirements for admission to CSU Channel Islands are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Code of Regulations. If you are not sure of these requirements you should consult a high school or community college counselor or the Admissions and Records Office. Applications may be obtained at any California high school or community college or from the Admissions Office at any of the campuses of the California State University.

Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at http://www.csumentor.edu/. The CSUMentor system allows students to browse through general information about CSU's twenty-three campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid.

Importance of Filing Complete, Accurate, and Authentic Application Documents
The CSU advises prospective students that they must supply complete and accurate information on the application for admission, residence questionnaire, and financial aid forms. Further, applicants must submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result in denial of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1, Title 5, California Code of Regulations).

UNDERGRADUATE APPLICATION PROCEDURES

Prospective students, applying for part-time or full-time undergraduate programs of study, in day or evening classes, must file a complete undergraduate application as described in the undergraduate admission booklet. The $55 nonrefundable application fee should be in the form of a check or money order payable to "The California State University" and may not be transferred or used to apply to another term. An alternate campus and major may be indicated on the application, but applicants should list as an alternate campus only a CSU campus that also offers the major. Generally, an alternate major will be considered at the first choice campus before an application is redirected to an alternate choice campus.

Impacted Programs
The CSU designates programs as impacted when more applications are received in the first month of the filing period than can be accommodated. Some programs are impacted at every campus where they are offered; others are impacted only at some campuses. You must meet supplementary admission criteria if applying to an impacted program.

The CSU will announce with the opening of the fall filing period which programs are impacted and the supplementary criteria campuses will use. That announcement will be published in the CSU Review, distributed to high school and college counselors. Information about the supplementary criteria is also sent to program applicants. There are no impacted majors at CSU Channel Islands at this time.

You must file your application for admission to an impacted program during the first month of the filing period. Further, if you wish to be considered in impacted programs at two or more campuses, you must file an application to each.

Supplementary Admission Criteria
Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include ranking on the freshman eligibility index, the overall transfer grade point average, completion of specified prerequisite courses, and a combination of campus-developed criteria. If you are required to submit scores on either the SAT I or the ACT, you should take the test no later than November if applying for fall admission.

The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the CSU Review and are sent by the campuses to all applicants seeking admission to an impacted program.

Unlike unaccommodated applicants to locally impacted programs who may be redirected to another campus in the same major, unaccommodated applicants to systemwide impacted programs may not be redirected in the same major but may choose an alternate major either at the first choice campus or another campus.

GRADUATE AND POSTBACCALAUREATE APPLICATION PROCEDURES

All graduate and postbaccalaureate applicants (e.g., master's degree applicants, those seeking credentials, and those interested in taking courses for personal or professional growth) must file a complete graduate application as described in the graduate and postbaccalaureate admission booklet. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the $55 nonrefundable application fee. Since applicants for postbaccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternate campuses or later changes of campus choice will be minimal. To be assured of initial consideration by more than one campus, it will be necessary to submit separate applications (including fees) to each. Applications may be obtained from the Graduate Studies Office or the Admissions Office of any California State University campus. An electronic version of the CSU graduate application is available on the World Wide Web at http://www.csumentor.edu/.

APPLICATION FILING PERIODS

Terms in 2002-2003	Applications First Accepted	Filing Period Duration
Summer Quarter 2002	February 1, 2002	Each campus accepts applications until capacities are reached. Many campuses limit undergraduate admission in an enrollment category because of overall enrollment limits. If applying after the initial filing period, consult the campus admission or office for current information.
Fall Semester or Quarter 2002	November 1, 2001	
Winter Quarter 2003	June 1, 2002	
Spring Semester or Quarter 2003	August 1, 2002	

Application Acknowledgment
You may expect to receive an acknowledgment from your first choice campus within two to four weeks of filing the application. The notice will also include a request that you submit the records necessary for the

campus to evaluate your qualifications. You may be assured of admission if the evaluation of your qualifications indicates that you meet CSU admission requirements and campus requirements for admission to an impacted program. Such a notice is not transferable to another term or to another campus.

HARDSHIP PETITIONS

The campus has established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Petitioners should write the Admission Offices regarding specific policies governing hardship admission.

UNDERGRADUATE ADMISSION REQUIREMENTS

Listed below are the freshman requirements to the California State University. CSU Channel Islands will admit freshmen beginning Fall 2003.

Freshman Requirements
You will qualify for regular admission as a first-time freshman if you

1. are a high school graduate,

2. have a qualifiable eligibility index (see section on Eligibility Index), and

3. have completed with grades of C or better each of the courses in the comprehensive pattern of college preparatory subject requirements (see "Subject Requirements").

Eligibility Index – The eligibility index is the combination of your high school grade point average and your score on either the ACT or the SAT. Your grade point average is based on grades earned during your final three years of high school (excluding physical education and military science) and bonus points for approved honors courses.
Up to eight semesters of honors courses taken in the last two years of high school can be accepted. Each unit of A in an honors course will receive a total of 5 points; B, 4 points; and C, 3 points.

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT I. Or, if you took the ACT, multiply your grade point average by 200 and add ten times the ACT composite score. If you are a California high school graduate (or a resident of California for tuition purposes), you need a minimum index of 2900 using the SAT I or 694 using the ACT; the Eligibility Index Table illustrates several combinations of required test scores and averages.

If you neither graduated from a California high school nor are a resident of California for tuition purposes, you need a minimum index of 3502 (SAT I) or 842 (ACT).

If your grade point average is 3.00 or above (3.61 for nonresidents), you are exempt from submitting test scores. However, you are urged to take the SAT I or ACT since campuses use test results for advising and placement purposes.

You will qualify for regular admission when the university verifies that you have a qualifiable eligibility index and will have completed the comprehensive pattern of college preparatory subjects and, if applying to an impacted program, meet supplementary criteria.

ELIGIBILITY FOR CALIFORNIA HIGH SCHOOL GRADUATES OR RESIDENTS OF CALIFORNIA (SEE TABLE A)

Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section.

Subject requirements – The California State University requires that

Eligibility Index Table for California High School Graduates or Residents of California **Table A**

GPA	ACT Score	SAT I Score	GPA	ACT Score	SAT I Score	GPA	ACT Score	SAT I Score	GPA	ACT Score	SAT I Score	GPA	ACT Score	SAT I Score
3.00 and above qualifies with any score			2.81	14	660	2.60	18	820	2.39	22	990	2.18	26	1160
			2.80	14	660	2.59	18	830	2.38	22	1000	2.17	26	1170
			2.79	14	670	2.58	18	840	2.37	22	1010	2.16	27	1180
2.99	10	510	2.78	14	680	2.57	18	850	2.36	23	1020	2.15	27	1180
2.98	10	520	2.77	14	690	2.56	19	860	2.35	23	1020	2.14	27	1190
2.97	10	530	2.76	15	700	2.55	19	860	2.34	23	1030	2.13	27	1200
2.96	11	540	2.75	15	700	2.54	19	870	2.33	23	1040	2.12	27	1210
2.95	11	540	2.74	15	710	2.53	19	880	2.32	23	1050	2.11	28	1220
2.94	11	550	2.73	15	720	2.52	19	890	2.31	24	1060	2.10	28	1220
2.93	11	560	2.72	15	730	2.51	20	900	2.30	24	1060	2.09	28	1230
2.92	11	570	2.71	16	740	2.50	20	900	2.29	24	1070	2.08	28	1240
2.91	12	580	2.70	16	740	2.49	20	910	2.28	24	1080	2.07	28	1250
2.90	12	580	2.69	16	750	2.48	20	920	2.27	24	1090	2.06	29	1260
2.89	12	590	2.68	16	760	2.47	20	930	2.26	25	1100	2.05	29	1260
2.88	12	600	2.67	16	770	2.46	21	940	2.25	25	1100	2.04	29	1270
2.87	12	610	2.66	17	780	2.45	21	940	2.24	25	1110	2.03	29	1280
2.86	13	620	2.65	17	780	2.44	21	950	2.23	25	1120	2.02	29	1290
2.85	13	620	2.64	17	790	2.43	21	960	2.22	25	1130	2.01	30	1300
2.84	13	630	2.63	17	800	2.42	21	970	2.21	26	1140	2.00	30	1300
2.83	13	640	2.62	17	810	2.41	22	980	2.20	26	1140	Below 2.00 does not qualify for regular admission		
2.82	13	650	2.61	18	820	2.40	22	980	2.19	26	1150			

first-time freshman applicants complete, with grades of C or better, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school. Within the 15 units completed, up to one unit (one year) in visual and performing arts or foreign language may be missing and offset by a college preparatory course(s) in other areas. The missing unit of visual and performing arts or foreign language must be completed either prior to, or by the end of the first year, of CSU enrollment. This provision is effective through the 2002-2003 academic year.

1. English, 4 years.
2. Mathematics, 3 years: algebra, geometry, and intermediate algebra.
3. U.S. history or U.S. history and government, 1 year.
4. Science, 1 year with laboratory: biology, chemistry, physics, or other acceptable laboratory science.
5. Foreign language, 2 years in the same language (subject to waiver for applicants demonstrating equivalent competence).
6. Visual and performing arts, 1 year: art, dance, drama/theater, or music.
7. Electives, 3 years: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, and visual and performing arts.

Applicants seeking admission as first-time freshmen for the fall 2003 or later terms will have the same preparatory course requirements for admission to both the California State University and the University of California. The preparatory course admission requirements for both systems will be the completion of the following courses with a grade of C or better: four years of English, three years of math (algebra, geometry, and intermediate algebra), two years of U.S. history or social science, two years of laboratory science, two years of foreign language, one year of visual or performing arts, and one year of electives chosen from one of the areas above.

TRANSFER STUDENT REQUIREMENTS

Students who have completed 55 or fewer transferable semester college units (83 or fewer quarter units) are considered lower division transfer students. Student who have completed 56 or more transferable semester college units (84 or more quarter units) are considered upper division transfer students. Students who complete college units during high school or through the summer between high school graduation and fall enrollment in the California State University are considered first-time freshmen and must meet those admission requirements. Transferable courses are those designated for baccalaureate credit by the college or university offering the courses.

Lower Division Transfer Requirements
Listed below are the lower division requirements to the California State University. CSU Channel Islands will not admit lower division transfers in 2002-2003 or 2003-2004.

You will qualify for admission as a lower division transfer student if you have a grade point average of 2.0 (C or better) in all transferable units attempted, are in good standing at the last college or university attended, and meet any of the following standards:

1. you will meet the freshman admission requirements in effect for the term to which you are applying (see "Freshman Requirements" section); or
2. you were eligible as a freshman at the time of high school graduation except for the subject requirements and have been in continuous attendance in an accredited college since high school graduation, and
   - have made up the missing subjects, or
   - have completed at least 30 semester units of college coursework with a grade of C or better in each course to be selected from courses in English, arts and humanities, social science, science and mathematics at a level at least equivalent to courses that meet general education requirements. The 30 units must include all the general education requirements in communication in the English language and critical thinking (at least 9 semester units) and the requirement in mathematics/quantitative reasoning (usually 3 semester units) OR the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning.

Applicants who graduated from high school prior to 1988 should contact the Admissions Office to inquire about alternative admission programs.

Upper Division Transfer Requirements
You will qualify for admission as an upper division transfer student if:

1. you have a grade point average of 2.0 (C or better) in all transferable units attempted; and
2. you are in good standing at the last college or university attended; and
3. you have completed at least 30 semester units of college coursework with a grade of C or better in each course to be selected from courses in English, arts and humanities, social science, science and mathematics at a level at least equivalent to courses that meet general education requirements. The 30 units must include all of the general education requirements in communication in the English language and critical thinking (at least 9 semester units) and the requirement in mathematics/quantitative reasoning (usually 3 semester units) OR the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning.

Adult Students
As an alternative to regular admission criteria, an applicant who is twenty-five years of age or older may be considered for admission as an adult student if he or she meets all of the following conditions:

1. Possesses a high school diploma (or has established equivalence through either the Tests of General Educational Development or the California High School Proficiency Examination).
2. Has not been enrolled in college as a full-time student for more than one term during the past five years.
3. If there has been any college attendance in the last five years, has earned a C average or better in all college work attempted.

Consideration will be based upon a judgment as to whether the applicant is as likely to succeed as a regularly admitted freshman or transfer student and will include an assessment of basic skills in the English

language and mathematical computation.

Provisional Admission
CSU Channel Islands may provisionally admit transfer applicants based on their academic preparation and courses planned for completion. The campus will monitor the final terms to ensure that those admitted complete all required courses satisfactorily.

Making Up Missing College Preparatory Subject Requirements
Lower division applicants who did not complete subject requirements while in high school may make up missing subjects in any of the following ways.

1. Complete appropriate courses with a C or better in adult school or high school summer sessions.

2. Complete appropriate college courses with a C or better. One college course of at least three semester or four quarter units will be considered equivalent to one year of high school study.

3. Earn acceptable scores on specified examinations.

Please consult with any CSU Admissions Office for further information about alternative ways to satisfy the subject requirements.

Test Requirements
Freshman and transfer applicants who have fewer than 56 semester or 84 quarter units of transferable college credit must submit scores, unless exempt (see "Eligibility Index" on page), from either the ACT or the (SAT I) of the College Board. If you are applying to an impacted program on campus and are required to submit test scores, you should take the test no later than November or early December. Test scores are also used for advising and placement purposes. Registration forms and dates for the SAT I or ACT are available from school or college counselors or from a CSU campus testing office. Or you may write to or call:

The College Board (SAT I)
Registration Unit, Box 6200
Princeton, New Jersey 08541
(609) 771-7588
CSUCI Institute Code: 4128

ACT
Registration Unit, P.O. Box 414
Iowa City, Iowa 52243
(319) 337-1270
CSUCI Institute Code: 204

TOEFL Requirement
All undergraduate applicants, regardless of citizenship, who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction must present a score of 500 or above on the Test of English as a Foreign Language. Some campuses require a score higher than 500. Applicants taking the Computer Based Test of English as a Foreign Language must present a score of 173 or above. Some campuses may require a higher score.

INTERNATIONAL (FOREIGN) STUDENT ADMISSION REQUIREMENTS

Listed below is general information on the admission of international students to the CSU. CSU Channel Islands is not authorized to admit international students for Fall 2002. However, we are committed to enrolling a diverse student body and intend to admit international students in future semesters.

The CSU must assess the academic preparation of foreign students. For this purpose, "foreign students" include those who hold U.S. visas as students, exchange visitors, or in other nonimmigrant classifications.

The CSU uses separate requirements and application filing dates in the admission of foreign students. Verification of English proficiency (see the section on TOEFL Requirement for undergraduate applicants), financial resources, and academic performance are all important considerations for admission. Academic records from foreign institutions must be on file at least eight weeks before registration for the first term and, if not in English, must be accompanied by certified English translations.

Priority in admission is given to residents of California. There is little likelihood of nonresident applicants, including international students, being admitted either to impacted majors or to those with limited openings.

INTRASYSTEM AND INTERSYSTEM ENROLLMENT PROGRAMS

Students enrolled at any CSU campus will have access to courses at other CSU campuses on a space available basis unless those campuses or programs are impacted. This access is offered without students being required to be admitted formally to the host campus and sometimes without paying additional fees. Although courses taken on any CSU campus will transfer to the student's home CSU campus as at least elective credit, students should consult their home campus academic advisors to determine how such courses may apply to their degree programs before enrolling at the host campus.

There are two programs for enrollment within the CSU and one for enrollment between CSU and the University of California or California community colleges. Additional information about these programs is available from the Office of Admissions and Records at CSU Channel Islands.

CSU Concurrent Enrollment – matriculated students in good standing may enroll at both their home CSU campus and a host CSU campus during the same term. Credit earned at the host campus is automatically reported to the home campus to be included on the student's transcript at the home campus.

CSU Visitor Enrollment – matriculated students in good standing enrolled at one CSU campus may enroll at another CSU campus for one term. Credit earned at the host campus is reported automatically to the home campus to be included on the student's transcript at the home campus.

Intersystem Cross Enrollment – matriculated CSU, UC, or community college students may enroll for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus.

HEALTH SCREENING

All new and readmitted students born after January 1, 1957, will be notified of the requirement to present proof of measles and rubella immunizations. All students 18 years of age or younger shall be required to present proof of immunization against hepatitis B. These are not admission requirements, but shall be required of students as conditions of enrollment in CSU. Proof of measles and rubella immunizations shall also be required for certain groups of enrolled students who have increased exposure to these diseases.

Policies and Regulations

POLICIES ON THE RIGHTS OF INDIVIDUALS AND STUDENT BEHAVIOR

EQUAL OPPORTUNITY

California State University Channel Islands prohibits discrimination or harassment based on sex, gender, race, color, religion, national origin or ancestry, age, disability, marital status, sexual orientation, cancer-related medical condition, or genetic predisposition. The University also prohibits discrimination against anyone due to their relationship or association with an individual with a known disability.

The University practices equal opportunity in admission to, access to, and operation of instruction, programs, services, and activities. Also, the University provides equally effective communication.

The University considers reasonable accommodation for these purposes (a) completion of the admission and enrollment processes, (b) participation in instruction, programs, services and activities, and (c) equally effective communication, upon request by persons with legally protected disabilities.

Questions, concerns, complaints, and requests for reasonable accommodation or addition information may be forwarded to George Morten, Ph.D., Coordinator of Student Services. Dr. Morten is located in Bell Tower 1415; the office is open Monday through Thursday from 8 a.m. to 5 p.m. and on Friday from 8 a.m. to noon, (805) 437-8516 (voice) or (805) 437-8529 (TDD).

USE OF SOCIAL SECURITY NUMBER

Applicants are required to include their social security number (taxpayer identification number) 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 University uses the social security number to identify records pertaining to the student as well as to identify the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution. Also, 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. This information is used by the IRS 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.

PRIVACY RIGHTS OF STUDENTS IN EDUCATION RECORDS

The Federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (34 C.F.R. 99) set out requirements designed to protect the privacy of students concerning their records maintained by the campus. Specifically, the statute and regulations govern access to student records maintained by the campus, and the release of such records. In brief, the law provides that the campus must provide students access to records directly related to the student and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. The right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes and the regulations on the campus. Copies of these policies and procedures may be obtained at the Admissions and Records Office in the Bell Tower Building. Among the types of information included in the campus statement of policies and procedures are: (1) the types of student records and the information contained therein; (2) the official responsible for the maintenance of each type of record; (3) the location of access lists that indicate persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) the access rights of students; (6) the procedures for challenging the content of student records; (7) the cost which will be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. An office and review board have been established by the Department to investigate and adjudicate violations and complaints. The office designated for this purpose is: Family Policy Compliance Office, U.S. Department of Education, Washington, D.C. 20202-4605.

The campus is authorized under the Act to release "directory information" concerning students. "Directory information" may include the student's name, address, telephone listing, electronic mail address, photograph, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying information which the student requests not to be released. Written objections should be sent to the Admissions and Records Office in the Bell Tower Building.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons are those who have responsibilities in connection with the campus's academic, administrative or service functions and who have reason for using student records connected with their campus or other related academic responsibilities. Disclosure may also be made to other persons or organizations under certain conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; to other institutions to which the student is transferring).

STUDENT DISCIPLINE

Inappropriate conduct by students or by applicants for admission is subject to discipline as provided in Sections 41301 through 41304 of Title 5, California Code of Regulations. These sections are as follows:

41301. Expulsion, Suspension and Probation of Students. Following procedures consonant with due process established pursuant to Section 41304, any student of a campus may be expelled, suspended, placed on probation or given a lesser sanction for one or more of the following causes which must be campus related:

(a) Cheating or plagiarism in connection with an academic program at a campus.
(b) Forgery, alteration or misuse of campus documents, records, or identification or knowingly furnishing false information to a campus.
(c) Misrepresentation of oneself or of an organization to be an agent of the campus.
(d) Obstruction or disruption, on or off campus property, of the campus educational process, administrative process, or other campus function.

(e) Physical abuse on or off campus property of the person or proerty of any member of the campus community or of members of his or her family or the threat of such physical abuse.
(f) Theft of, or non-accidental damage to, campus property, or property in the possession of, or owned by, a member of the campus community.
(g) Unauthorized entry into, unauthorized use of, or misuse of campus property.
(h) On campus property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes, except when lawfully prescribed pursuant to medical or dental care, or when lawfully permitted for the purpose of research, instruction or analysis.
(i) Knowing possession or use of explosives, dangerous chemicals or deadly weapons on campus property or at a campus function without prior authorization of the campus president.
(j) Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function.
(k) Abusive behavior directed toward, or hazing of, a member of the campus community.
(l) Violation of any order of a campus President, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.
(m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or probation pursuant to this Section.
(n) For purposes of this Article, the following terms are defined:
  (1) The term "member of the campus community" is defined as meaning California State University Trustees, academic, non-academic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.
  (2) The term "campus property" includes:
    (A) real or personal property in the possession of, or under the control of, the Board of Trustees of the California State University, and
    (B) all campus feeding, retail, or residence facilities whether operated by a campus or by a campus auxiliary organization.
  (3) The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, slingshot, billy, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.
  (4) The term "behavior" includes conduct and expression.
  (5) The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.
(o) This Section is not adopted pursuant to Education Code Section 89031.
(p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immedately prior to such effective date.

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.

41303. Conduct by Applicants for Admission.
Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302. Admission or readmission may be qualified or denied to any person who, while a student, commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

41304. Student Disciplinary Procedures for the California State University.
The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for the California State University. Subject to other applicable law, this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302, and for qualified admission or denial of admission under Section 41303; the authority of the campus President in such matters; conduct related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a Hearing Officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The Chancellor shall report to the Board actions taken under this section.

IMMIGRATION REQUIREMENTS FOR LICENSURE

On August 27, 1996, Governor Pete Wilson issued Executive Order W-135-96 which requested that the CSU and other state agencies implement "as expeditiously as reasonably practicable" the provision of The Personal Responsibility and Work Opportunity Reconciliation Act (PRAWORA) of 1996 (P.L. 104-193). The Act, also known as the Welfare

Reform Act, included provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants as well as benefits for all illegal immigrants.

Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the new Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure.

DETERMINATION OF RESIDENCE FOR NONRESIDENT TUITION PURPOSES

The Admissions and Records Office at Channel Islands determines the residence status of all new and returning students for nonresident tuition purposes. Responses to the Application for Admission, Residency Questionnaire, and Reclassification Request Form, and, if necessary, other evidence furnished by the student are used in making this determination. A student who fails to submit adequate information to establish a right to classification as a California resident will be classified as a nonresident.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by The California State University is found in Education Code Sections 68000-68090, 68120-68134, and 89705-89707.5, and in Title 5 of the California Code of Regulations, Sections 41900-41912.

Legal residence may be established by an adult who is physically present in the state and who, at the same time, intends to make California his or her permanent home. Physical presence in the state combined with steps taken at least one year prior to the residence determination date to show an intent to make California the permanent home is required to establish a California residence for tuition purposes. The steps necessary to show California residency intent will vary from case to case. Included among the steps may be registering to vote and voting in elections in California; filing resident California state income tax returns; ownership of residential property or continuous occupancy or renting of an apartment on a lease basis where one's permanent belongings are kept; maintaining active resident memberships in California professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks; and maintaining permanent military address and home of record in California if one is in the military service.

The student who is in the state for educational purposes only does not gain the status of resident regardless of the length of the student's stay in California.

In general, the unmarried minor citizen or noncitizen (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of abode. The residence of a minor cannot be changed by the minor or the appointment of a guardian for the minor, so long as the minor's parents are living.

A married person may establish his or her residence independent of his or her spouse.

A noncitizen may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States.

Nonresident students seeking reclassification are required by law to complete a supplemental questionnaire concerning their financial dependence status.

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A residence determination date is set for each academic term and is the date from which residence is determined for that term. The residence determination dates are:

Quarter Term Campuses	
Fall	September 20
Winter	January 5
Spring	April 1
Summer	July 1

Semester Term Campuses	
Fall	September 20
Winter*	January 5
Spring	January 25
Summer	June 1

* Applies only to winter term at California State University, Stanislaus.

The residence determination dates for the four stages on CalStateTEACH are as follows:

Stage 1	September 20
Stage 2	January 5
Stage 3	June 1
Stage 4	September 20

There are exceptions from nonresident tuition, including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues until the student has resided in the state the minimum time necessary to become a resident.

2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and have been entirely self-supporting for that period of time. The exception continues until the student has resided in the state the minimum time necessary to become a resident.

3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year. The exception continues until the student has resided in the state the minimum time necessary to become a resident.

4. Dependent children and spouse of persons in active military service stationed in California on the residence determination date. There is no time limitation on this exception unless the military person transfers out of California or retires from military service. If either of those events happen, the student's eligibility for this exception continues until he or she resides in the state the minimum time necessary to become a resident.

5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception continues until the military personnel has resided in the state the minimum time necessary to become a resident.

6. Military personnel in active service in California for more than one year immediately prior to being discharged from the military. Eligi-

bility for this exception runs from the date the student is discharged from the military until the student has resided in state the minimum time necessary to become a resident.

7. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.

8. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.

9. Certain credentialed, full-time employees of California school districts.

10. Full-time CSU employees and their children and spouse; state employees assigned to work outside the state and their children and spouse. This exception continues until the student has resided in the state the minimum time necessary to become California resident.

11. Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties.

12. Certain amateur student athletes in training at the United States Olympic Training Center in Chula Vista, California. This exception continues until the student has resided in the state the minimum time necessary to become a resident.

13. Federal civil service employees and their natural or adopted dependent children if the employee has moved to California as a result of a military mission realignment action that involves the relocation of a least 100 employees. This exception continues until the student has resided in the state the minimum time necessary to become a resident.

14. State government legislative or executive fellowship program enrollees. The student ceases to be eligible for this exception when he or she is no longer enrolled in the qualifying fellowship.

Any student, following a final campus decision on his or her residence classification only, may make written appeal to:

The California State University
Office of General Counsel
401 Golden Shore
Long Beach, California 90802-4210

within 120 calendar days of notification of the final decision by the campus of the classification. The Office of General Counsel may make a decision on the issue, or it may send the matter back to the campus for further review. Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations. Resident students who become nonresidents, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions Office. Applications for a change in classification with respect to a previous term are not accepted.

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made in the rate of nonresident tuition, in the statutes, and in the regulations between the time this catalog is published and the relevant residence determination date.

COURSE NUMBERING

100 – 299	Lower-Division Courses
300 – 499	Upper-Division Courses
500 – 599	Graduate and Teacher Credential Courses
330 – 349	Interdisciplinary Courses- without prerequisites (including cross-listed courses)
430 – 449	Interdisciplinary Courses- may have prerequisites or require permission from the instructor (including cross-listed courses)
397	Directed Studies Course- variable topic/credit courses
490	Special Topics- variable topic/credit courses
492	Service Learning/ Internship Course- variable credit
494	Independent Research Course- variable credit
497	Directed Studies Course- variable topic/credit courses
498	Senior Thesis Course- variable topic/credit courses
499	Undergraduate Capstone Course

POLICY ON CREDIT TOWARD GRADUATION FOR COURSES TAKEN OUTSIDE CSU CHANNEL ISLANDS

A student may earn credit toward graduation for courses taken outside CSUCI as follows:

Transfer of Undergraduate and Graduate Credit from Another Accredited Institution
Students who were in good standing at another accredited institution may, within maximums, transfer credit for baccalaureate or graduate degree course work. Course equivalency for major requirements is subject to the determination and discretion of the University; students are cautioned that the University is under no obligation to accept transferred courses for subject credit in addition to unit credit for admission. Policy regarding transfer of courses from California community colleges differs in some respects. Individual program regulations for specific transfer limitations should be consulted.

Transfer of Undergraduate Credit from Accredited Community Colleges
A maximum of 70 semester units earned in a community college may be applied toward the baccalaureate degree, with the following limitations and stipulations:

1. No upper division credit may be allowed for courses taken in a community college;
2. No credit may be allowed for professional courses in education taken in a community college, other than introduction to education

courses;
3. Students who transfer general education certification are still required to complete at least 9 units of upper-division general education courses at CSUCI.

Extension Courses
Students may take extension courses without matriculating at CSUCI provided that they meet course prerequisites. Extension courses may be applied to degree and credential requirements with approval of the degree program coordinator. Extension courses do not satisfy the University's residence requirement for graduation. Up to 24 units earned through Open University (see Open University) and Extension may be applied to a bachelor's degree, and up to 9 units may be applied to a master's degree.

Open University
Open University permits non-matriculated students to register concurrently with matriculated students in regular classes on a space available basis. Up to 24 units earned through Open University and Extension (See Extension Programs) may be applied to a bachelor's degree, and up to 9 units may be applied a master's degree.

International Program Credit
Course credits earned in universities abroad may be accepted for degree credit subject to evaluation by the Office of Admissions and Records. Specific course equivalencies may require consultation with individual program coordinators. CSUCI students who desire, subsequently, to take courses at a foreign university for degree credit must have each such course approved in advance in writing by the program coordinator.

POLICY ON WITHDRAWAL FROM COURSES

Student Initiated Course Withdrawals
1. A student may withdraw from any course during the first two weeks of instruction and the course will not appear on his or her permanent record.
2. After the second week of instruction and prior to the tenth week of instruction, withdrawal is permissible only for serious and compelling reasons. The approval signatures of the instructor and program coordinator are required to withdraw from class during this period.
3. Withdrawal during the final six weeks of instruction is not permitted except in cases such as accident or serious illness where the circumstances causing the withdrawal are clearly beyond the student's control and the assignment of an Incomplete is not practical. Ordinarily, withdrawal in this category will involve total withdrawal from the University. The approval signatures of the instructor, program coordinator and the office of Academic Affairs are required to withdraw from class during this period. A "W" will appear on the student's permanent record.

Instructor Initiated Course Withdrawal
1. An instructor may drop a student who does not attend class and has not made prior arrangements with the instructor. This may occur as early as after the first class meeting.
2. An instructor may drop a student who has enrolled in a course requiring permission of the instructor or completion of prerequisites if the student has not properly secured this permission or satisfactorily completed the prerequisites before enrolling.

POLICY ON THE ACCELERATION OF UNIVERSITY STUDIES

The University provides several means by which students may accelerate their studies; these are discussed below. Each of the following options may be subject to restrictions and regulations within individual academic programs. Therefore, students interested in any of these options should consult with the coordinator of the concerned program.

Advanced Placement
California State University Channel Islands grants credit toward its undergraduate degrees for successful completion of advanced placement examinations. Students who present scores of three or better will be granted up to six semester units of college credit for each AP course.

Unit Credit by Examination
California State University Channel Islands may grant unit credit to those students who pass examinations that have been approved for credit system-wide. These are: the CSU English Equivalency Examination; the College Level Entrance Program (C.L.E.P.) general examination in Mathematics; the C.L.E.P. Subject Examinations in College Algebra and Trigonometry, in Calculus and Analytic Geometry, in Statistics, in General Chemistry, and in German; the College Entrance Examination Board (C.E.E.B.) Advanced Placement examinations; and the American Chemical Society Cooperative Examination.

Students may also challenge some courses by taking examinations developed at the campus. Credit will be awarded to those who pass them successfully. Credits earned in this manner will be recorded as "CR" (credit) on the student's transcript and will be counted toward the total number of units required for the degree although they will not be included in calculation of the grade-point average. Credit by examination may not be used to fulfill the minimum residence requirement.

Substitution of Courses
Students who believe that a course they have taken (or intend to take) may be appropriate to their program and that this course could substitute for a specified course may request that a substitution of courses be made by the program advisor. Course substitutions are normally limited to cases where the required course cannot be offered or where the student has taken a similar, but not identical course elsewhere. Content credit, not units towards graduation, may be granted if approved.

Waiver of Course Requirement for Degree
Enrolled students who believe that previous training has sufficiently prepared them in a certain area may request a waiver of a specific course requirement (subject credit only). A waiver of specific course requirements does not reduce the total number of credits required for the major or the degree nor does it reduce the residence requirement. Additionally, the signature of the Program Coordinator is required. Courses required for admission to the University may not be waived.

POLICY ON GRADES

1. The "ABCDF" is the default grading system.
2. Although it is not required, individual faculty members may add a "+" or "-" to any grade except "F." By adding a "+" to a grade, the grade points earned increase by 0.3 (except an A+ shall still be 4.0 grade points). By adding a "-" to a grade, the grade points earned shall decrease by 0.3. Course syllabi are required to state clearly whether "+/-" grading is used.
3. A student may take a course "CR/NC" if the course is designated as allowing "CR/NC" grading in the course approval process.
4. Not more than 12 units of general education courses may be taken "CR/NC."

5. The decision on how many units of courses taken "CR/NC" and which courses can be taken "CR/NC" is left up to each individual program.
6. Course syllabi shall include a discussion of the instructor's grading policy.

POLICY ON COURSE GRADE APPEALS

1. Each student has the right to appeal the final course grade, but only the final course grade. A student may not appeal individual assignments and examinations.
2. Appeals are limited to situations in which the student believes the grade was "prejudicially," "capriciously," or "arbitrarily" assigned.
3. The appeal must be initiated within the first regular semester after assignment of the grade. It must first be directed to the instructor of the course, orally or in writing. If further action is necessary, the student should appeal in writing to the program coordinator. If further action is necessary, the issue may be appealed to the University Grade Appeals Committee.
4. Individuals may not participate as a member of the University Grade Appeals Committee in the review of an appeal if they are a participant in an appeal.
5. The decision of the University Grade Appeals Committee is final.

POLICY ON FORGIVENESS OF PREVIOUSLY EARNED GRADE (REPEAT AND DELETE)

A student may repeat a course for the purposes of improving his or her GPA. Courses in which the grade is C or above can be replaced up to a maximum of 24 units; however, there is no limit on the number of units that can be retaken for courses with grades of C- or lower. Only the higher grade in a course will be used in calculation of the grade point average if forgiveness is granted.

POLICY ON HONORS AT GRADUATION

University Honors:
The following honors are awarded to students graduating from CSUCI:

Summa Cum Laude—this honor is awarded to all students who possess a grade point average of 3.90 - 4.0 in courses taken at CSUCI.

Magna Cum Laude—this honor is awarded to all students who possess a grade point average of 3.75 – 3.89 in courses taken at CSUCI.

Cum Laude—this honor is awarded to all students who possess a grade point average of 3.50 – 3.74 in courses taken at CSUCI.

Program Honors:
Program honors will be awarded based on criteria developed by individual programs.

SYSTEMWIDE PLACEMENT TEST REQUIREMENTS

CSU Channel Islands will admit only upper division transfer students for Fall 2002 and Spring 2003. General Education English and math with minimum grades of C must be completed to qualify for admission as an upper division transfer. Completion of these courses exempts students from the exams listed below.

The California State University requires each entering undergraduate, except those who qualify for an exemption, to take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) after admission and prior to enrollment. These placement tests are not a condition for admission to the CSU, but they are a condition of enrollment. They are designed to identify entering students who may need additional support in acquiring basic English and mathematics skills necessary to succeed in CSU baccalaureate-level courses.

Students register for the EPT and/or ELM at their nearest CSU campus. Questions about test dates and registration materials may be addressed to Dr. George Morten at (805) 437-8510. CSU Channel Islands will not administer the EPT and ELM in 2002-03.

English Placement Test (EPT)
The EPT is designed to assess the level of reading and writing skills of entering undergraduate students so that they can be placed in appropriate baccalaureate-level courses. The CSU EPT must be competed by all entering undergraduates, with the exception of those who present proof of one of the following:

- A score of 550 or above on the verbal section of the College Board SAT I Reasoning Test taken April 1995 or later.
- A score of 24 or above on the enhanced ACT English Test taken October 1989 or later.
- A score of 680 or above on the re-centered and adjusted College Board SAT II: Writing Test taken May 1998 or later.
- A score of 3, 4, or 5 on either the Language and Composition or Composition and Literature examination of the College Board Scholastic Advanced Placement program.
- Completion and transfer or a course that satisfies the General Education-Breadth or Intersegmental General Education Transfer Curriculum (IGETC) written communication requirement, provided such course was completed with a grade of C or better.

Entry Level Mathematics (ELM) Placement Examination
The ELM examination is designed to assess the skill levels of entering CSU students in the areas of mathematics typically covered in three years of rigorous college preparatory mathematics courses in high school (Algebra I, Algebra II, and Geometry). The CSU ELM must be completed by all entering undergraduates, with the exception of those who present proof of one of the following:

- A score of 550 or above on the mathematics section of the College Board SAT I Reasoning Test or on the College Board SAT II Mathematics Tests Level I, IC (Calculator), II, or IIC (Calculator).
- A score of 23 or above on the American College Testing Mathematics Test.
- A score of 3 or above on the College Board Advanced Placement mathematics examination (AB or BC).
- A score of 3 or above on the College Board Advanced Placement Statistics examination.
- Completion and transfer of a course that satisfies the General Education-Breadth or Intersegmental General Education Transfer Curriculum (IGETC) quantitative reasoning requirement, provided such course was completed with a grade of C or better.

Chemistry Placement Test
Students planning on enrolling in Chemistry 121 must satisfy one of the following requirements:

- Satisfactory score on the Chemistry Placement Test
- Score of 3, 4 or 5 on the College Board Advanced Placement test in Chemistry
- Score of 48 or higher on the General Chemistry Exam of the College Level Examination Program (CLEP)
- Grade of C or higher (C- is unacceptable) in CHEM 105

The Chemistry Placement Test (CPT) covers high school chemistry and applied algebra. Students who fail the CPT may enroll in CHEM 121 after completing CHEM 105 with a grade of C or higher (C- is unacceptable) or after retaking the CPT with a satisfactory score. Successful completion of the ELM test or an approved exemption is a prerequisite for enrollment in CHEM 105 and CHEM 170.

Graduation Requirement in Writing Proficiency
All students must demonstrate competency in writing skills as a requirement for graduation. Information on available ways to meet this graduation requirement may be obtained from Dr. George Morten, University Testing Officer.

Financial Matters

SCHEDULE OF FEES

Legal residents of California are not charged tuition. CSU Channel Islands will charge campus-specific fees in addition to CSU mandated fees. Please visit the CSUCI Website at www.csuci.edu for more information.

All Students
Application Fee (nonrefundable), payable by check or money order at time application is made: $55

State University Fee (SUF)
The 2001-02 State University Fee for California residents was $828 for up to 6 units and $1428 for 6.1 or more units. These are the annual fees for two semesters. Campus-specific fees are charged in addition to the SUF.

Nonresident Students (U.S. and Foreign)
Nonresident Tuition (in addition to other fees charged all students) for all campuses:

	Quarter	Semester
Charge Per Unit:	$164	$246

The nonresident fee for California State University, Stanislaus, is the same as the semester unit charge, $246. The total fee paid per term will be determined by the number of units taken, including those in excess of fifteen. Most fees are waived for those individuals who qualify for such exemption under the provisions of the Alan Pattee Scholarship Act Ed Code, Section 68120. Systemwide mandatory fees are waived for those individuals who qualify for such exemption under the provision of Ed Code, Section 32320 (Children of deceased disabled veterans).

Credit Cards
VISA and Master Charge bank credit cards may be used for payment of student fees.

REFUND OF FEES

Details concerning fees which may be refunded, the circumstances under which fees may be refunded, and the appropriate procedure to be followed in seeking refunds may be obtained by consulting Section 42201 (parking fees), 41913 (nonresident tuition), 42019 (housing charges), and 41802 (all other fees) of Title 5, California Code of Regulations. In all cases it is important to act quickly in applying for a refund.

Information concerning any aspect of the refund of fees may be obtained from the Director of Admissions and Records.

DEBTS OWED TO THE INSTITUTION

Should a student or former student fail to pay 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). For example, the institution may withhold permission to receive official transcripts of grades from any person owing a debt. If a student believes that he or she does not owe all or part of an unpaid obligation, the student should contact the campus business office. The business office, or another office on campus to which the student may be referred by the business office, will review the pertinent information, including information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

ALAN PATTEE SCHOLARSHIPS

Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties are not charged mandatory systemwide fees or tuition of any kind at any California State University campus, according to the Alan Pattee Scholarship Act, Education Code Section 68120. Students qualifying for these benefits need to contact the Admissions/Registrar's Office, which determines eligibility.

AVAILABILITY OF INSTITUTIONAL AND FINANCIAL ASSISTANCE INFORMATION

The following information concerning student financial assistance may be obtained from the Director of Financial Aid: (805) 437-8510

1. student financial assistance programs, including state grants, available to students who enroll at CSU Channel Islands;

2. the procedures and forms by which application for student financial assistance is made;

3. the student eligibility requirements for financial assistance and the criteria used in determining how financial assistance is distributed among eligible applicants who enroll at CSU Channel Islands; and

4. the rights and responsibilities of students receiving financial assistance including aid provided under federal Title IV student assistance programs.

Information conerning policies regarding the return of federal Title IV student assistance funds is available from the Director of Financial Aid.

AVAILABILITY OF CAMPUS DATA

The Director of Admissions and Records, Bell Tower Building, will provide information or an appropriate referral to obtain information in the following matters:

- cost of attendance
- refund policies
- services for students with disabilities
- policies and procedures to report criminal actions or other emergencies
- annual security report
- prevention of drug and alcohol abuse and rehabilitation programs
- grievance procedures for students who feel aggrieved

MILITARY SELECTIVE SERVICE ACT

The federal Military Selective Service Act (the "Act") requires most males residing in the United States to present themselves for registration with the Selective Service System within thirty days of their eighteenth birthday. Most males between the ages of 18 and 25 must be registered. Males born after December 31, 1959, may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing

federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public postsecondary institution.

Selective Service registration forms are available at any U.S. Post Office, and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at http://www.sss.gov.

AVERAGE ANNUAL COST OF EDUCATION AND SOURCES OF FUNDS PER FULL-TIME EQUIVALENT STUDENT

The 23 campuses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. The total state appropriation to the CSU for 2000/2001 (not including capital outlay funding in the amount of $260,033,000) is $2,252,941,000. However, the total cost of education for CSU is $3,015,710,000 which must provide support for a projected 279,403 full-time equivalent students (FTES). The number of full-time equivalent students is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load).

The total cost of education in the CSU is defined as the expenditures for current operations, including payments made to the students in the form of financial aid, and all fully reimbursed programs contained in state appropriations, but excluding capital outlay appropriations and lottery funds. The average cost of education is determined by dividing the total cost by the total FTES. The average cost is further differentiated into three categories: State Support (the state appropriation, excluding capital outlay), Student Fee Support, and Support from Other Sources (including federal funds).

PROCEDURE FOR THE ESTABLISHMENT OR ABOLISHMENT OF A STUDENT BODY FEE

The law governing the California State University provides that fees defined as mandatory, such as a student body association fee and a student body center fee, may be established. A student body association fee must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). The campus president may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose (Education Code, Section 89300). The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus president containing the signatures of 10% of the regularly enrolled students at the University. Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947: including but not limited to Education Code, Sections 90012, 90027, and 90068. Student body fees support a variety of cultural and recreational programs, childcare centers, and special student support programs.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee. A student referendum also is required. The campus president may use alternate consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the campus president. The president may request the chancellor to establish the mandatory fee. Authority to adjust fees after consideration by the campus fee advisory committee and the completion of a student referendum is delegated to the president.

WITHDRAWING FROM THE INSTITUTION

Students who find it necessary to withdraw from CSU Channel Islands after enrolling for any academic term are required to follow the official withdrawal procedures. Failure to follow formal withdrawal procedures 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 Advisement Office.

Students who are receiving financial aid funds must consult with the Financial Aid Office, Bell Tower Building prior to withdrawing from the University regarding any required return or repayments 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.

General Education and Graduation Requirements

GENERAL EDUCATION

Requirements: 48 semester units

Category A: English Language, Communication and Critical Thinking (9 units)
Category B: Life Sciences - Biology, Chemistry, Biochemistry and Quantitative Reasoning (12 units)
Category C: Fine Arts, Literature, Languages and Cultures (12 units)
Category D: Social Perspectives (12 units)
Category E: Human Psychological and Physiological Perspectives (3 units)

Objectives

The General Education program provides a vital element in fulfilling the mission of the University. Interdisciplinary courses facilitate learning within and across disciplines, enabling students to use information and approaches from a wide variety of disciplines. Language and multicultural courses provide the opportunity for students to experience cultures other than their own in meaningful and respectful ways. General Education requirements are designed to assure that all graduates of the university, whatever their major, have acquired essential skills, experiences and a broad range of knowledge appropriate to educated people within our society.

General Education courses are intended

- to foster an ability to think clearly and logically,
- to prepare students to find and critically examine information,
- to communicate at an appropriate level in both oral and written forms,
- to acquaint students with the physical universe and its life forms and to impart an understanding of scientific methodology and of mathematical concepts and quantitative reasoning,
- to cultivate—through the study of philosophy, literature, languages, and the arts—intellect, imagination, sensibility and sensitivity,
- to deal with human social, political and economic institutions and their historical background, with human behavior and the principles of social interaction,
- and to integrate their knowledge by forming an interdisciplinary and insightful approach to learning.

Upper Division General Education

The upper division General Education program consists of courses that have been designed to meet the following interdisciplinary standards. To be considered "interdisciplinary," the syllabus must show that it is an integrative course with significant content, ideas, and ways of knowing from more than one discipline. These courses provide students with an understanding of the interrelationships among disciplines and their applications to contemporary environments, with multicultural and gender issues given special attention.

- Nine units of required upper division General Education must be selected from interdisciplinary courses (courses numbered 330-349 and 430-449).
- Courses numbered 330-349 do not have prerequisites.
- Courses numbered 430-449 may have prerequisites.
- A minimum of three semester units must be from a discipline outside the student's major.
- Students should attain junior standing before enrolling in 300 and 400 level courses.

Major Specific Courses

Some majors require specific GE courses. Students should consult the catalog for their majors' requirements or contact their advisors.

Cross Listed Courses

Many upper division General Education courses are cross listed. Students may only receive credit once for each cross listed course. For example: ENGL 431 is cross listed with ART 431. The student may choose to receive course units for either of the two courses but not both.

Double Counting

A course may meet the content requirements for two or more program areas (majors, minors, and other sub-programs) with permission of the program; however, the units for the course are counted only once toward the total units for graduation. Double counting between a program and General Education requirements is allowed; however, only six of the nine units of upper division, interdisciplinary General Education courses may be double counted between a major and General Education.

Courses in More Than One Category

A course may be found in more than one category. The student may choose which category requirements the course will fill, but a single course cannot fulfill requirements for two categories or sub-categories.

REQUIREMENTS FOR GENERAL EDUCATION

Category A: English Language, Communication and Critical Thinking (9 units)

Courses in category A approach communication as the human process of symbolic interaction, with a focus on formulation and analysis of those interactions. Students learn how to discover, evaluate and report information, how to reason inductively and deductively, and they develop the ability to distinguish matters of fact from matters of judgment or opinion. Courses emphasize the content and form of both oral and written communication in the English language, including exploration of the psychological basis and the social significance of communication, and an understanding of how language works in diverse situations. Modes of argument, rhetorical perspectives, and an understanding of the relationship of language to logic are stressed. Through active participation in written and oral communication, students develop the skills necessary for effective speaking, listening, writing and reasoning.

A-1 English Writing Courses (3 units)

ENGL 100 Composition and Rhetoric
ENGL 330 Writing in the Disciplines

A-2 Oral Communication (3 units)

COMM 101 Public Speaking
COMM 210 Interpersonal Communication
ENGL 330 Writing in the Disciplines
ENGL 483 Technical Visual Communication

A-3 Critical Thinking (3 units)

ART 330 Critical Thinking in a Visual World
BIOL 202 or MATH 202 Biostatistics
BIOL 346 or MGT 346 or MATH 346 or CHEM 346 Scientific and Professional Ethics
BIOL 430 or MATH 430 or CHEM 430 Research Design and Data Analysis
COMP 100 Computers: Their Impact and Use
COMP 101 Computer Literacy
ECON 343 or MKT 343 Capital Theory
ENGL 337 Literature of the Environment
ENGL 340 or BUS 340 or ECON 340 Business and Money in the American Novel
MATH 108 Mathematical Thinking
MATH 230 Logic
MATH 340 Statistics for Business and Economics

MATH 342 Probability and Statistics
MGT 424 Business in its Social Setting

Category B: Mathematics and Sciences (12 units)

Students study scientific methodologies as investigative tools. They improve their quantitative and rational thinking skills and apply them to the understanding of the complexity and diversity of modern problems in sciences. They learn to appreciate the influence and significance of sciences in the world's civilization, as well as the creative processes of problem solving.

Students must take a minimum of one course in each of the following subcategories. At least one course in B should include laboratory activity.

B1 Life Sciences - Biology, Chemistry, Biochemistry (3-4 units)

ANTH 330 or BIOL 330 Ecology and the Environment
ANTH 345 Bioanthropology
BIOL 100 General Biology
BIOL 200 Principles of Organismal and Population Biology
BIOL 201 Principles of Cell and Molecular Biology
BIOL 212 or PSY 212 Neurobiology and Cognitive Science
BIOL 331 Biotechnology in the Twenty-first Century
BIOL 332 Cancer and Society
BIOL 333 Emerging Public Health Issues
BIOL 344 or PSY 344 Health Psychology
BIOL 365 or PSY 365 Comparative Psychology, Ethology & Sociobiology
CHEM 100 Chemistry and Society
CHEM 110 or ANTH 110 Who Done It? An Introduction to Forensics
CHEM 121 General Chemistry I and Laboratory
CHEM 122 General Chemistry II and Laboratory
CHEM 170 Physical Sciences for the Elementary School Teacher
CHEM 341 or BUS 341 or ECON 341 Drug Discovery and Development
CHEM 343 or BIOL 343 Forensic Science
CHEM 344 Energy and Society

B2 Physical Sciences - Physics, Geology, Earth Sciences (3-4 units)

CHEM 170 Physical Sciences for the Elementary School Teacher
GEOL 121 Physical Geology
GEOL 122 Historical Geology
GEOL 300 Foundations of Earth Sciences
GEOL 321 Environmental Geology
PHYS 200 General Physics
PHYS 201 General Physics II

B3 Mathematics - Mathematics and Applications (3-4 units)

BIOL 431 or COMP 431 Bioinformatics
MATH 430 or CHEM 430 or BIOL 430 Research Design and Data Analysis
MATH 108 Mathematical Thinking
MATH 140 Calculus for Business Applications
MATH 150 Calculus
MATH 208 Modern Math for Elementary Teachers: Numbers and Problem Solving
MATH 330 Mathematics for Artists
MATH 331 History of Mathematics
MATH 340 Statistics for Business and Economics
MATH 440 Operations Research
MATH 462 Analysis of Algorithms

Category C: Fine Arts, Literature, Languages and Cultures (12 units)

Courses enable students to develop a basic appreciation of the human imagination and understand the value of personal creativity in a complex global society. Exposure to a diverse range of work in fine arts, literature, languages and cultures cultivate the student's ability to express intellectual and emotional responses by exercising subjective and objective evaluations. Awareness of diverse cultural contributions, in both historical and contemporary work, stresses the interrelationship between individual aesthetics and collective human sensibility. Numerous teaching methodologies involve active participation in the creative experience, leading to personal investigations into the cultural diversity prevalent in the visual, literary, audible, kinetic and oral traditions of human expression.

C-1 Minimum three units of Fine Arts Courses (3 units)

ART 100 Understanding Fine Arts Processes
ART 102 Children's Art Media and Methods
ART 110 Prehistoric Art to the Middle Ages
ART 111 Renaissance to Contemporary Art
ART 112 Arts of the Eastern World
ART 330 Critical Thinking in a Visual World
ART 331 Art and Mass Media
ART 332 Multicultural Art Movements
ART 333 or HIST 333 History of Southern California Chicana/o Art
ART 334 or BUS 334 The Business of Art
ART 338 or PSY 338 Psychology of Art and Artists
ART 433 Women in the Arts
MATH 330 Mathematics for Artists
MUS 333 Varieties of Musical Experience

C-2 Minimum of three units of Literature Courses (3 units)

ART 431 or ENGL 431 European Renaissance Literature and Art
ENGL 120 American Literature I
ENGL 150 British and European Literature I
ENGL 220 American Literature II
ENGL 250 British and European Literature II
ENGL 330 Writing in the Disciplines
ENGL 337 Literature of the Environment
ENGL 340 or BUS 340 or ECON 340 Business and Money in the American Novel
ART 432 or ENGL 432 or MU 432 Arts of the Harlem Renaissance
ENGL 449 Perspective on Multicultural Literature
PSY 336 Archetype West
PSY 339 or ENGL 339 Psychopathology in Literature

C-3 Languages and Cultures (6 units)

C3A: Language Courses (3 units)
COMP 444 Automata, Languages, and Computation
C3B: Multicultural Courses (3 units)
ANTH 320 World Cultures: Peoples, Places and Things
ANTH 321 World Cultures: Ethnicity in the United States
ART 332 Multicultural Art Movements
ART 432 or ENGL 432 Arts of the Harlem Renaissance
ENGL 333 Multicultural Drama in Performance/Production
ENGL 449 Perspectives on Multicultural Literature
HIST 333 or ART 333 History of Southern California Chicana/o Art
HIST 334 or ENGL 334 Narratives of Southern California
HIST 335 or ENGL 335 or ART 335 American Ethnic Images in Novels, Film and Art
MUS 333 Varieties of Musical Experience

PSY	344	Psychology and Traditional Asian Thought
LS	392	International Experience (variable credit)

Category D: Social Perspectives (12 units)
Courses in this category focus on the social, political and economic issues of institutions and cultures, with attention to contemporary and/or historical perspectives. Students develop an understanding of the social, political, historical, economic, educational and behavioral aspects of world cultures and systems and the ways in which these dimensions interact.

Students must complete a minimum of three courses—each in a different discipline—from the following list:

ANTH	102	Cultural Anthropology
ANTH	103	Human Beginnings: Biological and Cultural Evolution
ANTH	110	or CHEM 110 Who Done It? An Introduction to Forensics
ANTH	120	or ESRM 120 The World Eaters: Co-evolution of Humans and natural systems
ANTH	322	World Cultures: North America
ANTH	323	World Cultures: California to the 1850s
ANTH	332	Population and Resource Constraints
ANTH	333	Civilizations of an Ancient Landscape: World Archaeology
ANTH	334	Wars and Conflicts in the Modern World
ANTH	341	or PSY 341 Culture and Personality
ANTH	343	Anthropology of Organizations
ART	331	Art and Mass Media
ART	334	The Business of Art
ART	433	Women in the Arts
BUS	341	or ECON 341 or CHEM 341 Drug Discovery and Development
BUS	349	History of Business & Economics in North America
ECON	110	Principles of Microeconomics
ECON	111	Principles of Macroeconomics
ECON	300	Fundamentals of Economics
ECON	343	Capital Theory
EDUC	320	Education in Modern Society
ESRM	330	Environmental Institutions, Law & Regulation
HIST	211	World History: Origins of Civilizations to 1500
HIST	212	World History: Civilizations Since 1500
HIST	335	or ENGL 335 or ART 335 American Ethnic Images in Novels, Film and Art
HIST	365	Themes in World Civilizations Before 1500
HIST	366	Themes in World Civilizations Since 1500
HIST	402	Southern California Chicano History and Culture
MATH	331	or HIST 331 History of Mathematics
MGT	346	or CHEM 346 or BIOL 346 or MATH 346 or ANTH 346 Scientific and Professional Ethics
MGT	424	Business in Its Social Setting
PSY	341	or ANTH 341 Culture and Personality
PSY	366	Evolutionary Psychology, Sociobiology, and Civilization
SPED	345	or PSY 345 Individuals with Disabilities in Society

Category E: Human Psychological and Physiological Perspectives (3 units)
Courses in this category are designed to assist students in developing a lifelong understanding of themselves as psychological, social, and physiological beings. Such courses may include aspects of human sexuality, behavior, health, nutrition, and an understanding of death and dying. They may stress how humans relate within physical and social environments.

ANTH	341	or PSY 341 Culture and Personality
ART	338	or PSY 338 Psychology of Art and Artists
BIOL	212	or PSY 212 Neurobiology and Cognitive Science
BIOL	330	or PSY 330 Health Psychology
BIOL	333	Emerging Public Health Issues
BIOL	332	Cancer and Society
BIOL	365	or PSY 365 Comparative Psychology, Ethology and Sociobiology
COMP	449	Human-Computer Interaction
ENGL	339	or PSY 339 Psychopathology in Literature
PHED	101	Walking for Health
PHED	102	Seminar in Traditional Asian Martial Arts
PHED	103	Yoga
PHED	105	Zen of Surfing
PHED	302	Motor Learning, Fitness and Development in Children
PSY	100	Introduction to Psychology
PSY	210	Learning, Cognition and Development
PSY	220	Human Sexual Behavior
PSY	336	Archetype West
PSY	330	Psychology and Traditional Asian Thought
PSY	366	Evolutionary Psychology, Sociobiology and Civilization
SPED	345	or PSY 345 Individuals with Disabilities in Society

BACCALAUREATE DEGREE REQUIREMENTS

All baccalaureate degrees require completion of the requirements listed below. Degree requirements fall into three categories: general education requirements; major/minor requirements and other University requirements.

Total Units
A minimum of 120-125 units are required, depending on the major selected. No more than 70 units taken at a community college or other two-year college may be applied to this total, excluding military credit and credit by examination. A semester unit is equivalent to two-thirds of a quarter unit.

Upper Division Units
At least 40 of the total required units for graduation must be in courses numbered 300-499.

Major
Completion of a specific number and pattern of courses in one or more academic departments is defined as a major and is required for graduation.

General Education
All students must complete General Education requirements. General Education requirments can be found in this section of the catalog. A minimum of 9 units must be completed in residence at CSUCI.

Residence
At least 30 of the total units must be taken at CSUCI excluding Open University and Extension units. At least 24 of these units must be upper division, and 12 of the 30 must be in the major. At least 9 of the required 48 General Education units must be taken in residence at CSUCI.

Grade Point Average (GPA)
An overall GPA of 2.0 is required for:
1. total courses attempted;
2. CSUCI courses attempted; and
3. courses in the major

History and Government
Demonstrated competencies in U.S. History, U.S. Constitution, and California State and local government are required for graduation.

Language and Multicultural Requirement
One semester of a language other than English (e.g., foreign language, computer language, American Sign Language) with a grade of C or better is required. Students may also receive credit for speaking a language other than English (for purposes of GE, students will receive content credit but not unit credit in this case). Students' Non-English language will be evaluated through an examination. Students will also be required to complete a multicultural experience to be satisfied through an approved GE course in Category C3b.

Faculty

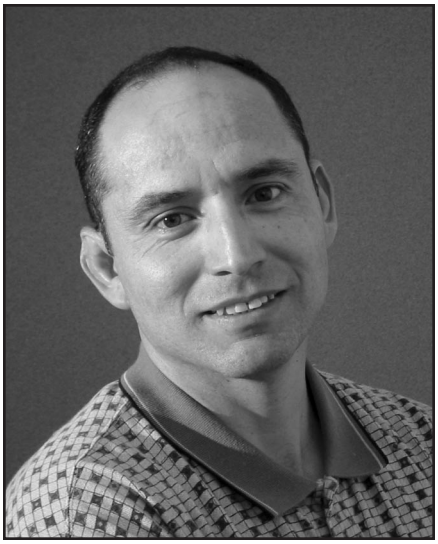
William Hampton Adams
Associate Professor of Anthropology

Dr. William Hampton Adams holds a Ph.D. and an M.A. from Washington State University, an AB from Indiana University and a Graduate Certificate in Tertiary Education, Flinders University of South Australia.

Dr. Adams has served on the faculties of Washington State University, University of Florida, Oregon State University, and Flinders University, as well as Senior Staff Archaeologist at Colonial Williamsburg. He is past President of the Society for Historical Archaeology and served on the Board of Directors for the Society of Professional Archaeologists. Dr. Adams has conducted oral histories and research on historical sites across the United States, as well as Australia, Canada, the Middle East, the Republic of the Marshall Islands, the Republic of Palau, and the Federated States of Micronesia. In the latter three countries he has been working with indigenous peoples on preserving their cultural heritage while developing their economies. He is an internationally recognized scholar in historical archaeology and in cultural heritage management.

Dr. Adams and his wife, Mel, have two young children. Their interests include gardening, hiking, and canoeing.

“Let me warn you, you who are thirsty for knowledge, against the thicket of opinions and the conflict of words. Opinions mean nothing; they may be beautiful or ugly, clever or foolish, anyone can embrace or reject them.” Hesse, Hermann 1971 Siddhartha. Bantam, New York. p.33



Frank P. Barajas
Assistant Professor of History

Raised in the once largely agricultural community of Ventura County, Dr. Frank P. Barajas understands the intellectual and economic advantages of possessing a quality education. Therefore, as an educator Professor Barajas utilizes the teaching of history not only as a means in appreciating the exercise of power through time but also as a vehicle in developing the valuable skills of critical thought and effective communication. It is his belief that individuals who enjoy these talents are better able to improve the quality of their own lives and those around them.

Students who take courses from Professor Barajas can expect thought provoking, and many times animated lectures. Persons in his class, however, will do much more than listen and learn. History assignments include: reading works that capture the milieu of a time period (spanning from Adventures of Huckleberry Finn to Borderlands/La Frontera), addressing historical problems with classmates, writing, and sharing with others research regarding individuals and topics of the past that interest them. From these exercises, Professor Barajas seeks to train agents of social change.

“The vitality of our democratic system of government depends on a well educated citizenry.” -Frank P. Barajas 2002

Lillian Vega-Castaneda
Professor of Elementary Education

Lillian Vega-Castaneda holds an Ed.D. from Harvard University, an M.A. from California State University Los Angeles and a B.A. from University of California, Irvine.

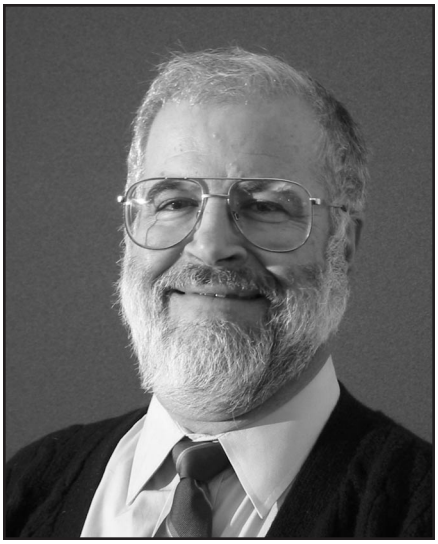
Lillian Vega-Castaneda started her career as a public school educator. She was a classroom teacher and coordinator of bilingual and Title One programs for thirteen years. Castaneda also served as a senior researcher at the Southwest Regional Laboratory (WestEd) in Los Alamitos, California, working on several national research projects on linguistic diversity. These experiences inform her practice, scholarship and service. Castaneda served the state of California on the Curriculum Development and Supplemental Materials Commission, chairing the English Language Arts Subject Matter committee.

Previously, she was on the faculty at California State University San Marcos (1992-2001). She led the development of and coordinated the (Bilingual) Cross-cultural Language and Academic Development Program across the credential and master's programs.

Dr. Vega-Castaneda has conducted research in language and literacy in various contexts and community-based education. Recent scholarship considers the impact of Proposition 227 and other legislative action on diverse students. Issues of equity, social justice and difference underscore her work.

Professor Castaneda is the parent of three young adults. She enjoys going to the movies, bookstores, and concerts. She is an avid reader, especially of mysticism and eastern thought.

"The U.S. public schools serve as the primary agents for articulating, shaping, and predicting the future successes, failures, and possibilities (or lack of) for all students. These predictions are reflected in choices made regarding curricula, approaches to teaching and learning, philosophies, and designs of programs and implementation. Our schools hold many answers toward increasing opportunities for children of color, ethnic, and linguistic minorities." -Lillian Vega-Castaneda 1995



William P. Cordeiro
Professor of Management

Dr. William P. Cordeiro has a Ph.D. in Executive Management and a MA in Management from the Peter F. Drucker Graduate School of Management of the Claremont Graduate University. He also has an MBA in Finance from the University of Southern California and a BS in Biology from the University of San Francisco.

Dr. Cordeiro comes to Channel Islands from CSU Los Angeles where he was a Professor of Management in the College of Business & Economics. At CSU Los Angeles since 1987, Dr. Cordeiro developed courses on general management, strategic planning and management, and business ethics. He was coordinator of the Capstone Course on Global Strategic Management required of all graduates.

Dr. Cordeiro primarily performs research and publishes in the areas of strategic planning, business ethics, and Japanese management issues.

Dr. Cordeiro is a partner in BCA Consulting, a small firm that specializes in information technology and business related consulting assignments for private and public organizations. The President of BCA is Sandra A. Bartik, who has been his life and business partner for over 30 years. Ms. Bartik and Dr. Cordeiro have family, friends and business interests on both coasts. They also share strong interests in theater and dance; and are enthusiastic (but slow) hikers.

"I believe that a successful graduate of our business programs must demonstrate skills in the 3Cs – Critical thinking, Cooperation in working with others, and Communication in written and oral English." -William P. Cordeiro 2002

Ivona Grzegorczyk
Associate Professor of Mathematics

Dr. Ivona Grzegorczyk received her Ph.D. in Mathematics from the University of California Berkeley in 1990 and her M.S. degree from Warsaw University in Poland. Ivona came to CSU Channel Islands from the University of Massachusetts, where she held an Associate Professor position at the Department of Mathematics. Her current interests include the fields of Algebraic Geometry (especially vector bundles on algebraic curves), Mathematics Education (especially the connection between fine arts and mathematical reasoning), and the new field of bioinformatics. She is the author of the book Mathematics and Fine Arts (2000) and many research papers. Ivona is the recipient of numerous national and international research and educational grants, and has presented her work at numerous conferences and scientific meetings. She has worked at Stanford University, the Oregon State University, the University of Massachusetts, McGill University (Canada), Henri Poincare Institute (France) and the University of Liverpool (England) among others.

Her husband Peter is a software developer and holds a Ph.D. in mathematics, and her two children, Chris and Anna, are currently in school. She has traveled widely, speaks several foreign languages, and enjoys reading, traveling, hiking, music, movies and chess games with Ira.

"The beauty, order and elegance of Mathematics is everywhere - enjoy it! " -Ivona Grzegorczyk 2002.

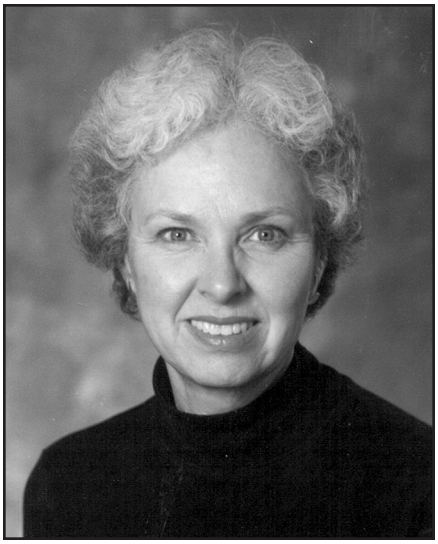
Philip D. Hampton
Associate Professor of Chemistry

Philip Hampton received his Bachelor of Arts Degree in Chemistry with honors from St. Olaf College, Northfield MN in 1984 and his Ph.D. in Organic Chemistry from Stanford University, Stanford CA in 1989. After receiving his Ph.D., Dr. Hampton performed postdoctoral research at the California Institute of Technology as the Dr. Chaim Weizmann Postdoctoral Fellow (a Caltech prize fellowship).

Dr. Hampton comes to Channel Islands from the University of New Mexico (1989-2001) where he was an Associate Professor of Chemistry. In 1996, Dr. Hampton received the prestigious Alumni Association Award for his outstanding teaching and service to students. During his tenure at the University of New Mexico, Dr. Hampton served as the chairman of the Graduate Recruitment Committee, coordinator of the organic laboratories, departmental Safety Officer, member of the university Faculty Senate, departmental search committees, and the department and university Undergraduate Committees.

His research interests include the synthesis of heterocyclic molecules that possess anti-cancer activity, and the development of fluorescence-based sensors for biological molecules. His hobbies/interests include reading, woodcarving, hiking, camping, and spending time with his wife and three-year old son.

"I view my role in the classroom as a facilitator of students' education. I strive to create an interactive atmosphere in my classes where students are encouraged to think and to ask questions. My teaching style continually evolves as I listen to student feedback on what teaching approaches help them the most." -Phillip Hampton 2002.



Joan M. Karp
Professor of Special Education

Education: Ph.D. University of Connecticut. M.S. Syracuse University. B.S. Rhode Island College.

"Ever since I was a child, school has always been a warm, comforting and inviting place where I found challenge and excitement—a place where new worlds were opened to me. I try to bring this same sense of excitement to every student with whom I work."

My research focuses on a number of areas directly related to preparing educators, such as a book on educators with disabilities. Using a story of 25 students and educators, Keller, Anderson and I wove together a text that presents the theoretical perspectives on life challenges of individuals with disabilities who desire to become or are educators.

My other scholarly work in the past few years focuses on using case studies, integrating technology into teaching, and an international study of paraprofessionals working in the classroom. Keenan and I developed a technology integration model that creates teams, called collaboratories, of undergraduate students, teachers and faculty who work together to integrate technology into instruction that the classroom teacher identifies. Recently Keenan and I wrote a chapter, "Building Meaningful Organizational Change" for a textbook on digital access and equity based on our work with Duluth Public Schools, Fond du Lac Indian Reservation and University of Minnesota Duluth teachers, students and administrators.

I conducted research, taught and administered programs at Rhode Island College, University of Washington, and University of California Santa Barbara. At UMD I received the Morse-University of Minnesota Alumni Association Award for Outstanding Contributions to Undergraduate Education and the College of Education and Human Service Professions Outstanding Faculty of the Year Award. Early in my career, I taught primary and preschool children with special needs in inner city schools in Providence, Rhode Island.

N. Jacquelyn Kilpatrick
Associate Professor of English

Dr. Kilpatrick received her Ph.D. in Literature from the University of California Santa Cruz, and an M.A. in English from California State University Fresno.

As a Fulbright Senior Scholar, Dr. Kilpatrick taught courses in Native American Literature and Film for doctoral students at the Universidad de Santiago de Compostela in Spain. She has also received National Endowment for the Humanities Fellowships for study of the interaction between indigenous and colonial cultures in Mexico and New Mexico in the 16th and 17th centuries. At her former institution, Governors State University, she taught in the English Program, directed the Integrative Studies Program, and advised the Drama Club and the Native American Students' Club. While there, she received two Students' Choice Awards, the Faculty Excellence Award, and was named Faculty Advisor of the Year in 2001.

Dr. Kilpatrick's major areas of research and teaching are Native American Literature and Renaissance Literature, primarily Shakepeare Studies. In addition to a variety of articles, chapters, essays and journal articles, she is the author of Celluloid Indians: Native Americans in Film, a historical look at the development of stereotypes of Native Americans and their depictions in American films. She is currently completing a book on fiction and poetry by Native American authors for high school teachers. Her hobbies include hiking, fly-fishing, cooking and spoiling her two cats, Wes and Livvy.

"I study literature because I want to study everything. Writing is what I do to make it all make sense." -Jacquelyn Kilpatrick, 2002

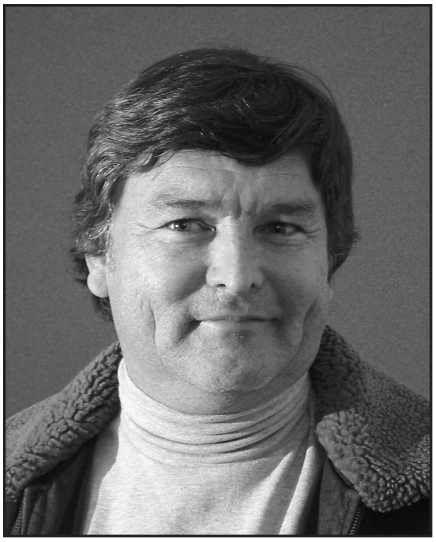
Louise Lutze-Mann
Associate Professor of Biology

Louise Lutze-Mann received a B.S. (Hons) and Ph.D. from the University of New South Wales in Sydney, Australia.

Dr. Louise Lutze-Mann has been a faculty member of the School of Biochemistry and Molecular Genetics, The University of NSW, Sydney, for the last four years. In this time she has established/coordinated a number of courses in molecular biology and life sciences. In recognition of her endeavors in this arena, she was recently awarded the Faculty of Life Sciences Teaching Award.

Prior to taking up her position in Sydney, Louise was an Assistant Research Professor at the University of California, San Francisco. Her research involved studies on the molecular mechanisms underlying cancer induction. A particular focus was a NASA-funded investigation of the cancer risks for astronauts during long-term space flight, such as the anticipated mission to Mars. These studies built on experience gained while undertaking post-doctoral research at the Children's Cancer Institute, Australia.

Louise and her husband Robert are both Australians who love the California life-style and climate. They are even prepared to concede that the beaches here are nearly as good as those Down Under! They are planning to make their home in Ventura with their dog Max and cat Paquita.



Dennis D. Muraoka
Professor of Economics

Professor Dennis D. Muraoka is a life long resident of Santa Barbara where he received his primary and secondary education from the local public schools. He attended Santa Barbara City College (SBCC) and UC Santa Barbara (UCSB), ultimately receiving his doctoral degree in economics from UCSB in 1981. While in graduate school, Dr. Muraoka was employed by the City of Oxnard as an economic analyst. He also taught economics courses at Oxnard College, Ventura College, SBCC and UCSB. Upon the completion of his graduate studies, Dr. Muraoka joined the faculty at California State University, Long Beach (CSULB). During his tenure at CSULB, he was honored by his peers with several faculty awards, including the CSULB Outstanding Professor Award, for excellence in teaching, scholarship and community service.

Dr. Muraoka is an expert in the field of natural resource and environmental economics and has authored or co-authored many articles in leading economics journals in this area. He is a pioneer and innovator in the use of technology in economics instruction having developed one of the earliest collections of new media instructional materials for economics.

Dr. Muraoka is an avid tennis player and gardener. He and his wife Mimi, a professor of nursing at SBCC, reside in Santa Barbara along with their two parrots.

Jack Reilly
Professor of Fine Arts

Jack Reilly's first encounter with art transpired at New York's Metropolitan Museum of Art, when Leonardo da Vinci's Mona Lisa was on loan from the Louvre. His parents insisted he brave the crowds and long lines for a glimpse at the renowned Renaissance masterpiece. Reilly's family eventually moved from New York City to Florida where his personal interest in art emerged as a teenager while painting designs on surfboards. In his early twenties, after taking art courses at the local community college, Reilly traveled to France and enrolled in the Paris American Academy to study painting and art history. He returned home to complete his education at Florida State University where he received a B.F.A. in painting and an M.F.A. in studio art. In 1978 Reilly moved to Los Angeles, and by the early 1980s his paintings were exhibited in museums and galleries throughout the United States. Throughout the 1990s, during his tenure as Professor of Art at California State University Northridge, Reilly explored emerging digital technologies, expanding his work into experimental film, digital video and computer generated imagery.

Articles on Reilly's work are published in periodicals such as Arts Magazine, Artweek, Los Angeles Times, Los Angeles Magazine, and in books including Inside the L.A. Artist and American Art Now. He is a recipient of a National Endowment for the Arts grant and numerous awards for his work in painting and video. His work is included in major public and private collections internationally. In addition to his ongoing commitment to curriculum development, teaching and creating art, Reilly is a veteran surfer. If he is not in the classroom or art studio, chances are he can be found at the beach, surfing the breaks of Ventura County.

"The real test for the 21st Century artist is to integrate traditional media with new technologies in order to explore, interpret, challenge and redefine artistic boundaries as they relate to life experiences." -Jack Reilly 2002

Kevin Volkan
Associate Professor of Psychology

Kevin Volkan's collection of degrees demonstrates his belief in life-long learning. He received a BA in Biology from the University of California, an MA in Psychology from Sonoma State University, an EdD in Educational Psychology from Northern Illinois University, a PhD in Clinical Psychology from The Center for Psychological Studies, and an MPH in Public Health from Harvard University. While working on these various degrees Kevin worked as a social scientist, university faculty member and administrator, and as a clinical psychologist in a state hospital and in private practice. Before coming to CSUCI, Kevin was a faculty member at Harvard Medical School where he researched ways to measure medical student and physician performance, while teaching medical students and physicians from Harvard as well as from all over the world.

Kevin's background in psychology is varied and he maintains an active interest in a number of psychological approaches to understanding human nature – including socio-biological, psychoanalytic, psychometric, and cognitive-behavioral. Additionally, he has drawn psychological insights from traditional Asian philosophies, religions, and medicine. Over the years Kevin has taught psychology courses in these areas for both undergraduate and graduate students, as well as supervised student research into these topics.

Kevin has written numerous papers and has published a book on the psychology of drug addiction.

When he is not teaching or writing, Kevin likes to practice Tai Ji, play the guitar, and spend time with his family and their two dogs. His favorite quote (which he believes holds profound psychological wisdom) is from the writer Raymond Chandler:

"When a man gets complicated, he gets unlucky"

Ching-Hua Wang
Professor of Immunology and Microbiology

Dr. Ching-Hua Wang's educational background includes a diploma from Beijing School of Foreign Languages, an M.D. degree from Beijing Medical College, a Master's degree in immunology from Beijing Medical University and a Ph.D. in immunology from Cornell University. Before joining CSUCI, she worked in the Biology Department of California State University at San Bernardino (CSUSB). She has taught numerous undergraduate and graduate level biology courses and has a strong commitment to public education and to helping all students. She was consistently ranked as one of the best instructors of the Biology Department, and many of her graduates attended medical, dental, pharmacy and other professional or graduate schools. Her research interests are to study the mechanisms of immunological resistance to infectious diseases. She has supervised many undergraduate and graduate students in their research, published numerous articles in peer-reviewed journals, and won competitive grants. She also served as Graduate Coordinator of the Master's Program of the Biology Department, Chair of the Retention, Tenure and Promotion Committee of the College of Natural Sciences, member of the Graduate Council, faculty advisor for international students, and the Vice-President of the Asian Faculty, Staff and Student Association at CSUSB. She is married to an historian and they have two children. Her interests include traveling, reading and seeing good movies.

"Live life to the fullest, amplify it further through learning and make it significant for yourself as well as for others along the way." -Ching-Hua Wang 2002

Majors and Credential

ART

THE MAJOR: The California State University Channel Islands Art major focuses on interdisciplinary studies in fine art, digital art technology, design and art history, emphasizing an innovative approach to artistic process, technique and problem solving. Through the integration of traditional media and digital technologies, courses in studio art, art history and interdisciplinary studies focus on developing a solid artistic foundation, leading to advanced work in art media and theory. In-depth study is available in the areas of two-dimensional art, three-dimensional art, time-based digital media, and communication design technology.

This program is designed for students who wish to pursue:

- Specialized study leading to a Bachelor of Arts Degree in Art
- A Liberal Studies major with a concentration in Art
- A minor in Art
- Preparation for graduate study
- Preparation for professional and academic fields in the Arts
- Teaching credential program with an emphasis in Art

CAREERS: students prepare for a wide range of opportunities in today's professional and academic fields. Careers include positions in the visual arts, graphic design, Web design, multimedia, computer graphics, digital imaging, video art, computer animation, visual effects, galleries, museums, teaching and numerous other professions in the arts.

PROGRAMS OFFERED:

Bachelor of Arts in Art
Minor in Art

CONTACT INFORMATION:

Jack Reilly, MFA, Professor of Fine Arts
Phone: (805) 437-8863
E-mail: jack.reilly@csuci.edu

REQUIREMENTS FOR THE BACHELOR OF ARTS IN ART (120 Units):

LOWER DIVISION REQUIREMENTS (24 Units):

Students are required to complete a minimum of twenty-four units of lower division Art courses in preparation for upper division studies. Courses used to meet General Education requirements may not be double counted in the Art major.

STUDIO FUNDAMENTALS (12 units)

ART	105	Drawing and Composition	3
ART	106	Color and Design	3
ART	107	Life Drawing	3
ART	108	Visual Technologies	3

ART HISTORY (6 units)

Select two courses from the following:

ART	110	Prehistoric Art to the Middle Ages	3
ART	111	Renaissance to Modern Art	3
ART	112	Arts of the Eastern World	3

STUDIO ELECTIVES (6 Units)

In selecting lower division studio elective courses (100 and 200 level), students are encouraged to enroll in courses that satisfy prerequisites for upper division study in specific areas. Transfer students may substitute similar or additional courses, provided they meet the requirements for lower division articulation in the major.

Select a minimum of two courses from the following:

ART	201	Painting	3
ART	202	Sculpture	3
ART	203	Illustration	3
ART	204	Graphic Design	3
ART	205	Multimedia	3
ART	206	Animation	3

UPPER DIVISION REQUIREMENTS (33 units)

Art majors are required to complete a minimum of thirty-three units of upper division courses that include a minimum of eighteen units selected from at least two studio/media areas of study.

PROFESSIONAL PREPARATION COURSES (7-9 Units)

Upper division Professional Preparation courses provide an understanding of current issues in the arts, application of specialized studio work, field activities and service learning.

ART	489	Arts Seminar	3
ART	492	Internship in the Arts	1-3
ART	499	Arts Capstone Project	3

ART HISTORY/INTERDISCIPLINARY COURSES (6 units)

Upper division Interdisciplinary Art History courses integrate the academic study of Art with content from related disciplines. Courses used to meet CSUCI General Education requirements may not be double counted in the major.

Select a minimum of two courses from the following:

ART	330	Critical Thinking in a Visual World	3
ART	331	Art and Mass Media	3
ART	332	Multicultural Art Movements	3
ART	333	History of Southern California Chicana/o Art	3
ART	334	The Business of Art	3
ART	335	American Ethnic Images in Novels, Film and Art	3
ART	338	Psychology of Art and Artists	3
ART	430	Modern and Contemporary Art	3
ART	431	European Renaissance Literature and Art	3
ART	432	Arts of the Harlem Renaissance	3
ART	433	Women in the Arts	3

MEDIA AND PROCESSES COURSES (6 units)

Students are encouraged to pursue an integrated approach in the exploration of media and artistic processes by integrating traditional methods of art production with digital technologies in at least two areas of study. Assignments incorporate projects created with basic art materials working in conjunction with digital art technologies that lead toward development of artistic skills and computer literacy.

Select a minimum of two courses from the following:

ART	310	Two-Dimensional Media and Processes	3
ART	311	Three-Dimensional Media and Processes	3
ART	312	Time -Based Digital Media and Processes	3
ART	313	Communication Design Technology Media and Processes	3

STUDIO TOPICS COURSES (6 units):

Upon completion of prerequisite media and process courses, select studio topics courses from at least two areas of study. Assignments focus on the development of artistic concepts, visual continuity and increased competency with media and applied techniques that result in the creation of individual art projects. (3 units, repeatable one time for additional credit).

Select a minimum of two courses from the following:

ART	320	Studio Topics: Two-Dimensional Art	3-3
ART	321	Studio Topics: Three-Dimensional Art	3-3
ART	322	Studio Topics: Time-Based Digital Art	3-3
ART	323	Studio Topics: Communication Design Technology	3-3
ART	326	Digital Technologies: 3D Computer Animation	3-3

ADVANCED ARTISTIC PROBLEMS COURSES (6 units):
Advanced artistic problems courses provide students with the opportunity to continue in-depth investigations working with specific media, leading to the development of sound artistic concepts and proficiency in advanced artistic processes. Continued exploration into the integration of media and technologies lead students to the development of a congruent body of work. Creation and presentation of a professional portfolio is a required component of the course work. (3 units, repeatable one time for additional credit).

Select a minimum of two courses from the following:

ART	420	Advanced Artistic Problems: Two-Dimensional Art	3-3
ART	421	Advanced Artistic Problems: Three-Dimensional Art	3-3
ART	422	Advanced Artistic Problems: Time-Based Digital Art	3-3
ART	423	Advanced Artistic Problems: Communication Design Technology	3-3

REQUIRED SUPPORTING AND OTHER GE COURSES (63 units):

University Electives	9
American Institutions Requirement	6
General Education	48

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

BIOLOGY

Biology is the study of life, its variety and processes. It emphasizes the relationship between structure and function in living systems and their interactions with the environment. The discipline is dynamic and rapidly advancing with the development of biotechnology and information technology. The major in biological sciences is designed for students who wish to enter graduate or health professional schools, the teacher credential program, or to seek careers in science education, business, industry or government. The minor will allow students in other majors to get a solid background in biology with further room to explore in-depth knowledge in a selected area. The Biology Program provides its students with a strong theoretical foundation in biology, combined with extensive, hands-on laboratory experiences using state-of-the-art technology. Students take a series of core courses augmented by upper-division electives selected from areas of special interest.

PROGRAMS OFFERED:

Bachelor of Science in Biology
Bachelor of Science in Biology with an Emphasis in Cell and Molecular Biology
Minor in Biology
Certificate in Biotechnology

CONTACT INFORMATION:

Ching-Hua Wang, PhD, Professor of Biology
Phone: (805) 437-8870
Email: Ching-Hua.Wang@csuci.edu

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BIOLOGY (120 units):

LOWER DIVISION REQUIREMENTS (31 units):

(12 units of the following will be counted toward lower division GE credits, 4 units in each of three different disciplines)

1. Biology
   - BIOL 200 Principles of Organismal and Population Biology....4
   - BIOL 201 Principles of Cell and Molecular Biology....4
   - BIOL 202 Biostatistics....3

2. Mathematics
   - MATH 150 Calculus I....4

3. Chemistry
   - CHEM 121 General Chemistry I....4
   - CHEM 122 General Chemistry II....4

4. Physics
   - PHYS 200 General Physics I....4
   - PHYS 201 General Physics II....4

For General Biology and Pre-Professional Students:

UPPER DIVISION REQUIREMENTS (32 units):

1. Organic Chemistry
   - CHEM 311 & 312 Organic Chemistry I....4
   - CHEM 314 & 315 Organic Chemistry II....4

(Organic Chemistry I & II taken at the 200 levels from community colleges are accepted as a year (8 units) of organic chemistry for the Biology major.)

2. Biology
   - BIOL 300 Cell Physiology....4
   - BIOL 302 Genetics and Evolution....3
   - BIOL 330* Ecology and the Environment....4
   - BIOL 346* Scientific and Professional Ethics....3
   - BIOL 400 Molecular Biology and Molecular Genetics....4

3. Computing in Biology
   Select one of the following courses:
   - BIOL 410 Computer Applications in Biomedical Fields....3
   - BIOL 430* Research Design and Data Analysis....3

4. Service Learning
   A minimum of 2 units taken from the following:
   - BIOL 494 Independent Research....2
   - BIOL 497 Directed Study....2

5. Capstone
   - BIOL 499 Senior Capstone Colloquium....1

(Courses with * are double-counted toward UD GE credits.)

ELECTIVES IN BIOLOGY (15 UNITS):

A minimum of 15 units chosen from 300 to 400 level upper division biology courses, with at least one lab-based course and only one course that could be taken at 300 level (no courses from BIOL 331 to 333 would be counted toward the major). CHEM 318 or CHEM 400 could also be taken to satisfy the electives.

REQUIRED SUPPORTING AND OTHER GE COURSES (42 units):

- ENGL 330 Writing in the Disciplines....3
- American Institutions Requirement....6
- Other GE Courses in Categories A-E....33

For Biology Students in Cell and Molecular Biology Emphasis:

UPPER DIVISION REQUIREMENTS (40-41 units):

1. Organic Chemistry and Biochemistry (7 Units):

- CHEM 311 Organic Chemistry I....3
- CHEM 312 Organic Chemistry I Laboratory....1
- CHEM 318 Biological Chemistry....3

(Note: Students completing the following courses to satisfy this category will obtain a Minor in Chemistry in addition to a Major in Biology:

- CHEM 311 Organic Chemistry I....3
- CHEM 312 Organic Chemistry I Laboratory....1
- CHEM 314 Organic Chemistry II....3
- CHEM 315 Organic Chemistry II Laboratory....1
- CHEM 400 Biochemistry....4

Organic Chemistry I & II taken at the 200 levels from community colleges are accepted as a year (8 units) of organic chemistry for the Biology major.)

2. Biology (27 Units):

- BIOL 300 Cell Physiology....4
- BIOL 301 Microbiology....4
- BIOL 302 Genetics and Evolution....3
- BIOL 330* Ecology and the Environment....4
- BIOL 346* Scientific and Professional Ethics....3
- BIOL 400 Molecular Biology and Molecular Genetics....4
- BIOL 401 Biotechnology and Recombinant DNA Technologies....5

3. Computing in Biology (3-4 Units)
BIOL 430* Research Design and Data Analysis 3
BIOL 431* Bioinformatics.....4

4. Service Learning (2 Units)
BIOL 492 Biotech Internship.....2-3
BIOL 494 Independent Research.....2
BIOL 497 Directed Study.....2

5. Capstone (1 Unit):
BIOL 499 Senior Capstone Colloquium.....1

(Courses with * are double-counted toward UD GE credits.)

ELECTIVES IN BIOLOGY (10 UNITS):

A minimum of 10 units chosen from 400 level courses, excluding BIOL 410.

REQUIRED SUPPORTING AND OTHER GE COURSES (38-39 units):

ENGL 330 Writing in the Disciplines.....3
American Institutions Requirement.....6
Other GE Courses in Categories A-E.....29-30

REQUIREMENTS FOR THE CERTIFICATE IN BIOTECHNOLOGY (24-25 units):

(For students with a B.S. degree in biology pursuing a certificate in biotechnology)

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1. B.S. degree in biology (may be concurrent);
2. Completion of the following courses with C or better grades:
   CHEM 318 or 400 Biological Chemistry or Biochemistry I.....3-4
   BIOL 401 Biotechnology and Recombinant DNA Technology.....5
   BIOL 420 Cellular and Molecular Immunology.....3
   BIOL 431 Bioinformatics.....4
3. Complete another 6 units of UD biology courses in consultation with the program director;
4. Complete a Biotech Internship course;
5. Complete the Capstone course;
6. Approval by the program director.

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

BUSINESS

The Business Program has a liberal arts and interdisciplinary focus. Students learn skills related to the practice of the business disciplines: analytical thinking, mathematics/logic, oral and written communication, and teamwork. Students also learn the fundamental principles of accounting, economics, finance, information systems, management, and marketing as applied in a variety of organizational settings. Several courses will involve students in service learning through community based research and participation projects. A distinguishing aspect of the Business Program is the requirement to take courses developed in conjunction with disciplines outside the traditional business curriculum. Examples include courses with Anthropology, Economics, English, Fine Arts, and History. In addition, a Capstone Course will provide students with the opportunity to integrate their knowledge through a Global Strategy Simulation exercise. An objective of the Business Program is to prepare students for working in a variety of organizations – both public and private. The degree can also prepare students for several types of graduate school and professional school studies: MBA, MPA, law school.

PROGRAMS OFFERED:

Bachelor of Science in Business
Option in Management
Minor in Business Management

CONTACT INFORMATION:

William P. Cordeiro, PhD, Professor of Management
Phone: (805) 437-8860 Fax: (805) 437-8864
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PROPOSED COURSE OF STUDY:

FRESHMAN YEAR (30 Units)

ECON 110 Principles of Microeconomics
ENGL 100 Composition & Rhetoric I
MATH 140 Calculus for Business & Economics (or)
MATH 150 Calculus
GE Section E
GE Section B-1

ECON 111 Principles of Macroeconomics
CIS 110 Business Computer Systems
American Institutions Requirement
GE Section B-2
GE Section C-1

SOPHOMORE YEAR (30 Units)

ACCT 210 Financial Accounting
BUS 110 Business Law
American Institutions Requirement
GE Section C-2
GE or Electives

ACCT 220 Managerial Accounting
GE or Electives
GE or Electives
GE or Electives
GE or Electives

JUNIOR YEAR (30 Units)

ACCT 300 Applied Managerial Accounting

ECON 310 Intermediate Microeconomics (or)
ECON 329 Managerial Economics

MATH 340 Statistics for Business & Economics
MGT 307 Management of Organizations
MGT 346 Scientific & Professional Ethics
CIS 310 Management Information Systems
ENGL 483 Technical Visual Communication
ECON 311 Intermediate Macroeconomics (or)
ECON 320 Money & Banking
FIN 300 Business Finance

GE Interdisciplinary can include any of the following:
BUS 340 Business & Money in the American Novel
BUS 341 Drug Discovery & Development
BUS 339 The Business of Art
BUS 343 Anthropology of Organizations
BUS 349 History of Business & Economics in North America
ECON 343 Capital Theory

SENIOR YEAR (30 Units)

MATH 440 Operations Research
MKT 310 Principles of Marketing
GE Interdisciplinary Outside Business Major
Electives
Electives

GE Interdisciplinary can include any of the following:
BUS 340 Business & Money in the American Novel
BUS 341 Drug Discovery & Development
BUS 339 The Business of Art
BUS 343 Anthropology of Organizations
BUS 349 History of Business & Economics in North America
ECON 343 Capital Theory

BUS 499 Capstone: Global Strategic Simulation
Electives
Electives
Electives

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BUSINESS (120 Units):

LOWER DIVISION REQUIREMENTS (24 Units):

ACCT 210 Financial Accounting....3
ACCT 220 Managerial Accounting....3
BUS 110 Business Law....3
CIS 110 Business Computer Systems....3
ECON 110 Principles of Microeconomics....3
ECON 111 Principles of Macroeconomics....3
ENGL 100 Composition & Rhetoric I....3
MATH 140 Calculus for Business & Economics (or)....3
MATH 150 Calculus....4

UPPER DIVISION REQUIRED MAJOR COURSES (36 Units):

ACCT 300 Applied Managerial Accounting....3
BUS 499 Capstone: Global Strategic Simulation....3
CIS 310 Management Info Systems....3

ECON 310 Intermediate Microeconomics (or)....3
ECON 329 Managerial Economics....3

ECON 311 Intermediate Macroeconomics (or) 3
ECON 320 Money & Banking 3

ENGL 483 Technical Visual Communication....3
FIN 300 Business Finance 3
MATH 340 Statistics for Business & Economics....3
MATH 440 Operations Research....3
MGT 307 Management of Organizations 3
MGT 346 Scientific & Professional Ethics 3
MKT 310 Principles of Marketing 3

UPPER DIVISION INTERDISCIPLINARY MAJOR COURSES (6 Units):

BUS 341 Drug Discovery & Development (CHEM) 3
BUS 343 Anthropology of Organizations (ANTH) 3
BUS 340 Business and Money in the American Novel (ENGL) 3
BUS 339 The Business of Art (ART)....3
BUS 349 History of Business & Economics in North America (HIST) 3
ECON 343 Capital Theory (FIN)....3

ELECTIVES (6 Units):

BUS 410 Special Topics in Business 3
BUS 420 Cases in Strategy 3
BUS 424 Business in Its Social Setting 3
MGT 310 Management of International Businesses....3
MGT 325 Entrepreneurial Management 3
MGT 425 Management of Educational Organizations 3
MGT 426 Management of Healthcare Organizations 3
MGT 427 Management of Not-for-Profit Organizations 3

REQUIRED SUPPORTING AND OTHER GE COURSES (48 units):

Upper Division Interdisciplinary courses outside Business Major....3
American Institutions Requirement 6
Other GE Courses in Categories A-E....39

REQUIREMENTS FOR THE OPTION IN MANAGEMENT (15 units):

Management Option requires 15 units from the following courses, which will reduce available electives:

All four of the following courses:
MGT 310 Management of International Businesses....3
MGT 325 Entrepreneurial Management 3
BUS 420 Cases in Strategy 3
BUS 424 Business in Its Social Setting 3

One of the following courses:
MGT 421 Human Resource Management 3
MGT 425 Management of Educational Organizations 3
MGT 426 Management of Healthcare Organizations 3
MGT 427 Management of Not-for-Profit Organizations 3

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

COMPUTER SCIENCE

The Computer Science degree offers latest, cutting edge education for various industrial and applied fields. The program will prepare students for careers in high-tech, computer and Internet driven industries, where interdisciplinary, dynamic and innovative professionals trained in latest technologies are increasingly sought. Students will be given a strong background in computer hardware and software, as well as a substantial amount of experiential learning. The program will stress interdisciplinary applications in other sciences and business.

PROGRAMS OFFERED:

Bachelor of Science in Computer Science
Minor in Computer Science

CONTACT INFORMATION:

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Email: ivona.grze@csuci.edu

PROPOSED COURSE OF STUDY:

FRESHMAN YEAR (30 Units)

ENGL 100	Composition and Rhetoric	3 (G.E. A1)
MATH 150	Calculus 1	4 (G.E B3)
COMP 150	Object Oriented Programming	4
Gen. Ed.	Section A, C, D, or E	3
MATH 151	Calculus 2	4
MATH 230	Logic	3 (G.E. A3 or C3)
COMP 151	Data Structures and Program Design	3
COMP 162	Comp. Architecture and Assembly Language	3
Gen. Ed.	Section A, C, D, or E	3

SOPHOMORE YEAR (28-31 Units)

MATH 240	Linear Algebra	3
COMP 232	Programming Languages	3
COMP 262	Computer Organization and Architecture	3
MATH 300	Discrete Mathematics	3
MGT 346	Scientific and Professional Ethics	3 (G.E. D)
Select one 2 semester science sequence and an additional science course (one lab section required) in Physics, Biology, or Chemistry		13-16 (G.E. B1 and B2)

JUNIOR YEAR (18 Units + G.E.)

MATH 344	Analysis of Algorithms	3
COMP 344	Automata, Languages and Computation	3
COMP 362	Operating Systems and System Architecture	3
MATH 342	Probability and Statistics	3 (G.E. A3
COMP 350	Software Engineering	3

SENIOR YEAR (20-21 Units + Electives)

COMP 420	Database Theory and Design	3
COMP 447	Societal Issues in Computing	3 (G.E. D)
MATH 451	Numerical Analysis	3
COMP 464	Computer Graphics I	3
COMP 499	Senior Colloquium	1

Choose at least 3 Computer Science Electives from the following list:

COMP 430	Design of Compilers	3
COMP 431	Bioinformatics	3
COMP 466	Computer Graphics II	3
COMP 469	AI/Neural Nets	3
MATH 440	Operation Research	3
ENGL 434	Technical Writing	3
COMP 485	Human Comp. Interaction	3
COMP 424	Security	3
COMP 429	Networks	3
COMP 432	Advanced Object Oriented Programming	3
COMP 490	Topics in Computer Science	3
COMP 492	Internship	3
COMP 494	Independent Research	3
COMP 497	Directed Study	3
COMP 499	Senior Colloquium	1

The choice of electives should reflect student specialization and requires approval by the student's advisor. Students are cautioned against assuming that courses taken before such approval will be acceptable.

General Education Included in Major Requirements (24 Units):

MATH 150	Calculus 1	4 (G.E. B3)
MATH 230	Logic	3 (G.E. A3)
MGT 346	Scientific and Professional Ethics	3 (G.E. D)
COMP 344	Automata, Languages and Computation	3 (G.E. C3)
COMP 450	Societal Issues in Computing	3 (G.E. D)
Misc. Sciences		8 (G.E. B1, B2)

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN COMPUTER SCIENCE (125 Units):

LOWER DIVISION REQUIREMENTS (43-46 units):

MATH 150	Calculus 1	4
MATH 151	Calculus 2	4
MATH 230	Logic	3 (G.E. A3 or C3)
COMP 150	Object Oriented Programming	4
COMP 151	Data Structures and Program Design	4
COMP 162	Comp. Architecture and Assembly Language	3
MATH 240	Linear Algebra	3
COMP 232	Programming Languages	3
COMP 262	Computer Organization and Architecture	3
Select one 2 semester science sequence and an additional science course (one lab section required) in Physics, Biology, or Chemistry		12-15 (G.E. B1 and B2)

UPPER DIVISION REQUIREMENTS (34 Units):

MATH 300	Discrete Mathematics	3
MGT 346	Scientific and Professional Ethics	3
MATH 344	Analysis of Algorithms	3
COMP 362	Operating Systems and System Architecture	3
MATH 342	Probability and Statistics	3
COMP 350	Software Engineering	3
COMP 420	Database Theory and Design	3
COMP 444	Automata, Languages and Computation	3
COMP 447	Societal Issues in Computing	3 (G.E. D)
MATH 451	Numerical Analysis	3
COMP 464	Computer Graphics I	3
COMP 499	Senior Colloquium	1

MAJOR ELECTIVES (9-10 Units)

COMP 430	Design of Compilers	3
COMP 431	Bioinformatics	4
COMP 466	Computer Graphics II	3
COMP 469	AI/Neural Nets	3
MATH 440	Operation Research	3

ENGL	482	Technical Writing 3
COMP	449	Human Computer Interaction 3
COMP	424	Security 3
COMP	429	Networks 3
COMP	462	Advanced Object Oriented Programming 3
COMP	490	Topics in Computer Science 3
COMP	492	Internship 3
COMP	494	Independent Research 3
COMP	497	Directed Study 3
COMP	499	Senior Colloquium 1

REQUIRED SUPPORTING AND OTHER GE COURSES (42 Units):

Electives 6
American Institutions Requirement 6
General Education 30

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

ENGLISH

The major in English at California State University Channel Islands focuses on the study of Literature, Writing and Criticism in an interdisciplinary context. Students develop a sound foundation in all three areas while developing analytical and critical skills, and the ability to explore, organize, and articulate ideas through writing. Literature and language are significant cultural phenomena that shape and are shaped by particular contexts; therefore, this program addresses the historical and cultural significance of English as a language and as a body of texts.

Course work in the English program is completed in three areas. Foundation courses provide the tools for intellectual discussion of materials. Interdisciplinary courses provide the student an opportunity to make connections with different ideas, different approaches and different ways of knowing. The required sequence provides for more in-depth investigation in a specialized field of Multicultural Literature, Writing or Education. In addition, the student may choose to pursue an emphasis in Creative Writing or Multicultural Literature, or a certificate in Technical Writing. A minor in English is also available.

English majors will keep a portfolio of work produced in each of their required courses and electives. The student will work closely with his or her advisor in developing the portfolio, which will be reviewed by the instructor as a prerequisite to the capstone/service learning course. At the end of the capstone, when all course requirements have been fulfilled for the major, there will be a review of the final portfolio.

PROGRAMS OFFERED:

Bachelor of Arts in English
Bachelor of Arts in English with an emphasis in Creative Writing
Bachelor of Arts in English with an emphasis in Multicultural Literature
Minor in English
Certificate in Technical Writing

CONTACT INFORMATION:

N. Jacquelyn Kilpatrick, PhD, Associate Professor of English
Phone: (805) 437-8865,
E-mail: j.kilpatrick@csuci.edu

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN ENGLISH (120 Units):

LOWER DIVISION REQUIREMENTS (12 Units):

Students seeking the Bachelor of Arts in English must have fulfilled the lower division writing requirement (at CSUCI ENGL 100 Composition and Rhetoric). In addition, four courses in literature survey courses (or the equivalent) are required in preparation for upper division studies.

ENGL 120 American Literature I 3
ENGL 150 British and European Literature I 3
ENGL 220 American Literature II 3
ENGL 250 British and European Literature II 3

UPPER DIVISION REQUIREMENTS (42 Units):

The upper division English core is designed to provide students with a broad background in literature, solid foundations in theory and criticism, and experience in writing to learn. (English majors may not use courses in this section to fulfill General Education requirements.)

ENGL 310 Research Methods 3
ENGL 315 Introduction to Linguistics 3
ENGL 326 Major British and European Authors 3
ENGL 327 Major American Authors 3
ENGL 328 Mythology 3
ENGL 330 Writing in the Disciplines 3
ENGL 410 Shakespeare 3
ENGL 430 Literary Theory 3
ENGL 449 Perspectives on Multicultural Literature 3
ENGL 499 Capstone Project/ Senior Seminar 3

Required Interdisciplinary Courses (6 units):
The rationale behind these courses is interdisciplinarity. Each course has been designed to interest students from across the university and to allow students to experience content, methodologies, and "ways of knowing" from more than one discipline area. Courses may be cross-listed and possibly co-taught with various programs and majors. These courses are suitable as upper division general education, interdisciplinary courses and may count for GE content and English major units. (See General Education requirements for details on double-counting.)

ENGL 333 Multicultural Drama in Performance/Production 3
ENGL 334 Narratives of Southern California 3
ENGL 335 American Ethnic Images in Novels and Film 3
ENGL 337 Literature of the Environment 3
ENGL 339 Psychopathology in Literature 3
ENGL 340 Business and Money in the American Novel 3
ENGL 431 European Renaissance Literature and Art 3
ENGL 432 Arts of the Harlem Renaissance 3

Required Sequence (6 units):
The sequence requirement allows students to explore an area of interest in more depth. Students choose one of the following: ENGL 449, ENGL 460, ENGL 475 or ENGL 482, and at least one of the courses listed below the chosen course. Or, the student may choose two courses in a culturally-based literature (ENGL 450, 451, 452, or 453) after completing the ENGL 449 requirement.

ENGL 449 Perspectives on Multicultural Literature 3
  ENGL 450 Native American Literature 3
  ENGL 451 African/African American Literature 3
  ENGL 452 Asian/Asian American Literature 3
  ENGL 453 Hispanic/Hispanic American Literature 3

ENGL 460 Perspectives on Creative Writing 3
  ENGL 461 Fiction Writing 3
  ENGL 462 Poetry Writing 3
  ENGL 463 Writing for the Stage and Screen 3
  ENGL 464 Creative Non-Fiction 3

ENGL 475 Language in Social Context 3
  ENGL 476 Language Development and Assessment 3
  ENGL 477 Literature for English Secondary Education 3
  ENGL 478 Writing for English Secondary Education 3

ENGL 482 Technical Writing* 3
  ENGL 483 Technical Visual Communication 3
  ENGL 484 Technical Writing for the Sciences 3

*The Technical Writing sequence for English majors requires ENGL 482 and one other course in Technical Writing. However, unless undertaken as part of the sequence requirement, ENGL 482 is not a prerequisite for 483 or 484.

EMPHASIS IN CREATIVE WRITING (18 Units):

The Creative Writing Emphasis gives the English major an opportunity to pursue his or her interests in creative writing of various forms. The

culmination of the emphasis is the Creative Writing project, which the student chooses in consultation with her or his advisor. The product of that course will be a completed work of publishable quality in one of the genres addressed in the course work. Courses may fulfill the "required sequence" requirement as well as counting toward the emphasis. The emphasis requires completion of all English major requirements, plus each of the following:

ENGL 460 Perspectives on Creative Writing 3
ENGL 461 Fiction Writing 3
ENGL 462 Poetry Writing 3
ENGL 463 Writing for the Stage and Screen 3
ENGL 464 Creative Non-Fiction 3
ENGL 465 Creative Writing Project 3

EMPHASIS IN MULTICULTURAL LITERATURE (18 Units):

The Multicultural Literature Emphasis gives the English major an opportunity to pursue his or her interests in studying the literature of various cultures and ethnic groups. The culmination of the emphasis is the Multicultural Literature project, which the student chooses in consultation with his or her advisor. The product of that course will be a completed work which addresses the literature (broadly defined as fiction, non-fiction, poetry, drama and film) addressed in the course work. Courses may fulfill the "required sequence" and core requirement as well as counting toward the emphasis. The emphasis requires completion of all English major requirements, plus each of the following:

ENGL 449 Perspectives on Multicultural Literature 3
ENGL 450 Native American Literature 3
ENGL 451 African/African American Literature 3
ENGL 452 Asian/Asian American Literature 3
ENGL 453 Hispanic/Hispanic American Literature 3
ENGL 454 Multicultural Literature Project 3

REQUIRED SUPPORTING AND OTHER GE COURSES (66 Units):

Electives 12
American Institutions Requirement 6
General Education 48

REQUIREMENTS FOR THE CERTIFICATE IN TECHNICAL WRITING (18 Units):

The Certificate in Technical Writing provides an opportunity for students from various disciplines to pursue interests in Technical Writing, and the certificate will prove valuable in a variety of career choices. The culmination of the certificate is the Special Topics course, which may be an internship or may be a project the student chooses in consultation with his or her advisor. Courses may not fulfill the "required sequence" requirement as well as count toward the certificate. The certificate requires each of the following:

ENGL 330 Writing in the Disciplines 3
ENGL 310 Research Methods 3
ENGL 482 Technical Writing 3
ENGL 483 Technical Visual Communication 3
ENGL 484 Technical Writing for the Sciences 3
ENGL 485 Technical Writing Project 3

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

THE MAJOR: Today's environmental problems call for individuals who are educated in more than one discipline, highly trained in technical skills, and aware of the political, economic, and social dimensions of environmental decisions. The Bachelor of Science in Environmental Science and Resource Management provides solid training in basic physical, biological, and social sciences, and application of management science to reduce adverse impacts of human activity on the environment and to maximize the benefits that accrue from environmental resources. This curriculum prepares students for professional careers in Environmental Science and Resource Management and for subsequent graduate study.

In the narrowest sense, environmental science is the study of the impact of human systems on physical and biological systems, and the dependence on natural resources by human systems. In a broader sense, environmental science is the study of the interaction and co-evolution of human, physical, and biological systems. Natural science is the study of physical and biological systems. Social science is the study of human systems – economic systems, political systems, human perceptions, and human interactions. Environmental science requires integral knowledge of both natural and social science. Resource management is concerned with the most effective means of avoiding damage to environmental assets and extracting beneficial uses of environmental resources, within the context of social institutions. Effective resource management considers benefits and costs, uncertainties and risks, limits of knowledge, institutional constraints, and social and political forces.

The B.S. program has two emphases: environmental science and resource management. This program prepares graduates specializing in environmental science who understand basic principles of resource management, and graduates specializing in resource management who understand basic principles of environmental science. Most required courses are those offered in related disciplines. The curriculum fosters cross-disciplinary communication in the several required courses common to both degree programs and particularly in the Environmental Science and Resource Management courses.

CAREERS: For graduates completing the program of study required for the BS degree in Environmental Science and Resource Management, there are ample career opportunities working on environmental problems in industry, government, and non-profit organizations. The degree will also prepare students for graduate programs in either Environmental Science or Resource Management. For example, students could pursue a Ph.D. in Environmental Science at UCLA or in Environmental Science and Policy at U.C. Santa Barbara.

PROGRAM OFFERED:

Bachelor of Science in Environmental Science and Resource Management
- Emphasis in Environmental Science
- Emphasis in Resource Management

CONTACT INFORMATION:

Philip Hampton, PhD, Associate Professor of Chemistry
Phone: (805) 437-8869
E-mail: phampton@csuci.edu

PROPOSED COURSE OF STUDY

FRESHMAN YEAR (31 Units)

BIOL	200	Principles of Organismal and Population Biology	4
BIOL	201	Principles of Cell and Molecular Biology	4
CHEM	121	General Chemistry I	4
CHEM	122	General Chemistry II	4
ECON	110	Principles of Microeconomics	3
ECON	111	Principles of Macroeconomics	3
ENGL	100	Composition and Rhetoric I	3
American Institutions Requirement			3
GE course			3

SOPHOMORE YEAR (29 Units)

ANTH 102, 103, 120, or 332			3
GEOL 121 or PHYS 200			4
MATH	150	Calculus I	4
MATH 202, 340, or 342			3
American Institutions Requirement			3
Elective			3
Elective			3
Elective			3
GE course			3

JUNIOR YEAR (31 Units)

BIOL	330	Ecology and the Environment	4
ECON	310 or 329		3
ENGL	330	Writing in the Disciplines	3
ENGL	337	Literature of the Environment	3
ESRM	328	Introduction to Geographical Information Systems	3
ESRM	330	Environmental Institutions, Law and Regulation	3
Elective in the emphasis			3
Elective			3
GE course			3
GE course			3

SENIOR YEAR (29 Units)

ESRM	499	Capstone	3
ECON	362	Introduction to Environmental Economics	3
GEOL	321	Environmental Geology	3
Required course in the emphasis			3
Required course in the emphasis			4 or 2+2
Elective in the emphasis			3
Elective in the emphasis			3
Elective			4
Elective			3

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT (120 Units):

LOWER DIVISION REQUIREMENTS (36 Units):

BIOL	200	Principles of Organismal and Population Biology	4
BIOL	201	Principles of Cell and Molecular Biology	4
CHEM	121	General Chemistry I and Laboratory	4
CHEM	122	General Chemistry II and Laboratory	4
ECON	110	Principles of Microeconomics	3
ECON	111	Principles of Macroeconomics	3
MATH	150	Calculus I	4

(MATH 151 Calculus II is also recommended)

Select one course from each of the following sets of courses:

1. ANTH 102 Cultural Anthropology 3
   ANTH 103 Human Beginnings: Biological and Cultural ..... Evolution 3
   ANTH 120 The World Eaters: Co-evolution of Human and Natural Systems 3
   ANTH 322 World Cultures: North America 3

2. GEOL 121 Physical Geology 4
   PHYS 200 General Physics I 4
   (PHYS 201 General Physics II is also recommended)

3. MATH 202 Biostatistics 3
   MATH 340 Statistics for Business and Economics 3
   MATH 342 Probability and Statistics 3

UPPER DIVISION REQUIREMENTS (28 Units):

BIOL 330 Ecology and the Environment 4
ECON 362 Introduction to Environmental Economics 3
ENGL 330 Writing in the Disciplines 3
ENGL 337 Literature of the Environment 3
ESRM 328 Introduction to Geographical Information Systems 3
ESRM 330 Environmental Institutions, Law, and Regulation 3
ESRM 499 Capstone 3
GEOL 321 Environmental Geology 3

ECON 310 Intermediate Microeconomics 3
Or
ECON 329 Managerial Economics 3

All students must select either the Environmental Science Emphasis or the Resource Management Emphasis and take the associated coursework.

ENVIRONMENTAL SCIENCE EMPHASIS REQUIREMENTS (16 Units):

BIOL 432 Principles of Epidemiology and Environmental Health 3
CHEM 250 Quantitative Analysis 2
CHEM 251 Quantitative Analysis Laboratory 2

A total of nine units from the following courses:

BIOL 301 Microbiology 4
BIOL 310 Animal Biology and Ecology 4
BIOL 311 Plant Biology and Ecology 4
BIOL 312 Marine Biology 4
BIOL 331 Biotechnology in the 21st Century 2
BIOL 333 Emerging Public Health Issues 2
BIOL 402 Toxicology 3
BIOL 427 Developmental Biology 3
BIOL 428 Biology of Cancer 2
CHEM 311 Organic Chemistry I 3
CHEM 312 Organic Chemistry I Laboratory 1
CHEM 314 Organic Chemistry II 3
CHEM 315 Organic Chemistry II Laboratory 1
CHEM 318 Biological Chemistry 3
CHEM 333 Energy and Society 3
ESRM 481 Topics in Environmental Pollution 3
MATH 430 Research Design and Data Analysis 3
PHYS 201 General Physics II 4

RESOURCE MANAGEMENT EMPHASIS REQUIREMENTS (16 Units):

ECON 486 Introduction to Econometrics 3
ECON 488 Quantitative Methods in Environmental Economics 4

A total of nine units from the following courses:

ECON 443 Capital Theory 3
ECON 462 Environmental Economics 3
ECON 463 Energy Economics 3
ECON 464 Natural Resource Economics 3
ESRM 332 Population and Resource Constraints 3
ESRM 410 Environmental Impact Analysis 3
ESRM 482 Topics in Environmental Planning and Resource Management 3
ESRM 483 Topics in Global Resource Management 3
MGT 307 Management of Organizations 3
MGT 428 Management for Science/ Technology Organizations 3

REQUIRED SUPPORTING AND OTHER GE COURSES (40 units):

University Electives 16
American Institutions Requirement 6
Other GE Courses 18

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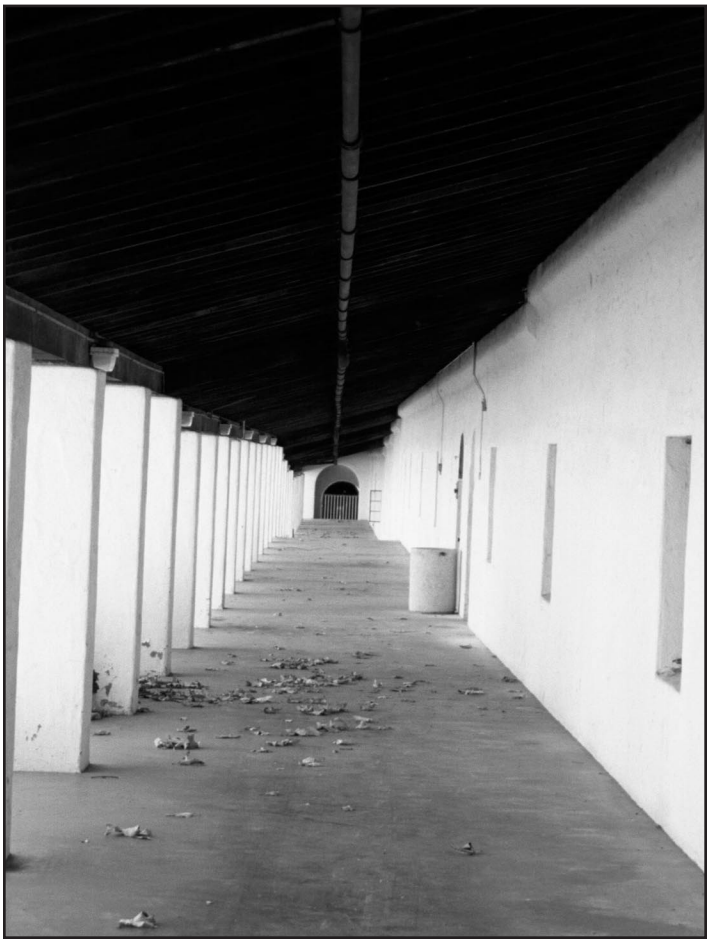

LIBERAL STUDIES

The Liberal Studies program provides an education that allows students the opportunity to experience knowledge residing at the intersection of traditional areas of study. Students choose from three options; Interdisciplinary Program, Concentrated Studies, or Teaching and Learning.

Liberal Studies Interdisciplinary Option students will be in demand by corporations as well as non-profit and government organizations. These graduates will have flexible problem solving skills and breadth of knowledge allowing them to excel in positions that require rapid on-the-job acquisition of knowledge and experience.

Students in the Concentrated Studies Option will have an opportunity to study in-depth with a specific faculty member. This option will appeal to students who want greater flexibility in designing their course of study or students who need the greater flexibility this degree offers in order to complete their education. It is also expected that some students in the Concentrated Studies Option will use the Liberal Studies program to 'test the waters' of other degree programs. This major will provide a jumping off point into the traditional majors.

Liberal Studies majors have traditionally gone on to teaching careers. The need for teachers who can draw from many areas of knowledge is especially acute and it is expected that graduates from the Teaching and Learning option will be in high demand.

All Liberal Studies options will provide an excellent broad-based background for entry into professional and/or graduate programs.

In addition to the program options, all Liberal Studies students will choose from core courses in the following areas: Reading, Literature & Language, History & Social Science, Math, Science, Visual Arts, Physical Education, Human Development, Humanities, Multicultural Studies, Performing Arts, and Computer Literacy.

PROGRAMS OFFERED:

Bachelor of Arts in Liberal Studies with an Option in:
- Interdisciplinary Studies
- Concentrated Studies
- Teaching and Learning

CONTACT INFORMATION:

Frank P. Barajas, PhD, Assistant Professor of History
Phone: (805) 437-8862 Fax: (805) 437-8864
Web Page: http://www.csuci.edu
Email: frank.barajas@csuci.edu

CREDENTIAL INFORMATION:

The Liberal Studies Teaching and Learning Option has been designed to meet the state-approved Multiple Subject Subject-Matter Preparation Program. Completion of the Liberal Studies Teaching and Learning Option, a passing score on the MSAT, and completion of pre-requisite courses are required for entrance into CSUCI's Multiple Subject Credential Program. State-approval of the Multiple Subject-matter Preparation Program is pending. For more information about credential programs see Teaching Credential and contact Professors Lillian Vega-Castaneda or Joan Karp in the Education Program.

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN LIBERAL STUDIES (120 Units):

INTERDISCIPLINARY AND CONCENTRATED STUDIES OPTIONS:

REQUIRED CORE COURSES (33 Units):

Reading, Literature & language 3
History & Social Sciences 3
Mathematics 3
Science 3
Visual Arts 3
Physical Education 3
Human Development 3
Humanities 3
Multicultural Studies 3
Performing Arts 3
Computer Literacy 3

Students must have 3 units from some combination of these courses:

LS	492	Individual Research	1-3
LS	494	Service Learning/Internship	1-3
LS	497	Directed Studies	1-3
LS	499	Capstone Project	1-3

REQUIRED OPTION COURSES (21 Units):

For the Interdisciplinary Studies Option:
Interdisciplinary courses 21
(Interdisciplinary courses are numbered 330-349 or 430-449)

For the Concentrated Studies Option:
Students must contract a course of study with a selected full time faculty member. Contact the Liberal Studies program for more information.... 21

REQUIRED SUPPORTING AND OTHER GE COURSES (63 Units):

University Electives 9
American Institutions Requirement 6
General Education 48
General Education courses may not be double counted.

TEACHING AND LEARNING OPTION:

There are 90 total units of subject matter preparation for the credential. These units include General Education, Liberal Studies Core, Teaching and Learning Option, and Capstone Courses. The following courses fulfill the California Commission on Teacher Credentialing standards for the subject matter preparation of teachers, Kindergarten to Grade 8 (subject matter). Core courses and options have been specified so that all of the California teacher preparation standards will be met. In addition to the listed courses, students must select nine units in a specified area of emphasis and a capstone course. Courses meeting both General Education and the Teaching and Learning Option may be counted as meeting both requirements.

REQUIRED CORE COURSES (80 Units):

1. Reading, language and literature (15 units)

COMM	210	Interpersonal Communication	3
ENGL	100	Composition and Rhetoric	3
ENGL	312	Children's Literature	3
ENGL	315	Introduction to Language Structure and Linguistics	3
ENGL	475	Language in Social Context	3

2. History and social science (24 units):

HIST 211 World History Origins to 1500 3
Or ANTH 333 Civilizations of an Ancient Landscape: .... World Archeology 3
HIST 212 World History Since 1500....3
HIST 270 The United States to 1877....3
HIST 369 California History and Culture....3
Or ANTH 323 World Cultures: California to 1850s....3
ECON 111 Principles of Macroeconomics....3
Or ECON 300 Fundamentals of Economics 3
ANTH 102 Cultural Anthropology 3
EDUC 101 Introduction to Education 3
EDUC 320 Education in Modern Society....3

3. Mathematics (6 units):

MATH 208 Modern Math for Elementary Teachers Numbers and ... Problem Solving 3
MATH 308 Modern Math for Elementary Teachers Geometry, ... Probability and Statistics....3

4. Science (15 units):

GEOL 300 Foundations of Earth Science 4
BIOL 201 Principles of Cell and Molecular Biology 4
CHEM 170 Physical Sciences for the Elementary School Teacher .4
COMP 101 Computer Literacy 3

5. Visual and Performing Arts (6 units):

ART 100 Understanding Fine Art Processes 3
Or ART 102 Children's Art Media and Methods 3
MUS 333 Varieties of Musical Experiences....3
Or TH 333 Multicultural Drama 3
Or TH 410 Shakespeare 3

6. Physical education and Health (5 units):

PHED 302 Motor Learning, Fitness and Development in . Children....3
HLTH 322 Health for Educators 2

7. Human development, learning and cognition (9 units):

PSY 200 Introduction to Psychology....3
PSY 210 Learning, Cognition and Development....3
SPED 345 Individuals with Disabilities in Society 3

REQUIRED EMPHASIS: (9 Units):

Select 9 additional units from one of the following areas:

Reading, language and literature
History and Social Science
Mathematics
Science
Visual and Performing Arts
Physical Education and Health
Human Development and Psychology

REQUIRED SUPPORTING AND OTHER GE COURSES (31 Units):

American Institutions Requirement 6
General Education....25

LIBERAL STUDIES COURSE LIST

Anthropology

ANTH 102 Cultural Anthropology....3
ANTH 103 Human Beginnings: Biological and Cultural Evolution...3
ANTH 110 Who Done it? An Introduction to Forensics....3
ANTH 120 The World Eaters: Co-evolution of Human and Natural Systems....3
ANTH 320 World Cultures: Peoples, Places, and Things....3
ANTH 321 World Cultures: Ethnicity in the United States 3
ANTH 322 World Cultures: North America 3
ANTH 323 World Cultures: California to the 1850s....3
ANTH 324 World Cultures: African-American Culture History 3
ANTH 330 Ecology and the Environment 3-4
ANTH 331 Wars and Conflicts in the Modern World 3
ANTH 332 Population and Resource Constraints....3
ANTH 333 Civilizations of an Ancient Landscape World Archaeology 3
ANTH 335 American Ethnic Images in Novels and Film 3
ANTH 341 Culture and Personality 3
ANTH 343 Anthropology of Organizations....3
ANTH 345 Bioanthropology: Human Evolution and Diversity....3
ANTH 346 Scientific and Professional Ethics 3
ANTH 441 Space and Time: Cross-cultural Perspectives....3
ANTH 443 Medical Anthropology: Cross-Cultural Perspectives on Health and Healing....3

Art

ART 100 Understanding Fine Arts Processes 3
ART 102 Children's Art Media and Methods 3
ART 110 Prehistoric Art to the Middle Ages....3
ART 111 Renaissance to Contemporary Art....3
ART 112 Arts of the Eastern World 3
ART 330 Critical Thinking in a Visual World....3
ART 331 Art and Mass Media 3
ART 332 Multicultural Art Movements....3
ART 333 History of Southern California Chicana/o Art....3
ART 334 The Business of Art 3
ART 335 American Ethnic Images in Novels and Film 3
ART 337 Psychology of Art and Artists....3
ART 430 Modern and Contemporary Art 3
ART 431 European Renaissance Literature and Art 3
ART 432 Arts of the Harlem Renaissance 3
ART 433 Women in the Arts....3

Biology

BIOL 100 General Biology 4
BIOL 200 Principles Of Organismal and Population Biology 4
BIOL 201 Principles Of Cell and Molecular Biology....4
BIOL 210 Human Anatomy and Physiology I 4
BIOL 211 Human Anatomy and Physiology II....4
BIOL 301 Microbiology....4
BIOL 302 Genetics and Evolution 3
BIOL 310 Animal Biology and Ecology....4
BIOL 311 Plant Biology and Ecology....4
BIOL 312 Marine Biology....4
BIOL 330 Ecology and The Environment....4
BIOL 346 Scientific and Professional Ethics 3

Business

BUS 339 The Business of Art 3
BUS 340 Business and Money in the American Novel 3
BUS 343 Anthropology of Organizations 3
BUS 349 History of Business & Economics in North America 3
BUS 424 Business in Its Social Setting 3

Chemistry

CHEM 100 Chemistry and Society 4
CHEM 105 Introduction to Chemistry 3
CHEM 110 Who Done it? An Introduction to Forensics 3
CHEM 121 General Chemistry I and Laboratory 4
CHEM 122 General Chemistry II and Laboratory 4
CHEM 170 Physical Sciences for the Elementary School Teacher 4
CHEM 341 Drug Discovery and Development 3
CHEM 343 Forensic Science 3
CHEM 344 Energy and Society 3
CHEM 346 Scientific and Professional Ethics 3

Communication

COMM 210 Interpersonal Communication 3

Computer Science

COMP 100 Computers: Their Impact and Use 3
COMP 101 Computer Literacy 3
COMP 102 Introduction to Algorithms 2
COMP 103 Computer Programming 1
COMP 150 Object Oriented Programming 3

Economics

ECON 111 Principles of Macroeconomics 3
ECON 300 Fundamentals of Economics 3
ECON 340 Business and Money in the American Novel 3
ECON 342 History of Business and Economics in North America 3

Education

EDUC 101 Introduction to Education 3
EDUC 320 Education in Modern Society 3

English

ENGL 100 Composition and Rhetoric 3
ENGL 120 American Literature I 3
ENGL 150 British and European Literature I 3
ENGL 220 American Literature II 3
ENGL 250 British and European Literature II 3
ENGL 310 Research Methods 3
ENGL 312 Introduction to Children's Literature 3
ENGL 315 Introduction to Language Structure and Linguistics 3
ENGL 328 Mythology 3
ENGL 330 Writing in the Disciplines 3
ENGL 333 Multi-Cultural Drama in Performance/Production 3
ENGL 334 Narratives of Southern California 3
ENGL 335 American Ethnic Images in Novels and Film 3
ENGL 337 Literature of the Environment 3
ENGL 339 Psychopathology in Literature 3
ENGL 340 Business and Money in the American Novel 3
ENGL 400 Contemporary Literature 3
ENGL 410 Shakespeare's Plays 3
ENGL 420 Literary Theory 3
ENGL 431 European Renaissance Literature and Art 3
ENGL 432 Arts of the Harlem Renaissance 3
ENGL 449 Perspectives on Multi-Cultural Literature 3
ENGL 450 Native American Literature 3
ENGL 451 African/African American Literature 3
ENGL 452 Asian/Asian American Literature 3
ENGL 453 Hispanic/Hispanic American Literature 3
ENGL 475 Language in Social Context 3
ENGL 476 Language Development and Assessment 3
ENGL 477 Literature for English Secondary Education 3
ENGL 478 Writing for English Secondary Education 3

Geology

GEOL 101 Physical Geology 3
GEOL 102 Historical Geology 3
GEOL 300 Foundations of Earth Science 4
GEOL 321 Environmental Geology 3
GEOL 327 Oceans and the Global Environment 3

History

HIST 211 World History: Origins to 1500 3
HIST 212 World History: Since 1500 3
HIST 270 The United States to 1877 3
HIST 271 The United States since 1865 3
HIST 331 History of Mathematics 3
HIST 333 History of Southern California Chicana/o Art 3
HIST 334 Narratives of Southern California 3
HIST 335 American Ethnic Images in Novels, Film, and Art 3
HIST 350 Chicano History and Culture 3
HIST 365 Themes in World Civilization Before 1500 3
HIST 366 Themes in World Civilization Since 1500 3
HIST 369 California History and Culture 3
HIST 370 United States Colonial History 3
HIST 371 The Founding of the United States 3
HIST 372 United States Industrialization and Progressivism 3
HIST 401 United States Immigration History, 1840-1945 3

Health

HLTH 322 Health for Educators 2

Liberal Studies

LS 101 Learning in the University, Learning for Life 3
LS 492 Independent Research 1-3
LS 494 Service Learning/Internship 1-3
LS 497 Directed Studies 1-3
LS 499 Capstone Project 1-3

Mathematics

MATH 108 Mathematical Thinking 3
MATH 140 or 150/151 Calculus 3
MATH 208 Modern Math for Elementary Teachers 1: Numbers and Problem Solving 3
MATH 230 Logic 3
MATH 233 Biostatistics 3
MATH 300 Fundamentals of Mathematics 3
MATH 308 Modern Math for Elementary Teachers 2: Geometry, Probability and Statistics 3
MATH 330 Mathematics for Artists 3
MATH 331 History of Mathematics 3

MATH 346 Scientific and Professional Ethics 3

Management

MGT 346 Scientific & Professional Ethics 3

Music

MU 333 Varieties of Musical Experiences 3

Physical Education

PE 101 Walking for Health 1
PE 102 Seminar in Traditional Asian Martial Arts – Tai Ji 1
PE 103 Yoga 1
PE 105 Zen of Surfing 1
PE 302 Motor Learning, Fitness and Development in Children 2

Physics

PHYS 200 General Physics I 4
PHYS 201 General Physics II 4

Psychology

PSY 100 Introduction to Psychology 3
PSY 200 History and Systems of Psychology 3
PSY 210 Learning, Cognition and Development 3
PSY 212 Neurobiology and Cognitive Science 3
PSY 215 Cognition and Learning 3
PSY 220 Human Sexual Behavior 3
PSY 310 Developmental Psychology 3
PSY 320 Cognitive Psychology 3
PSY 335 Psychology of Art and Artists 3
PSY 341 Culture and Personality 3
PSY 344 Health Psychology 3
PSY 370 Clinical Psychology 3
PSY 441 Space and Time: Cross-cultural Perspectives 3
PSY 450 Neural Science 3

Special Education

SPED 345 Individuals With Disabilities in Society 3

Theatre

TH 333 Multi-Cultural Drama in Performance/Production 3
TH 410 Shakespeare's Plays 3

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MATHEMATICS

Mathematics can be pursued as a scholarly discipline of an especially elegant kind -- a creative art form -- or it can be treated as a valuable tool in an applied discipline. Our program will address both needs: it will prepare students for teaching careers, studies in graduate programs (in pure mathematics, applied mathematics, mathematics education, or the mathematical sciences) or for employment in high-tech and bio-tech industries, where mathematics-trained professionals with interdisciplinary expertise (sciences and business) are in high demand. Students will be given a strong background in mathematics and statistics as well as a substantial amount of interdisciplinary applications in physics, computational biochemistry, biostatistics, business, computer and information sciences, computer imagining or artificial intelligence.

DEGREES AND PROGRAMS OFFERED:

Bachelor of Science in Mathematics
Minor in Mathematics

CONTACT INFORMATION:

Ivona Grzegorczyk, PhD, Associate Professor of Mathematics
Phone: (805) 437-8868 Fax: (805) 437-8864
Email: ivona.grze@csuci.edu

PROPOSED COURSE OF STUDY:

FRESHMAN YEAR (31 Units)

ENGL 100 Composition and Rhetoric ..... 3 (G.E. A1)
MATH 150 Calculus 1 ..... 4 (G.E B3)
COMP 150 Object Oriented Programming 4
G.E. Section A, C, D, or E 3

MATH 151 Calculus 2 4
MATH 230 Logic ..... 3 (G.E. A3 or C3)
COMP 151 Data Structures and Program Design 3
PHYS 200 General Physics I 4
G.E. Section A, C, D, or E 3

SOPHOMORE YEAR (28-31 Units)

MATH 250 Calculus III 3
MATH 240 Linear Algebra 3
MATH 300 Discrete Mathematics 3
MATH 350 Differential Equations and Dynamical Systems 3
MGT 346 Scientific and Professional Ethics ..... 3 (G.E. D)
Select one 2 semester science sequence and an additional science course (one lab section required) in Physics, Biology, or Chemistry ..... 13-16 (G.E. B1 and B2)

NOTE: By the sophomore year students should decide on an emphasis to plan their electives

JUNIOR YEAR (18 Units + G.E)

MATH 342 Probability and Statistics ..... 3 (G.E. A3)
MATH 351 Real Analysis 3
MATH 452 Complex Analysis 3
Emphasis courses 6-9

SENIOR YEAR (20-21 Units+ G.E.)

Math 499 Senior Colloquim 1
Electives in Major 9-10
Other Electives 13

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN MATHEMATICS (120 Units):

LOWER DIVISION REQUIREMENTS (37 Units):

MATH 150 Calculus I ..... 4(G.E B3)
MATH 151 Calculus II 4
MATH 250 Calculus III 3
COMP 150 Object Oriented Programming 4
COMP 151 Data Structures and Program Design 4
MATH 230 or PHIL 230 Logic ..... 3 (G.E. A3)
MATH 240 Linear Algebra 3
PHYS 200 General Physics I ..... 4 (G.E. B2)
Two Additional Sciences courses ..... 8 (G.E. B2)

UPPER DIVISION REQUIREMENTS (46 Units):

MATH 300 Discrete Mathematics 3
MGT 346 Scientific and Professional Ethics ..... 3 (G.E. D)
MATH 342 Probability and Statistics ..... 3 (G.E. A3)
MATH 350 Differential Equations and Dynamical Systems 3
MATH 351 Real Analysis 3
MATH 452 Complex Analysis 3
MATH 499 Senior Colloquium 1

EMPHASIS REQUIREMENTS (6-9 Units):

Biomathematics (6 Units):

Students selecting this emphasis should take BIOL 200 and 201 (8) as the science sequence.

MATH 430 Scientific experimental design and Data Analysis 3
COMP 431 Bioinformatics 3

Computational Chemistry (6 Units):

Students selecting this emphasis should take CHEM 121 and 122 General Chemistry I and II (8) as the science sequence.

MATH 349 Symmetry Groups and Science 3
MATH 430 Research Design and Data Analysis 3

Computer Science (9 Units):

COMP 350 Software Engineering 3
MATH 451 Numerical Analysis 3
MATH 344 Analysis of Algorithms 3

Physics (6 Units):

Students selecting this emphasis should take PHYS 200 and 201 (8) as the science sequence.

MATH 350 Partial Differential Equations and Mathematical Physics 3
MATH 452 Complex Analysis 3

Actuarial Sciences/Economics (9 Units):

ECON 300 Fundamentals of Economics ..... 3 (G.E. D)
ECON 486 Econometrics 3
MATH 440 Operations Research 3

Business Management (9 Units):

ECON 300 Fundamentals of Economics ..... 3 (G.E.D)
MATH 440 Operations Research 3
MGT Upper division management course 3

Cognitive Science (9 Units):

MATH 343 Research design and Data Analysis 3
PSY 320 Cognitive Psychology 3
PSY 450 Neuroscience or other upper division cognitive

psychology course....3

Education (9 Units):

EDUC	320	Education in Modern Society	3
	Or		
PSY	200	Introduction to Psychology	3
MATH	318	Mathematics for Secondary School Teachers	3
MATH	331	History of Mathematics	3

Applied Mathematics (9):

MATH	450	Partial Differential Equations and Mathematical Physics	3
MATH	451	Numerical Analysis	3
MATH	440	Operations Research	3

Digital Design (9):

MATH	393	Abstract Algebra	3
ART	108	Visual Technologies	3
ART	300	Digital Art technologies or ART 312, ART 322	3

Choice of another emphasis or individualized emphasis is possible upon approval of the mathematics advisor.

ELECTIVE REQUIREMENTS (9 Units):

MATH	318	Mathematics for Secondary School Teachers	3
MATH	331	History of Mathematics	3
MATH	344	Analysis of Algorithms	3
MATH	393	Abstract Algebra	3
MATH	430	Scientific experimental design and Data Analysis	3
MATH	440	Operations Research	3
MATH	450	Partial Differential Equations and Mathematical Physics	3
MATH	451	Numerical Analysis	3
MATH	480	Differential and Riemannian geometry	3
MATH	482	Number Theory and Cryptography	3
MATH	484	Algebraic Geometry and Coding Theory	3
MATH	490	Topics in Mathematics	3
MATH	492	Internship	3
MATH	494	Independent Study	3
MATH	497	Directed Study	3
MATH	499	Senior Colloquium	1

REQUIRED SUPPORTING AND OTHER GE COURSES (22 units):

American Institutions Requirement....6
Electives / GE Courses....16

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

MULTIPLE SUBJECT TEACHING CREDENTIAL

The Multiple Subject Credential Program prepares teachers to work with students in grades K-8 with responsibility for all subject areas in a self-contained classroom. Multiple Subject Credential Teachers most often teach in elementary, middle school, or self-contained departmentalized classrooms.

This program specifically prepares teachers for the diversity of languages and cultures often encountered in California's public classrooms. The program prepares candidates to address the needs of students who speak English as a native language and/or as a second language in the elementary school setting.

An underlying principle of the program is the belief that all children (regardless of race, ethnicity, gender, ability or economic status) are capable of learning. Emphasis is placed on the K-8 student as actively engaged in his/her learning.

PROGRAM OFFERED:

Multiple Subject Teaching Credential

CONTACT INFORMATION:

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REQUIREMENTS FOR ADMISSION TO THE MULTIPLE SUBJECT TEACHING CREDENTIAL PROGRAM:

1. Application. Application to both the University and the Education Program Area.

2. CBEST Examination. Students must take the California Basic Educational Skills Test (CBEST) prior to admission to the Multiple Subject Teaching Credential Program. Students are urged to take this examination at the earliest possible time after deciding to pursue a teaching credential. CBEST must be passed before certification or intern teaching.

3. Subject Matter Preparation. The CSU Channel Islands Liberal Studies Option 3 – Teaching and Learning best prepares students for the subject matter knowledge and skills required for the Multiple Subject Teaching Credential Program. Prior to admission to the CSU Channel Islands Multiple Subject Teaching Credential Program, students may also complete a state-approved subject matter program from other colleges or universities. Students who have not completed a state-approved subject matter program must take the Multiple Subjects Assessment for Teachers (MSAT) prior to admission to the Multiple Subject Credential Program. The examination includes Content Knowledge and Content Area Exercises. The MSAT examination results are valid for five years from the date of passing and must be valid upon final completion of the program.

4. Prerequisite Courses in Education (12 units). If taken at CSU Channel Islands, the course must be completed within seven (7) years prior to beginning the program with a grade of "C" or better. If an equivalent course at another college or university has been taken, it must have been completed within five (5) years prior to beginning the program.

ENGL	475	Language and Social Context
EDUC	510	Learning theory and development applied in multicultural education contexts
EDUC	512	Equity, Diversity and Foundations of Schooling
SPED	345	Individuals with Disabilities in Society

5. U.S. Constitution. Knowledge of the U.S. Constitution demonstrated by completion of two semester-units of a college level course or college-level examination.

6. Grade Point Average. A student must have a cumulative grade point average (GPA) of 2.75 to be accepted into the Multiple Subject credential program offered at CSUCI. If you do not have the required GPA, conditional admission may be available on a limited basis.

7. Health Clearance. Tuberculin clearance is required. The tuberculin clearance is valid for four (4) years and must be valid through student teaching. The tuberculin clearance may be completed at a private physician's office, the County Health Department, or the CSUCI Student Health Center.

8. Certificate of Clearance. Students must possess or apply for a valid Certificate of Clearance as part of admission to the Teaching Credential Program. A copy of an emergency permit satisfies the clearance requirement.

9. Two Sets of Official Transcripts. One official set of transcripts from each of the colleges or universities attended must be mailed directly to the CSU Channel Islands Office of Admissions, and one official set of transcripts must be submitted to the Education Program Student Services Center with the program application.

10. Two Letters of Recommendation. Two letters of recommendation from faculty, employers, and/or others who are knowledgeable about the student's personal qualities and potential to work with children must be submitted with the program application.

11. Interview. An interview conducted by an Education Program Admissions Committee

12. Experience. At least 45 hours documented field experience in a K-8 classroom or a documented field experience deemed equivalent.

13. Bachelor's Degree. A bachelor's degree or all undergraduate academic subjects must be satisfied toward a bachelor's degree before entering a teacher education program. A bachelor's degree is a requirement for teacher certification.

14. Writing Sample. Writing samples are required as part of the application process.
Please Note: The California Commission on Teacher Credentialing requires passing the Reading Instruction Competence Assessment (RICA) for the initial issuance of a Multiple Subject Credential. RICA consists of passing one of two components, either a comprehensive examination or a performance assessment. It is recommended that the Assessment be taken after completion of the Literacy I and Literacy II courses in the credential program.

REQUIREMENTS FOR THE MULTIPLE SUBJECT TEACHING CREDENTIAL:

FULL-TIME MULTIPLE SUBJECT CREDENTIAL PROGRAM (36 units)

Summer, Winter or Spring:

EDUC 520 Observing and Guiding Behavior in Multilingual/..... Multicultural and Inclusive Classrooms 3

First Semester:

EDMS 522 Literacy 1 Multicultural/Multilingual 3
EDMS 526 Modern Methods in Mathematics Teaching 3
EDMS 527 History, Social Studies and Integrated Arts.....4
EDUC 560 Fieldwork/Student Teaching.....5

Second Semester:

EDMS 523 Literacy 2 Multicultural/Multilingual 4
EDMS 529 Science, Health and PE 4
EDUC 560 Fieldwork/Student Teaching.....9
EDUC 561 Student Teaching Seminar.....1

PART-TIME MULTIPLE SUBJECT CREDENTIAL PROGRAM (36 units)

Summer, Winter or Spring:

EDUC 520 Observing and Guiding Behavior in Multilingual/..... Multicultural and Inclusive Classrooms 3

First Semester:

EDMS 522 Literacy 1 Multicultural/Multilingual 3
EDMS 526 Modern Methods in Mathematics Teaching 3

Second Semester:

EDMS 527 History, Social Studies and Integrated Arts.....4
EDMS 523 Literacy 2 Multicultural/Multilingual 4

Third Semester:

EDMS 529 Science, Health and PE 4

Fourth Semester:

EDUC 560 Fieldwork/Student Teaching.....5
EDUC 561 Fieldwork/Student Teaching.....9
EDUC 561 Student Teaching Seminar.....1

Note: This program had not received final approval at the time this catalog went to press. Please visit our Website at www.csuci.edu for confirmation of its approval.

Course Descriptions

ACCOUNTING

ACCT 210. FINANCIAL ACCOUNTING (3)
Three hours per week.
Prerequisite: none
Introduction to accounting principles: accumulation, measurement, and evaluation of accounting data. Topics include internal controls, financial statement analysis and interpretation, and use of spreadsheets in accounting applications.

ACCT 220. MANAGERIAL ACCOUNTING (3)
Three hours per week.
Prerequisite: none
Continues the exploration of accounting principles and topics: investing and financing activities, cost and budgeting systems, cash flow analysis, accounting for debt and equity, and introduces using accounting data for decision-making.

ACCT 300. APPLIED MANAGERIAL ACCOUNTING (3)
Three hours per week.
Prerequisite: ACCT 210, ACCT 220
Use of accounting data for budgeting, cost control, pricing, performance measurement, and general decision-making within the business organization.

ANTHROPOLOGY

ANTH 102. CULTURAL ANTHROPOLOGY (3)
Three hours per week.
Prerequisite: none.
The study of recent and modern societies using a cross-cultural perspective to gain an understanding on the range of human expression in culture and society. Issues discussed include ethnicity, gender, family structure, kinship, sex and marriage, socio-economic class, religion and the supernatural, language and culture, economics, political and social organization, art, and culture change.
GenEd: D

ANTH 103. HUMAN BEGINNINGS: BIOLOGICAL AND CULTURAL EVOLUTION (3)
Three hours per week.
Prerequisite: none.
Human biological and cultural evolution from 5 million years ago to the present using archaeological and physical anthropology. How and when did we become human? What physical and cultural adaptations were necessary as we spread across the Earth? How did hunters and gatherers become sedentary horticulturalists and pastoralists? What role did humans play in the domestication of plants and animals?
GenEd: D

ANTH 110. WHO DONE IT? AN INTRODUCTION TO FORENSICS (3)
Three hours per week.
Prerequisite: none.
Interdisciplinary approaches to forensic science, with lectures based on Anthropology, Art, Biology, Chemistry, Computer Science, History, Literature, Physics, Psychology, Sociology. How have fictional detectives in novels, TV, and film reflected and influenced forensics? How have scientific and archaeological methods been incorporated into crime scene analysis? How have crimes been viewed and punished through time? How have different cultures defined crimes? How do forensic specialists identify forgeries in art, cartography, and documents? How have computer scientists contributed to forensics? How are cybercrimes solved? How do psychologists profile criminals? How do biologists use DNA, pollen, seeds, and insects to solve crimes? How do chemists and physicists analyze forensic materials?
Same as CHEM 110.
GenEd: B1, D

ANTH 120. THE WORLD EATERS: CO-EVOLUTION OF HUMAN AND NATURAL SYSTEMS (3)
Three hours per week.
Prerequisite: none.
Are natural systems real, or have humans so altered the Earth to meet our needs that no purely natural systems survive? This course examines the human impact on the environment from the discovery of fire to the present, using case studies from throughout the world, including fire farming in Australia, deforestation in Africa, Asia, and America; and human roles in faunal and floral extinctions through time.
Same as ESRM 120.
GenEd: D

ANTH 320. WORLD CULTURES: PEOPLES, PLACES, AND THINGS (3)
Three hours per week.
Prerequisite: none.
This course examines the ethnology of cultures from throughout the world. Using archaeological, historical, and ethnographic sources, this course introduces the methods and theories used in placing comparative cross-cultural analysis in an ecological context. Focuses on issues of cultural history, environmental adaptations, political and economic systems, population, family, gender, religion, ideology, and contemporary issues in culturally distinct regions of the world.
GenEd: D, C3B

ANTH 321. WORLD CULTURES: ETHNICITY IN THE UNITED STATES (3)
Three hours per week.
Prerequisite: none.
This course surveys the diversity of the United States from an historical perspective, tracing the various ethnic groups who came to the US and were variously assimilated. The myth of the American Melting Pot will be explored. Why did some groups cast off their ethnicity (or did they really?) while others maintained their ethnic identity for generations?
GenEd: D, C3B

ANTH 322. WORLD CULTURES: NORTH AMERICA (3)
Three hours per week.
Prerequisite: none.
This course examines the development of Native American peoples and cultures as they adapted to their environments. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the cultural history of these peoples will be traced from antiquity to the present, to provide the student with a broad context for understanding the region.
GenEd: D

ANTH 323. WORLD CULTURES: CALIFORNIA TO THE 1850S (3)
Three hours per week.
Prerequisite: none.
This course examines the development of Native American peoples and cultures in California as they adapted to the diverse environments there. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture and history of California's Native Americans will be traced from antiquity to the 1850s. The impact of Spanish exploration, colonization, and the mission system will be traced from the perspectives of both the Native Americans

and their colonizers.
GenEd: D

ANTH 330. ECOLOGY AND THE ENVIRONMENT (4)
Three hours lecture per week; three hours lab per week
Prerequisite: none.
Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. A standard lab fee is required.
Same as BIOL 330.
GenEd-ID: B1

ANTH 332. POPULATION AND RESOURCE CONSTRAINTS (3)
Three hours per week.
Prerequisite: none.
This human ecology course places humans into the environment in historical and global contexts. Discusses systems theory as it applies to human adaptation to the environment. Studies the relations between political power, ideology, and resources, integrating concepts from ecology with those from social sciences. Theories and forecasts of human population growth and migration among regions and cultures. Social and environmental impacts of population and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars.
GenEd-ID: D

ANTH 333. CIVILIZATIONS OF AN ANCIENT LANDSCAPE: WORLD ARCHAEOLOGY (3)
Three hours per week.
Prerequisite: none.
Traces the relationship between the physical geography and the development of ancient civilizations in Pre-Columbian America, Africa, Asia, and Europe, beginning with the post-glacial period and ending with the rise of feudalism in Europe and Japan. The change from hunting and gathering groups to sedentary agriculturalists and pastoralists giving rise to later complex social organizations. Art, architecture, science, religion, economic trade and social systems are included.
GenEd-ID: D

ANTH 334. WARS AND CONFLICTS IN THE MODERN WORLD (3)
Three hours per week.
Prerequisite: none.
Cross-cultural perspectives on the development of the modern world in the future. Can the Earth sustain an American style culture for everyone? How do Third and Fourth World countries view the developed countries? Can conflicts over resources be resolved peacefully? This course exams war and terrorism in the context of resources and modernity.
GenEd-ID: D

ANTH 341. CULTURE AND PERSONALITY (3)
Three hours per week.
Prerequisite: none.
This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Team taught with psychology.
Same as PSY 341.
GenEd-ID: D, E

ANTH 343. ANTHROPOLOGY OF ORGANIZATIONS (3)
Three hours per week.
Prerequisite: none.
Anthropological perspective on human organizations in terms of communication, spatial relations, product development, technology, marketing, and group behavior. Explores principles of effectively organizing and directing work groups.
Same as BUS 343
GenEd-ID: D

ANTH 345. BIOANTHROPOLOGY: HUMAN EVOLUTION AND DIVERSITY (3)
Three hours per week.
Prerequisite: none.
Human biological evolution from the African savannah of 5 million years ago to the present, focusing upon adaptation to environmental conditions, disease, and diet. Includes segments on ecology, evolutionary theory, genetics, natural selection, non-human primates. Discusses the concept of race from an anthropological perspective. Includes issues of speciation and race, adaptation to cold, heat, desert, tropics, diseases. Compares ethnicity vs. race.
GenEd-ID: B1

ANTH 346. SCIENTIFIC AND PROFESSIONAL ETHICS (3)
Three hours per week.
Prerequisite: none.
Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Topics also include integrity of scientific research and literature and responsibilities of scientists to society, intellectual property, ethical practices in professional fields, ethical dilemmas in using animal or human subjects in experimentation, gene cloning, animal cloning, gene manipulation, genetic engineering, genetic counseling, and ethical issues of applying biotechnology in agricultural fields. Emphasizes cases to explore ethical issues.
Same as BIOL 346, MGT 346, CHEM 346, and MATH 346.
GenEd-ID: A3

ANTH 443. MEDICAL ANTHROPOLOGY: CROSS-CULTURAL PERSPECTIVES ON HEALTH AND HEALING (3)
Three hours per week.
Prerequisite: none.
This course provides a cross-cultural perspective on human health issues. Uses biological, cultural, and behavioral approaches to understand the concepts of diseases and their treatment, ethnoscience, health, and alternative medicine placed in a global perspective.
Offered Spring 2003 and alternate years thereafter.

ANTH 483. QUALITATIVE RESEARCH METHODS IN THE SOCIAL SCIENCES (3)
Three hours per week.
Prerequisite: none.
This course provides the student with an understanding of how social scientists collect and analyze data. Explores methods and procedures used in anthropology research, including creating a research design, interviewing, cross-verifying data, and interpreting data. This course also details the various methods employed by ethnographers, folklorists, and oral historians in collecting oral testimony in a structured, systematic method. Particular attention is given to ethical and legal issues.
Same as PSY 483.

ANTH 490. SEMINAR IN ANTHROPOLOGY (3)
Three hours per week.
Prerequisite: none.
This seminar explores a different topic each term. Students may enroll up to four times in different seminars.

ANTH 492. SERVICE LEARNING/INTERNSHIP (3)
Six hours per week.
Prerequisite: none.
Enrollment in this course is with permission of faculty member in charge. Individual internship through service learning. Graded Credit/No Credit.

ANTH 494. INDEPENDENT STUDY RESEARCH (3)
Variable hours per week.
Prerequisite: none.
Individual contracted study/research on topics selected by the student for further study. Enrollment in this course is with permission of faculty member in charge. Graded Credit/No Credit.

ANTH 499. CAPSTONE PROJECT (3)
Variable hours per week.
Prerequisite: Senior status.
This course is an interdisciplinary experience in which students from diverse disciplines and majors work in teams, contributing their expertise to a community-based group project. Graded Credit/No Credit.

ART

ART 100. UNDERSTANDING FINE ART PROCESSES (3)
Two hours lecture and two hours laboratory per week. Lab fee required.
Prerequisite: none (Not available for Art major credit)
Entry level experience for the non major. This course integrates elements of drawing, painting, sculpture and mixed media techniques. Students gain an understanding of the function of the Fine Arts in everyday life through participation in the artistic process.
GenEd: C1

ART 102. CHILDREN'S ART MEDIA AND METHODS (3)
Two hours lecture and two hours laboratory per week. Lab fee required.
Prerequisite: none
Hands-on creation of artistic projects emphasize the importance of art in the child's development. Projects explore basic concepts and materials leading to the student's development of primary skills and an aesthetic appreciation for the creative process.
GenEd: C1

ART 105. DRAWING AND COMPOSITION (3)
Six hours laboratory per week.
Prerequisite: none
Basic fundamentals of drawing are explored through the use of various techniques and media. Investigations into line, value, perspective and composition as related to surface and pictorial space is also investigated.

ART 106. COLOR AND DESIGN (3)
Six hours laboratory per week.
Prerequisite: none
Explorations in basic color theory are conducted within two-and three-dimensional design contexts. Visual elements including line, shape, form and texture are explored along with elements of color interaction, harmony and dissonance within a variety of visual motifs.

ART 107. LIFE DRAWING (3)
Six hours laboratory per week.
Prerequisite: none
The study of the human figure and its representation depicted through gesture, contour value and volume. Anatomy, proportion, foreshortening and structure are explored through observation of props and live models.

ART 108. VISUAL TECHNOLOGIES (3)
Two hours lecture and two hours laboratory per week. Lab fee required.
Prerequisite: none
An introductory survey of visual technologies commonly used by artists and designers. Projects explore software applications as they relate to current methods of digital art production. Emphasis is on the development of fundamental computer skills and an understanding of the relationship between digital media and visual design.

ART 110. PREHISTORIC ART TO THE MIDDLE AGES (3)
Three hours lecture per week.
Prerequisite: none
Survey of the history of art, artifacts and architecture from the Prehistoric era through the Gothic period. The examination of cultural and conceptual contexts will trace the early development of Western artistic traditions.
GenEd: C1

ART 111. RENAISSANCE TO MODERN ART (3)
Three hours lecture per week.
Prerequisite: none
Survey of the history of art and architecture from the European Renaissance through the Modern Art. Cultural and conceptual contexts will examine the evolution of the art object as a form of Western cultural expression.
GenEd: C1

ART 112. ARTS OF THE EASTERN WORLD (3)
Three hours lecture per week.
Prerequisite: none
Survey of the painting, architecture and crafts of India, China, Japan and Southeast Asia. An examination of artistic, cultural, and historical events explore the exchange of influences and ideas related to Eastern cultures.
GenEd: C1

ART 201. PAINTING (3)
Six hours laboratory per week.
Prerequisite: ART 105, ART 106, ART 107
An introduction to basic painting materials and techniques. Experiments in representational and abstract painting will explore oil, acrylic, and water-based media. Particular emphasis will be on the development of fundamental skills and the understanding of color, shape, surface and pictorial structure.

ART 202. SCULPTURE (3)
Six hours laboratory per week.
Prerequisite: ART 105, ART 106, ART 107
An introduction to basic sculpture materials and techniques. Experiments in representational and abstract sculpture will explore a variety of three-dimensional materials through additive and subtractive sculptural processes. Particular emphasis will be on the development of fundamental skills and the understanding of design, form and structural elements.

ART 203. ILLUSTRATION (3)
Six hours laboratory per week.
Prerequisite: ART 105, ART 106, ART 107
An introduction to basic illustration materials and rendering techniques. Experiments in a variety of media and styles explore quash, colored pencils, pen and ink, pastels and markers. Particular emphasis is on

the development of fundamental skills and concepts required to execute successful illustrations.

ART 204. GRAPHIC DESIGN (3)
Six hours laboratory per week.
Prerequisite: ART 105, ART 106, ART 108
An introduction to basic concepts in graphic design for print and electronic media. Projects incorporating traditional and digital media explore typography, layout and visual design. Particular emphasis is on the development of fundamental skills leading to the ability to communicate ideas through the use of text and visual imagery.

ART 205. MULTIMEDIA (3)
Six hours laboratory per week.
Prerequisite: ART105, ART 106, ART 108
An introduction to techniques and concepts involved in the production of interactive multimedia. Projects explore basic interactive technologies utilized in the creation of digital graphics, Websites and computer game designs.

ART 206. ANIMATION (3)
Six hours laboratory per week.
Prerequisite: ART 105, ART 106, ART 107, ART 108
An introduction to basic techniques and processes involved in the production of animation. Projects include elements of concept and story development, character design, storyboarding, timing, key framing and inbetweening, and cell production leading to the creation of short works in animation.

ART 310. TWO-DIMENSIONAL MEDIA AND PROCESSES (3)
Six hours laboratory per week.
Prerequisite: ART 108, ART 201
Studio projects explore media and methodologies in painting, drawing and other two-dimensional art forms. Assignments emphasize the integration of traditional art materials and techniques with related digital art technologies in the creation of two-dimensional art projects.

ART 311. THREE-DIMENSIONAL MEDIA AND PROCESSES (3)
Six hours laboratory per week.
Prerequisite: ART108, ART 202
Studio projects explore media and methodologies in sculpture, ceramics and other three-dimensional art forms. Assignments emphasize the integration of traditional art materials and techniques with related digital art technologies in the creation of three-dimensional art projects.

ART 312. TIME-BASED DIGITAL MEDIA AND PROCESSES (3)
Six hours laboratory per week.
Prerequisite: ART 108, ART 205
Studio projects explore media, methodologies and artistic concepts in digital imaging, non-linear video, digital animation graphics and visual effects. Assignments emphasize the integration of traditional art techniques with digital technology in the development of computer generated imagery and animation. Projects are presented in a digital format.

ART 313. COMMUNICATION DESIGN TECHNOLOGY MEDIA AND PROCESSES (3)
Six hours laboratory per week.
Prerequisite: ART 108, ART 204
Studio projects explore media, methodologies in graphic design and multimedia. Assignments emphasize the integration of traditional design concepts with graphic design technology in projects created for print, internet applications and multimedia presentations.

ART 320. STUDIO TOPICS: TWO-DIMENSIONAL ART (3-3)
Six hours laboratory per week.
Prerequisite: ART 310
Studio topics explore thematic approaches in the development of visual continuity and technical competency working in painting, drawing and related art processes. At this phase of study, projects focus on the integration of artistic concept, technique and proficiency in the use of two-dimensional media in the creation of individual works of art.

ART 321. STUDIO TOPICS: THREE DIMENSIONAL ART (3-3)
Six hours laboratory per week.
Prerequisite: ART 311
Studio topics explore thematic approaches in the development of visual continuity and technical competency working in sculpture, ceramics and related art processes. At this phase of study, projects focus on the integration of artistic concept, technique and proficiency in the use of three-dimensional media in the creation of individual works of art.

ART 322. STUDIO TOPICS: TIME-BASED DIGITAL ART (3-3)
Six hours laboratory per week.
Prerequisite: ART 312
Studio topics incorporate thematic approaches in the development of visual continuity and technical competency working in digital imaging, video compositing, digital animation and visual effects. At this phase of study, projects focus on the integration of artistic concept and technological proficiency in the creation of time-based digital art projects presented on video, CD Rom or DVD.

ART 323. STUDIO TOPICS: COMMUNCATION DESIGN TECHNOLOGY (3-3)
Six hours laboratory per week.
Prerequisite: ART 313
Studio topics explore thematic approaches in the development of visual continuity and technical competency working in graphic design and multimedia. At this phase of study, projects focus on the integration of artistic concept and technological proficiency in the creation of design projects for print, Websites and interactive multimedia.

ART 326. DIGITAL TECHNOLOGIES: 3D COMPUTER ANIMATION (3)
Six hours laboratory per week.
Prerequisite: ART 206, ART 312
Studio topics explore applications of digital technologies utilized in the production of 3D computer animation. Projects involve wireframe modeling, texture mapping, lighting techniques, motion sequencing and animation techniques involved in the creation of computer generated animation projects.

ART 330. CRITICAL THINKING IN A VISUAL WORLD (3)
Three hours lecture per week.
Prerequisite: none
A critical look at subjective responses and objective reasoning in the assessment of visual images that permeate every day aspects of contemporary life. Comparative studies evaluate psychological impact of corporate logos, religious iconography and secular symbolism. The genesis of cultural icons are investigated from a historical perspective in relationship to their role in a global society.
GenEd-ID: A3, C1

ART 331. ART AND MASS MEDIA (3)
Three hours lecture per week.
Prerequisite: none
The study of synergetic relationships between visual art and human communication dating back to the roots of civilization. Comparative studies in art and communication link ancient traditions to the development of contemporary mass media including print, photography, film, television and the internet.

GenEd-ID: C1, D

ART 332. MULTICULTURAL ART MOVEMENTS (3)
Three hours lecture per week.
Prerequisite: none
A survey of the arts and crafts originating in African, Asian, Latin American, Middle Eastern and Native American cultures. Emphasis is on the understanding of traditions and historical contexts as well as the exploration of random intersections of indigenous methods and aesthetics.
GenEd-ID: C1, C3

ART 333. HISTORY OF SOUTHERN CALIFORNIA CHICANA/O ART (3)
Three hours lecture per week.
Prerequisite: none
A survey of the Southern California Chicano/a culture exploring the genesis, vitality and diversity represented in the painting, sculpture and artistic traditions of Mexican American artists. Historical movements, politics, cultural trends and Mexican folklore underlying the development of this dynamic style of art will be investigated within a variety of contexts.
Same as HIST 333.
GenEd-ID: C1, C3

ART 334. THE BUSINESS OF ART (3)
Three hours lecture per week.
Prerequisite: none
Exploration into aspects of "art world" business including the financial activities of art consultants, private dealers, commercial galleries, public museums and international auction houses. Case studies in art marketing, gallery and museum management, contracts and commissions, as well as public image and career development will be investigated.
Same as BUS 334
GenEd-ID: C1, D

ART 335. AMERICAN ETHNIC IMAGES IN NOVELS, FILM AND ART (3)
Three hours lecture per week.
Prerequisite: none
An examination of the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and artistic modes of analysis. This course highlights the ways in which artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples.
Same as ENGL 335, HIST 335.
GenEd-ID: C3, D

ART 338. PSYCHOLOGY OF ART AND ARTISTS (3)
Three hours lecture per week.
Prerequisite: none
An inquiry into the mind of the artist and the psychological dynamics that underlie the creative process. Emphasis is placed on deciphering personal allegory and universal symbolism hidden within a wide range of visual and conceptual genres in painting, sculpture, film and music. The self-image of the artist will be examined from private and public viewpoints.
Same as PSY 338
GenEd-ID: C1, E

ART 420. ADVANCED ARTISTIC PROBLEMS: TWO DIMENSIONAL ART (3-3)
Six hours laboratory per week.
Prerequisite: ART 320
Investigations into the development of in-depth concepts, innovative processes and personal artistic style. Students achieve increased artistic depth and advanced technical proficiency working in two-dimensional media leading to the development of a congruent body of work in painting, drawing and related art forms. Creation and presentation of a professional portfolio is a required component of the course work.

ART 421. ADVANCED ARTISTIC PROBLEMS: THREE-DIMENSIONAL ART (3-3)
Six hours laboratory per week.
Prerequisite: ART 321
Investigations into the development of in-depth concepts, innovative processes and personal artistic style. Students achieve increased artistic depth and advanced technical proficiency working in three-dimensional media leading to the development of a congruent body of work in sculpture, ceramics and related art forms. Creation and presentation of a professional portfolio is a required component of the course work.

ART 422. ADVANCED ARTISTIC PROBLEMS: TIME-BASED DIGITAL ART (3-3)
Six hours laboratory per week.
Prerequisite: ART 322
Investigations into the development of in-depth concepts, innovative processes and personal artistic style. Students achieve increased artistic depth and advanced technical proficiency working in time-based digital media leading to the development of a congruent body of work in digital imaging, video, digital animation and visual effects. Creation and presentation of a professional video, CD Rom or DVD portfolio is a required component of the course work.

ART 423. ADVANCED ARTISTIC PROBLEMS: COMMUNICATION DESIGN TECHNOLOGY (3-3)
Six hours laboratory per week.
Prerequisite: ART 323
Investigations into the development of in-depth design concepts, innovative processes and individual artistic style. Students achieve increased artistic depth and advanced technical proficiency working in graphic design, computer graphics, Web design, and multimedia authoring. Creation and presentation of a professional interactive multimedia portfolio is a required component of the course work.

ART 430. MODERN AND CONTEMPORARY ART (3)
Three hours lecture per week.
Prerequisite: none
From nineteenth century Impressionism, through twentieth-century Cubism, Surrealism, Abstract Expressionism and Pop Art, this course explores the gamut of concepts, periods, trends, and "isms" culminating in international Post Modernism and New Genre art of the twenty-first century.

ART 431. EUROPEAN RENAISSANCE LITERATURE AND ART (3)
Three hours lecture per week.
Prerequisite: Upper division standing
The study of literary and artistic works produced in Europe and England in the fifteenth and sixteenth centuries. This "re-birth" of the human spirit is viewed from historical, philosophical and aesthetic perspectives, emphasizing the relationship between literary and artistic traditions found in Renaissance literature and visual art forms.
Same as ENGL 431.
GenEd-ID: C1, C2

ART 432. ARTS OF THE HARLEM RENAISSANCE (3)
Three hours lecture per week.
Prerequisite: Upper division standing
Study focusing on the dramatic upsurge of creativity in art, music and literature resulting from social and political undercurrents in the African

American cultural revolution in New York during the 1920s. Historical geneses and subsequent artistic legacies will be also be explored.
Same as ENGL 432, MUS 432
GenEd-ID: C1, C3

ART 433. WOMEN IN THE ARTS (3)
Three hours lecture per week.
Prerequisite: Upper division standing
An investigation into the historical roles and influences of women artists in Western and non-Western traditions. Women as subject matter in painting, sculpture, photography, film and video will also be explored as related to artistic, social, historical and political issues.
GenEd: C1, D

ART 489. ARTS SEMINAR (3)
Prerequisite: Senior standing.
Students interact with guest speakers, visiting artists, and industry professionals in a seminar environment. This course also affords students the opportunity to assess their training and summarize artistic achievements through projects that prepare them for a variety of careers in the arts.

ART 492. INTERNSHIP IN THE ARTS (1-3)
Two to six hours activity per week (service learning).
Prerequisite: Senior standing portfolio review and consent of instructor.
Experiential study in a professional artistic environment appropriate to student's interests and artistic goals. Service learning positions are arranged by the university, instructor or student in cooperation with local community organizations or businesses. Internship positions must meet specific criteria set by the university in accordance with the mission of the university.

ART 494. INDEPENDENT STUDY (1-3)
Prerequisite: Senior standing and consent of instructor.
Individualized student projects are created under the guidance of a sponsoring instructor. Independent field work and supervised studio work is required in the development and execution of art projects. Regular progress reports and meetings are mandatory throughout the semester. Project completion is required before receiving course credit.

ART 499. ARTS CAPSTONE PROJECT (3)
One hour seminar and two hours field work per week (service learning).
Prerequisite: Senior standing, portfolio review and consent of instructor.
A culminating interdisciplinary experience in which students from various Fine Arts disciplines work in groups with non-art majors and community members on projects specifically designed to meet a common goal. Activities supervised by sponsoring faculty are executed on campus and/or on-site in conjunction with community businesses or organizations.

BIOLOGY

BIOL 100. GENERAL BIOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: none
An introduction to organismal biology, including the diversity, structure, and function of prokaryotes, protists, fungi, plants, and animals. Also includes the principles of evolution, ecology and population biology. No credit given toward the biology major. A standard lab fee is required.
GenEd: B1

BIOL 200. PRINCIPLES OF ORGANISMAL AND POPULATION BIOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: none
An introduction to organismal biology, including the diversity, comparative structure, organ system function, development, phylogeny, taxonomy and systematics of prokaryotes, protists, fungi, plants, and animals. Discussion of the principles of evolution including speciation and natural selection, the environmental impact and ecosystem interaction of plants and animals, the behavior of animals, population genetics and population biology. A standard lab fee is required.
GenEd: B1

BIOL 201. PRINCIPLES OF CELL AND MOLECULAR BIOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: CHEM 121; BIOL 200 with "C" or better grade for biology majors. (No prerequisite for students in Liberal Studies, Teaching and Learning Option.)
This course will cover principles and applications of basic chemistry, biological macromolecules, prokaryotic and eucaryotic cell structure and function, homeostasis, metabolism including both respiration and photosynthesis, cell cycling, signal transduction, Mendelian genetics, molecular genetics including transcription and translation, and a brief introduction to virology and immunology. The philosophy of science, scientific method and experimental design are foundational to the course. A standard lab fee is required.
GenEd: B1

BIOL 202. BIOSTATISTICS (3)
Weekly three-hour laboratory instruction and exercise.
Prerequisite: A passing score on the Entry Level Mathematics Exam or credit in MATH 105.
Use of probability and statistics in the description and analysis of biological data collected from laboratory and or field experiments.
Same as MATH 202.
GenEd: A3

BIOL 210. HUMAN ANATOMY AND PHYSIOLOGY I (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: BIOL 100.
Gross and microscopic anatomy of the human body with integrated physiological functions of the nine body organ systems studied from organ system through cellular levels of organization including basic chemistry, cell metabolism, acid-base relationships, membrane function, basic genetics, alleles and inherited disorders. A standard lab fee is required.

BIOL 211. HUMAN ANATOMY AND PHYSIOLOGY II (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: BIOL 210.
Continuation of BIOL 210. A standard lab fee is required.

BIOL 212. NEUROBIOLOGY AND COGNITIVE SCIENCE (3)
Weekly three-hour lectures.
Prerequisite. BIOL 100.
Principles of brain organization and function underlying behavior. Topics include neuroanatomy and physiology of language, vision, sexual behavior, memory and abnormal behavior.
Same as PSY 212.
GenEd: B1, E

BIOL 300. CELL PHYSIOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: CHEM 122; CHEM 311 and 312 or concurrent enrollment; BIOL 201 with "C" or better grades.
Detailed study of the organization and functioning of cells and cellular organelles at the cellular and molecular levels, emphasizing experimental approaches and structural and functional relationships and their regulation and control. Topics include macromolecules, membrane phenomena,

metabolism, enzyme kinetics, and cellular events associated with excitable cells and tissues. Individual critique on a current aspect of cellular and molecular biology required. A standard lab fee is required.

BIOL 301. MICROBIOLOGY (4)
Weekly three-hours lectures and two one-and-a-half hour-laboratories.
Prerequisite: CHEM 122; BIOL 201 with C or better grades.
Study of microorganisms of the environment, including disease-causing organisms, their structures and functions and their interactions to their host animals and the environment. A standard lab fee is required.

BIOL 302. GENETICS AND EVOLUTION (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 201 with C or better grades.
Principles of classical transmission genetics, population genetics and evolution, with an introduction to modern molecular genetics.

BIOL 310. ANIMAL BIOLOGY AND ECOLOGY (4)
Weekly three-hour lectures and three-hour laboratories with periodic field trips in local ecosystem and its animals.
Prerequisite: BIOL 100 or BIOL 201.
Animal adaptation and diversity and their relationship to the development of evolutionary theory and the environment. Identification of common invertebrate and vertebrate animals. A standard lab fee is required.

BIOL 311. PLANT BIOLOGY AND ECOLOGY (4)
Weekly three-hour lectures and three-hour laboratories with periodic field trips.
Prerequisite: BIOL 100 or BIOL 201.
A general introduction of diverse structures and functions of plants and their relationship to the environment. Identification of common, local native plants and plant communities, uses of native plants by Native Americans, and human and environmental impacts on native plant communities. A standard lab fee is required.

BIOL 312. MARINE BIOLOGY (4)
Weekly three-hour lectures and three-hour laboratories with periodic field trips.
Prerequisite: BIOL 201.
Overview of complexity of marine life including marine plants and animals and the processes that underlie their distribution and abundance in open oceans, coastal regions, estuaries, and wetlands. Diverse interactions of organisms in the intertidal zone, over the continental shelves and in the open oceans. A standard lab fee is required.

BIOL 330. ECOLOGY AND THE ENVIRONMENT (4)
Weekly three-hour lectures and three-hour laboratories, including periodic field trips.
Prerequisite: none
Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. A standard lab fee is required.
Same as ANTH 330.
GenEd-ID: B1, B2

BIOL 331. BIOTECHNOLOGY IN THE TWENTY- FIRST CENTURY (2)
Weekly two-hour lectures.
Prerequisite: none
Presentation of recent advances in biotechnology and discussion of societal implications. Topics include applications in basic research, medicine, agriculture, consumer products and warfare. No credit given toward the biology major.
GenEd: B1

BIOL 332. CANCER AND SOCIETY (2)
Weekly two-hour lectures augmented by readings and discussion.
Prerequisite: none
The biological, clinical and psychological nature of cancer and its impact on society from perspectives of medical researchers and physicians. No credit given toward the biology major.

BIOL 333. EMERGING PUBLIC HEALTH ISSUES (2)
Weekly two-hour lectures.
Prerequisite: none
Discussion of emerging infectious diseases and other health related issues with global concerns such as AIDS, tuberculosis, sexually transmitted diseases, cardiovascular diseases. Animal and bird diseases which may be transmitted to people, food and blood safety issues, environmental public health hazards, immigration and public health issues, potential biological weapons and their impact on human and animal populations in the world and the ecosystem.
GenEd-ID: B1, E

BIOL 343. FORENSIC SCIENCE (3)
Two hours of lecture and one hour of laboratory per week. Lab fee requird.
Prerequisite: none
A survey of the various chemical and biological techniques used in obtaining and evaluating criminal evidence. Topics include: chromatography; mass spectrometry (LC-MS, GC-MS); atomic absorption spectrometry; IR, UV, fluorescence, and X-ray spectroscopies; fiber comparisons; drug analysis; arson/ explosive residue analysis; toxicological studies; psychological profiling; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis.
Same as CHEM 343.
GenEd-ID: B1

BIOL 346. SCIENTIFIC AND PROFESSIONAL ETHICS (3)
Weekly three-hour lectures and discussions.
Prerequisite: none
Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues.
Same as CHEM 346, MATH 346, MGT 346.
GenEd-ID: A3, D

BIOL 400. MOLECULAR BIOLOGY AND MOLECULAR GENETICS (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: CHEM 314 & 315, 318 or 400; BIOL 300 and 302 with C or better grades.
Study of informational macromolecules and how they direct molecular processes in both eukaryotic and prokaryotic cells. Topics include structure, function and regulation of the genetic material at the molecular level, gene organization, structures and functions of DNA, RNA and proteins, gene transcription and expression, RNA processing, genomics and proteomics. A standard lab fee is required.

BIOL 401. BIOTECHNOLOGY AND RECOMBINANT DNA TECHNIQUES (5)
Weekly three-hour lectures and six-hour laboratories.
Prerequisite: CHEM 318 or 400; BIOL 300 and 302 with "C" or better grades.
Theory and practice of various biotechnologies and recombinant DNA techniques applicable to research and development, drug discovery, clinical therapies, preventative medicine, agriculture, the criminal justice system and a variety of other fields. Modern techniques in genomics and proteomics will be introduced in the laboratories. A standard lab fee is required.

BIOL 402. TOXICOLOGY (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 201 with C or better grades.
An in depth study of toxic chemicals and their interactions within the ecosystems. Topics include the origin, fate, chemical and biological detection, and quantification of pollutants and toxins and their impact on organisms at the molecular, biochemical, cellular, physiological, organismal, and community levels of organization. Basic toxicology, genetic toxicology, environmental mutagenesis and the molecular basis of mutation induction will be covered.

BIOL 410. COMPUTER APPLICATIONS IN BIOMEDICAL FIELDS (3)
Weekly three-hour laboratory instruction and exercise.
Prerequisite: BIOL 201 with C or better grades.
Applications of computers and data processing technology to the understanding and solving of specific problems in biomedical fields.
Same as COMP 410 .

BIOL 420. CELLULAR AND MOLECULAR IMMUNOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: CHEM 122; BIOL 301 with C or better grades.
Study of cellular and molecular aspects of the immune system and its responses against infectious agents and/or environmental insults. Included are development of the organs and cells of the immune system, genetics of the molecules of the immune system and their functions and interactions during an immune response, immunological disorders such as immunodeficiencies, autoimmune diseases, transplantation, and contemporary immunological techniques used in clinical diagnosis and other modern research and development applications. A standard lab fee is required.

BIOL 421. VIROLOGY (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 301 with C or better grades.
Study of aspects of molecular structure, genetics, and replication of viruses and other sub-viral agents such as prions and viroids, virus-host interactions, pathogenesis of viral infections, diagnostic virology, and antiviral vaccines and drugs; emphasis on human pathogens.

BIOL 422. MOLECULAR PLANT PHYSIOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: CHEM 318 or 400; BIOL 311 recommended; BIOL 300 with C or better grades.
Study of principles and methods of plant physiology at molecular level combined with modern plant technology. Topics include plant tissue and cell culture, genetic engineering and transformation, plant defense and genomics, and applications of DNA technology. A standard lab fee is required.

BIOL 423. CELLULAR AND MOLECULAR NEUROBIOLOGY (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 212 recommended; BIOL 300 with C or better grades.
Study of the nervous system at cellular and molecular levels, including cellular structure of neurons and other types of neuronal cells and their functions and interactions, neurotransmitters and their functions and regulation, chemical agents and their effects on the neuronal cells and their functions, and normal responses by the cells and the molecules of the nervous system and their response under adverse conditions.

BIOL 424. HUMAN PHYSIOLOGY (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 300 with C or better grades.
Study of human physiology at both the cellular and organ system levels, including neurophysiology, muscle physiology, cardiovascular physiology, respiration, kidney function, hormone function and reproduction.

BIOL 425. HUMAN GENETICS (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 300 and 302 with C or better grades.
Basic principles of human inheritance, including the transmission of genetic traits, chromosomal abnormalities and their effects, gene structure and function, pedigree analysis, gene mapping, cytogenetics, mutations and mutagenic agents, cancer genetics, molecular analysis of inherited diseases and genetically controlled phenomena in humans.

BIOL 426. EMBRYOLOGY (4)
Weekly three-hour lectures and three-hour laboratories.
Prerequisite: CHEM 122; BIOL 300 with C or better grades.
Studies in comparative gametogenesis, morphogenesis, and reproductive physiology. A standard lab fee is required.

BIOL 427. DEVELOPMENTAL BIOLOGY (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 300 with C or better grades.
Studies in human developmental sequences from fertilization to adolescence and examine how the developmental processes can be altered due to genetic, drug or environmental factors. Other animal systems (fly, frog, chick, mouse) will also be studied to aid in understanding anatomical, physiological, genetic and molecular mechanisms operating during gametogenesis, fertilization, cleavage, gastrulation and organogenesis.

BIOL 428. BIOLOGY OF CANCER (2)
Weekly two-hour lectures.
Prerequisite: CHEM 122; BIOL 300 with C or better grades.
Principles of oncology are examined. Included are mechanisms of oncogenesis at cellular and molecular levels, characteristics of cancer, advantages and disadvantages of various therapies of cancer treatment.

BIOL 430. RESEARCH DESIGN AND DATA ANALYSIS (3)
Weekly three-hour laboratory instruction and exercise.
Prerequisite: BIOL 202 with C or better grades.
Discussion of experimental design, sampling methods, data collection, and methods of data analysis related to scientific fields.
Same as CHEM 430, MATH 430.
GenEd-ID: A3, B3

BIOL 431. BIOINFORMATICS (4)
Weekly four-hour laboratory instruction and exercise.
Prerequisite: CHEM 318 or 400; COMP 150 recommended; BIOL 400 with C or better grades.
Computational methods for analysis of biological systems at all levels of scale from macromolecules to ecosystems. Topics include development of algorithms, macromolecular sequence analysis to determine structure and function, the study of phylogenetic relationships, imaging in two to four dimensions, and mathematical modeling in biological sciences. Technology applicable to research and development, gene discovery, new molecules which could lead to drug discoveries, clinical therapies.

Applications in preventative medicine, agriculture, criminal justice system, and a variety of other fields. A standard lab fee is required.
Same as COMP 431.
GenEd-ID: B3

BIOL 432. PRINCIPLES OF EPIDEMIOLOGY AND ENVIRONMENTAL HEALTH (3)
Weekly three-hour lectures.
Prerequisite: CHEM 122; BIOL 201 with C or better grades.
Distribution and dynamics of human health problems. Principles and procedures used to determine circumstances under which disease occurs or health prevails and to aid in managing and planning health and environmental systems. The broadened scope of epidemiology is examined through case studies and community and environmental health approach.

BIOL 490. SPECIAL TOPICS (1-3)
Prerequisite: CHEM 122; BIOL 300 with C or better grades.
Group study of a selected topic, the title of which is to be specified in advance. May be repeated for credits as topics change.

BIOL 491. SPECIAL LABORATORY TOPICS (1-3)
Prerequisite: CHEM 122; BIOL 300 with C or better grades.
Group laboratory study of a selected topic, the title of which is to be specified in advance. May be repeated for credits as topics change. A standard lab fee is required.

BIOL 492. BIOTECH INTERNSHIP (2-3)
Prerequisite: CHEM 318 or 400; BIOL 400 and 401 with a minimum overall grade point average of 3.0 or program approval.
Supervised work and study in work situations involving biological research, technical skills, and service learning. Up to three units may be applied toward degree in biology program. All students are required to attend the Biology Program Senior Capstone Colloquium scheduled at the end of each semester to present their projects. Graded credit/no credit.

BIOL 494. INDEPENDENT RESEARCH (2)
Prerequisite: CHEM 122 or 311 and 312, 318 or 400; BIOL 300 with a minimum overall grade point average of 3.0 or consent of instructor and program approval.
Laboratory and/or library research in selected areas in biology conducted under the direction of a faculty member. A total of four units by taking the course twice may be applied toward graduation. All students are required to attend the Biology Program Senior Capstone Colloquium scheduled at the end of each semester to present their projects. Graded credit/no credit.

BIOL 497. DIRECTED STUDY (2)
Prerequisite: CHEM 122; BIOL 300 with "C" or better grades; consent of instructor and program approval.
Reading and library research in an area of biology conducted under the direction of a faculty member in Biology. No more than two units may be applied toward graduation. All students are required to attend the Biology Program Senior Capstone Colloquium scheduled at the end of each semester to present their projects. Graded credit/no credit.

BIOL 499. SENIOR CAPSTONE COLLOQUIUM (1)
Prerequisite: BIOL 492, 494 or 497 with credits.
Oral presentation of completed or work-in-progress projects of BIOL 492, 494, or 497 courses. Only one unit may be applied toward graduation. Graded credit/no credit.

BUSINESS

BUS 110. BUSINESS LAW (3)
Three hours per week.
Prerequisite: none
Introduction to the legal and regulatory environment of business, emphasizing the US legal system. Topics include contracts, personal property, litigation, labor agreements and international trade.

BUS 334. THE BUSINESS OF ART (3)
Three hours per week.
Prerequisite: none
Explores various aspects of the "art world" business including the financial activities of art consultants, private dealers, commercial galleries, public museums and international auction houses. Uses cases to investigate art marketing, gallery and museum management, contracts and commissions, public image and career development. Analyzes the management elements needed to successfully manage an "art world" business.
Same as ART 334
GenEd-ID: D

BUS 340. BUSINESS AND MONEY IN THE AMERICAN NOVEL (3)
Three hours per week.
Prerequisite: none
What is money, really? How does it work in our society and in our literature? These are the starting questions that will form the core of exploration as we read and discuss works of American literature.
Same as ENGL 340.
GenEd-ID: C3

BUS 341. DRUG DISCOVERY AND DEVELOPMENT (3)
Three hours of lecture a week.
Prerequisite: none
How are drugs discovered? What determines the price for a drug? What is the difference between a generic and non-generic drug? These questions will be examined with an interdisciplinary approach. Topics to be covered may include the isolation of compounds from natural sources, the screening of compounds for biological activity, structure-activity relationships of drugs, computer-assisted drug design, combinatorial chemistry, bioinformatics, the FDA approval process for new drugs, and the economic and business aspects of pharmaceutical development.
Same as CHEM 341, ECON 341
GenEd-ID: B1, D

BUS 343. ANTHROPOLOGY OF ORGANIZATIONS (3)
Three hours per week.
Prerequisite: none
Anthropological perspective on human organizations in terms of communication, spatial relations, product development, technology, marketing, group behavior. Explores principles of effectively organizing and directing work groups.
Same as ANTH 343.
GenEd-ID: D

BUS 349. HISTORY OF BUSINESS & ECONOMICS IN NORTH AMERICA (3)
Three hours per week.
Prerequisite: none
Examines the growth and development of the economies of North America since colonial times. Addresses social, ethical, economic and management issues during the development of Canada, the United States, and Mexico. Analyzes the business principles underlying the growth and development of the economies.
Same as HIST 349.

GenEd-ID: D

BUS 410. SPECIAL TOPICS IN BUSINESS (3)
Three hours per week.
Prerequisite: Senior status or consent of professor
In-depth exploration and analysis of topics significant to the contemporary environment. Includes a major research project based on the local business community.

BUS 420. CASES IN STRATEGY (3)
Three hours per week.
Prerequisite: Senior status or consent of professor
A case study seminar that integrates functional areas of business into the development and analysis of strategy and strategic planning. An emphasis will be on practical strategic solutions that could reasonably lead to success in the marketplace.

BUS 424. BUSINESS IN ITS SOCIAL SETTING (3)
Three hours per week.
Prerequisite: BUS 346 or consent of professor
Analytical and interdisciplinary investigation of the evolution and contemporary status of business, especially relative to its environment – political, social, ethical, legal and economic. The dynamic nature of these environmental elements and their inter-relationships are analyzed through case studies and research projects.
GenEd: D

BUS 499. CAPSTONE: GLOBAL STRATEGIC SIMULATION (3)
Three hours per week.
Prerequisite: All Lower Division (24 units) and other Upper Division (33 units) required courses in the Business Major.
Provides an integration of all prior business core subject matter by requiring teams of students to participate in a PC-based simulation of an ongoing (fictitious) international business. Requires decision-making under uncertainty but within strict deadlines, competitor analysis, and formal oral/written reporting of results. Also, provides interdisciplinary exposure to complex business cases via Web-based analytical tools.

CHEMISTRY

CHEM 100. CHEMISTRY AND SOCIETY (4)
Three hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: none
An introduction to the basic principles of chemistry and a consideration of the benefits and problems arising from applications of chemistry. Discussions of foods and food additives, drugs, plastics and other materials of everyday life, fuel sources, the atmosphere, and fresh water. Intended for the non-chemistry major.
GenEd: B1

CHEM 105. INTRODUCTION TO CHEMISTRY (3)
Three hours of lecture per week.
Prerequisite: A qualifying score on the ELM Examination or satisfying the ELM exemption requirements.
A one-semester course that introduces the basic principles and concepts in Chemistry. Topics covered include: measurements, units and unit conversion, scientific notation, stoichiometry, atomic structure, the concept of the mole, types of compounds, and problem solving. Intended for the non-chemistry major.

CHEM 110. WHO DONE IT? AN INTRODUCTION TO FORENSICS (3)
Three hours of lecture per week.
Prerequisite: none
Interdisciplinary approaches to forensic science, with lectures based on Anthropology, Art, Biology, Chemistry, Computer Science, History, Literature, Physics, Psychology, and Sociology. How have fictional detectives in novels, TV, and film reflected and influenced forensics? How have scientific and archaeological methods been incorporated into crime scene analysis? How have crimes been viewed and punished through time? How have different cultures defined crimes? How do forensic specialists identify forgeries in art, cartography, and documents? How have computer scientists contributed to forensics? How are cybercrimes solved? How do psychologists profile criminals? How do biologists use DNA, pollen, seeds, and insects to solve crimes? How do chemists and physicists analyze forensic materials? Intended for the non-chemistry major.
Same as ANTH 110.
GenEd: B1, D

CHEM 121. GENERAL CHEMISTRY I AND LABORATORY (4)
Three hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: A passing score on the Chemistry Placement Examination or credit in CHEM 105 within the preceding year. One year of high school chemistry is strongly recommended.
An introductory chemistry course which provides an overview of the chemical and physical behavior of matter with a focus on qualitative and quantitative general inorganic, physical, and analytical chemistry.
GenEd: B1

CHEM 122. GENERAL CHEMISTRY II AND LABORATORY (4)
Three hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: CHEM 121 with a grade of C or better
An introductory chemistry course which provides an overview of the chemical and physical behavior of matter with a focus on quantitative general inorganic, physical, and analytical chemistry including kinetics and thermodynamics of reactions, gas phase and solution equilibria, and qualitative aspects of radiochemistry, organic chemistry, and polymer chemistry.
GenEd: B1

CHEM 170. PHYSICAL SCIENCES FOR THE ELEMENTARY SCHOOL TEACHER (4)
Three hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: A qualifying score on the ELM examination or satisfying the ELM exemption requirements.
Designed to provide K-8 elementary school teachers with an understanding of the physical sciences (Chemistry and Physics) with a focus on (1) the structure and properties of matter and (2) the principles of motion and energy. The areas covered in this course include the physical properties of solids, liquids, and gases; physical and chemical changes in matter; atomic theory and the periodic table; the principles of motion and energy; forces and the motion of particles; sources and transformations of energy including heat, electricity, magnetism, light, and sound; renewable and non-renewable energy sources; and the conservation of energy resources. The laboratory component of this course focuses on demonstrations for the K-8 classroom. Intended for the non-chemistry major.
GenEd: B1, B2

CHEM 250. QUANTITATIVE ANALYSIS (2)
Two hours of lecture per week.
Prerequisite: Must be taken concurrently with CHEM 251. CHEM 122 with a grade of C or better.
An examination of the theory and techniques involved in the quantification of inorganic, organic, and biological species from samples with an

emphasis on the environmental, biological, and medical applications of the analysis techniques.

CHEM 251. QUANTITATIVE ANALYSIS LABORATORY (2)
Two four-hour labs per week. Lab fee required.
Prerequisite: Must be taken concurrently with CHEM 250
A laboratory course designed to provide students with an exposure to the techniques used in the quantification of inorganic, organic, and biological species from samples using gravimetric and volumetric analyses, potentiometric titrations, atomic absorption spectrometry, UV-visible spectroscopy, GC, and GC/MS.

CHEM 311. ORGANIC CHEMISTRY I (3)
Three hours of lecture per week
Prerequisite: CHEM 122 with a grade of C or better
The structure and reactions of simple organic molecules and spectroscopic techniques (NMR, GC-MS, IR, and UV-visible) used to characterize molecules. Students interested in pre-professional programs (pre-medical, pre-veterinary, pre-dental, and pre-pharmacy) should take this course.

CHEM 312. ORGANIC CHEMISTRY I LABORATORY (1)
One four-hour lab per week. Lab fee required.
Prerequisite: CHEM 311 (or taken concurrently with CHEM 311) with a grade of C or better
A laboratory course designed to provide students with an exposure to the techniques and hands-on access to the instrumentation (NMR, GC, GC-MS, LC, IR, and UV-visible) used to purify and characterize organic molecules resulting from organic reactions.

CHEM 313. ORGANIC CHEMISTRY I LEARNING COMMUNITY (1)
One hour of recitation per week.
Prerequisite: Must be taken concurrently with CHEM 311
An instructor/peer-supervised interactive problem-solving session for students in CHEM 311 where students work in small groups on problems related to the content in CHEM 311.

CHEM 314. ORGANIC CHEMISTRY II (3)
Three hours of lecture per week
Prerequisite: CHEM 311 with a grade of C or better.
An examination of the structure, reactions, and spectroscopy of organic compounds containing one or more functional groups, and the structures and reactions of biologically relevant molecules. Students interested in pre-professional programs (pre-medical, pre-veterinary, pre-dental, and pre-pharmacy) or obtaining a minor in Chemistry should take this course.

CHEM 315. ORGANIC CHEMISTRY II LABORATORY (1)
One four-hour lab per week. Lab fee required.
Prerequisite: CHEM 311, 312, and 314 (or taken concurrently with CHEM 314) with grades of C or better
A laboratory course designed to provide students with experience in single-step and multi-step syntheses and characterization of organic molecules with hands-on access to instrumentation (NMR, GC, GC-MS, LC, IR, and UV-visible).

CHEM 316. ORGANIC CHEMISTRY II LEARNING COMMUNITY (1)
One hour of recitation section per week.
Prerequisite: Must be taken concurrently with CHEM 314
An instructor/peer-supervised interactive problem-solving session for students enrolled in CHEM 314 where students work in small groups on problems related to the content in CHEM 314.

CHEM 318. BIOLOGICAL CHEMISTRY (3)
Three hours of lecture per week
Prerequisite: CHEM 311 with a grade of C or better
An integrated Organic Chemistry II and Biochemistry course for biology students. The topics covered in this course include: the structure and synthesis of sugars, amino acids, DNA, RNA, proteins; enzyme catalysis and inhibition; and the reactions involved in biosynthetic and metabolic pathways. Students who are interested in pre-professional programs (pre-medical, pre-veterinary, pre-dental) or students interested in obtaining a minor in Chemistry should take CHEM 314. Intended for the non-chemistry major.

CHEM 341. DRUG DISCOVERY AND DEVELOPMENT (3)
Three hours of lecture per week.
Prerequisite: none
How are drugs discovered? What determines the price for a drug? What is the difference between a generic and non-generic drug? These questions will be examined with an interdisciplinary approach. Topics to be covered may include the isolation of compounds from natural sources, the screening of compounds for biological activity, structure-activity relationships of drugs, computer-assisted drug design, combinatorial chemistry, bioinformatics, the FDA approval process for new drugs, and the economic and business aspects of pharmaceutical development.
Same as ECON 341, BUS 341
GenEd-ID: B1, D

CHEM 343. FORENSIC SCIENCE (3)
Two hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: none
A survey of the various chemical and biological techniques used in obtaining and evaluating criminal evidence. Topics include: chromatography; mass spectrometry (LC-MS, GC-MS); atomic absorption spectrometry, IR, UV, fluorescence, and X-ray spectroscopies; fiber comparisons; drug analysis; arson/ explosive residue analysis; toxicological studies; psychological profiling; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis.
Same as BIOL 343.
GenEd-ID: B1

CHEM 344. ENERGY AND SOCIETY (3)
Three hours of lecture per week.
Prerequisite: none
Survey of the physical, chemical, and engineering principles involved in the production of energy from current and potential sources and the economical, environmental, and political issues surrounding energy production. The course will also examine factors that influence worldwide energy policy. Examples of topics that may be included in this course include fossil fuels, solar energy, biomass, fuel cells, and nuclear (fission and fusion) processes.
GenEd-ID: B1

CHEM 346. SCIENTIFIC AND PROFESSIONAL ETHICS (3)
Three hours of lecture/ discussion per week.
Prerequisite: none
Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues.
Same as BIOL 346, MATH 346, MGT 346.
GenEd-ID: A3, D

CHEM 350. PHYSICAL CHEMISTRY I (3)
Three hours of lecture per week.
Prerequisite: CHEM 122 and MATH 151 with grades of C or better
The fundamentals of physical chemistry including thermodynamics, equilibria, spectroscopy, and kinetics.

CHEM 400. BIOCHEMISTRY I AND LABORATORY (4)
Three hours of lecture and one four-hour lab per week. Lab fee required.
Prerequisite: CHEM 314 with a grade of C or better
An introduction to the physical and chemical properties of proteins and enzymes, enzymatic catalysis and inhibition, the biosynthesis of proteins and nucleic acids, and biosynthetic and metabolic pathways.

CHEM 430. RESEARCH DESIGN AND DATA ANALYSIS (3)
Three hours of lecture/ discussion per week.
Prerequisite: CHEM 121 and 122 with "C" or better grades.
Discussion on experimental design, sampling methods, data collection, and methods of data analysis related to scientific fields.
Same as BIOL 430, MATH 430.
GenEd-ID: A3, B3

CHEM 490. SPECIAL TOPICS IN CHEMISTRY (1-3)
Prerequisite: Consent of instructor.
Specialized topics from the fields of Chemistry and Biochemistry. Variable topic and variable credit (1-3 units). This course may be repeated for credit.

CHEM 492. INTERNSHIP/ SERVICE LEARNING (1-3)
Prerequisite: Consent of instructor.
Provides student credit for internship work and/or service learning in the community that culminates in a written and oral report. Variable credit (1-3 units). This course may be repeated for credit.

CHEM 494. INDEPENDENT RESEARCH (1-3)
Prerequisite: Consent of instructor/ research advisor.
Provides student credit for independent research (laboratory or library) that culminates in a written and oral report. Variable credit (1-3 units). This course may be repeated for credit.

CHEM 497. DIRECTED STUDIES (1-3)
Prerequisite: Consent of instructor.
Provides student credit for independent work. Variable credit (1-3 units). This course may be repeated for credit.

COMMUNICATION

COMM 210. INTERPERSONAL COMMUNICATION (3)
Three hours lecture per week.
Prerequisite: none
Analysis of the role communication plays in interpersonal relationships with special emphasis on intercultural communication. Oral interpersonal communication skills will be stressed.
GenEd: A2

COMPUTER INFORMATION SYSTEMS

CIS 110. BUSINESS COMPUTER SYSTEMS (3)
Three hours per week.
Prerequisite: none
Introduces the fundamentals of computer information systems for business: terminology, hardware, software, database and network concepts. Provides hands-on experience in using PCs to address business problems.

CIS 310. MANAGEMENT INFO SYSTEMS (3)
Three hours per week.
Prerequisite: CIS 110
Application of computer-based information systems to the management of organizations. Topics include use of information to further the organization's mission and strategy, the role of users, the architecture of information, and development of decision-support processes for managers.

COMPUTER SCIENCE

COMP 100. COMPUTERS: THEIR IMPACT AND USE (3)
Three hours of lecture in the lab per week.
Prerequisite: none
An introduction to the uses, concepts, techniques, and terminology of computing. Places the possibilities and problems of computer use in historical, economic, and social contexts. Shows how computers can assist in a wide range of personal, commercial, and organizational activities. Typical computer applications, including word processing, spreadsheets, and databases. Not open to Computer Science majors.

COMP 101. COMPUTER LITERACY (3)
Three hours of lecture in the lab per week.
Prerequisite: none
An introduction to computer applications, including Web applications, word processing, spreadsheets, databases and programming. Includes service learning component. Not open to Computer Science majors.

COMP 102. INTRODUCTION TO ALGORITHMS (3)
Three hours of lecture in the lab per week.
Prerequisite: none
An introduction to the design, development and expression of algorithms. Algorithms and their stepwise refinement. Expression of algorithms in a formal language. This course is intended to be a first course in a two-course sequence, the second being a programming language laboratory. Not open to students who have completed COMP 150.

COMP 103. COMPUTER PROGRAMMING INTRODUCTION (3)
Three hours of lecture in the lab per week.
Prerequisite: none
An introduction to the design, development and expression of algorithms. Algorithms and their stepwise refinement. Expression of algorithms in a formal language. This course is intended to be a first course in programming language (for example VISUAL BASIC or C/C++). Not open to students who have completed COMP 150.

COMP 150. OBJECT ORIENTED PROGRAMMING (4)
Four hours of lecture in the lab per week.
Prerequisite: Students with no programming experience should take COMP 103 first.
Introduction to algorithms, their representation, design, structuring, analysis and optimization. The course introduces the concept of object paradigm and teaches how to design and implement algorithms as structured programs in a high level language. Course includes programming lab.

COMP 151. DATA STRUCTURES AND PROGRAM DESIGN (4)
Four hours of lecture in the lab per week.
Prerequisite: COMP 150.
Introduction to data structures and the algorithms that use them. Review of composite data types such as arrays, records, strings, and sets. The role of the abstract data type in program design. Definition, implementation, and application of data structures such as stacks, queues, linked lists, trees, and graphs. Recursion. Use of time complexity expressions in evaluating algorithms. Comparative study of sorting and searching algo-

rithms. Course includes programming lab.

COMP 162. COMPUTER ARCHITECTURE AND ASSEMBLY LANGUAGE (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 150.
An introduction to computer architecture, assembly language programming, system software and computer applications. Number systems and data representation. Internal organization of a computer. Primitive instructions and operations. Assembly language. Language translation principles. Overview of operation systems.

COMP 232. PROGRAMMING LANGUAGES (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 162 and 151.
Discussion of issues in the design, implementation, and use of high-level programming languages. Historical background. How languages reflect different design philosophies and user requirements. Technical issues in the design of major imperative (procedural) programming languages. Other approaches to programming: functional programming, logic programming, and object-oriented programming.

COMP 262. COMPUTER ORGANIZATION AND ARCHITECTURE (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 151 and 162.
Extension of basic addressing concepts to more advanced addressability such as base register and self-relative addressing. Comparative computer architecture focusing on such organizations as multiple register processors and stack machines. Basics of virtual memory input-output. Introduction to the concept of microprogrammable systems. Low-level language translation process associated with assemblers. System functions such as relocatable loading and memory management. Application of data structure and hashing techniques to the above. Other related topics.

COMP 350. SOFTWARE ENGINEERING (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 232, 262.
Concepts and techniques for systems engineering, requirements analysis, design, implementation and testing of large scale computer systems. Principles of software engineering for production of reliable, maintainable and portable software products. Emphasis on functional analysis and structured design techniques. Topics include unit, integration and systems testing, configuration management, and software quality assurance practices. Participation in group activities involving analysis, design and implementation of a software intensive system. Introduction to Computer Aided Software Engineering (CASE)

COMP 362. OPERATING SYSTEMS (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 262.
Examination of the principal types of systems including batch, multiprogramming, and time-sharing. Networked systems are also discussed. The salient problems associated with implementing systems are considered including interrupt or event driven systems, multi-tasking, storage and data base management, and input-output. Emphasis will be placed on some of the simple algorithms used to solve common problems encountered such as deadlocks, queue service, and multiple accesses to data. Projects will be implemented to reinforce the lectures.

COMP 410. COMPUTER APPLICATION IN BIOMEDICAL FIELDS (3)
Three hours of lecture in the lab per week.
Prerequisite: BIOL 201 with C or better grades.
Current applications of computers and data processing technology to the understanding and solving of specific problems in biomedical fields.
Same as BIOL 410.

COMP 420. DATABASE THEORY AND DESIGN (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350.
Database structure including: structure definition, data models, semantics of relations, and operation on data models. Database schemas: element definition, use and manipulation of the schema. Elements of implementation. Algebra of relations on a database. Hierarchical data bases. Discussion of information retrieval, reliability, protection and integrity of databases.

COMP 422. DESIGN OF COMPILERS (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 444
Organization of compiler including lexical and syntax analysis, symbol tables, object code generation, code optimization techniques, and overall design. Compilation techniques and run-time structures.

COMP 424. COMPUTER SYSTEM SECURITY (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350.
Security techniques in operating systems, data bases, and computer networks. Analysis of formal security models. Introduction to cryptography, public key security schemas.

COMP 429. COMPUTER NETWORKS (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350, COMP 362 and MATH 344.
Basic software design and analysis considerations in networking computers into coherent, cooperating systems capable of processing computational tasks in a distributed manner. Network topology, routing procedures, message multiplexing and process scheduling techniques.

COMP 431. BIOINFORMATICS (4)
Three hours of lecture in the lab per week.
Prerequisite: COMP 150, MATH 151, Statistics.
Basic computational models used in molecular biology and chemistry will be introduced. Topics include algorithms for string alignments, dynamic programming, structural superposition algorithms, computing with differential information, 3D motifs, Hidden Markov Models, phylogenetic trees, statistical/ information techniques for pattern recognition, genetic algorithms.
Same as BIOL 431
GenEd-ID: B3

COMP 444. AUTOMATA, LANGUAGES, AND COMPUTATION (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH. 300.
Study of the relation of languages (i.e. sets of strings) and machines for processing these languages, with emphasis on classes of languages and corresponding classes of machines. Phrase structure languages and grammar. Types of grammars and classes of languages. Regular languages and finite state automata. Context-free languages and pushdown automata. Unrestricted languages and Turing Machines. Computability models of Turing, Church, Markov, and McCarthy. Applications to programming languages, compiler design, and program design and testing.
GenEd: C3

COMP 447. SOCIETAL ISSUES IN COMPUTING (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350 and COMP 362 and senior standing.
A survey course on the role of the digital computer in modern society. The dangers of the misuse of computers (as in the invasion of privacy), as well as the proper and intelligent use of the machines, are discussed.
GenEd: D

COMP 449. HUMAN-COMPUTER INTERACTION (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350.
The information exchange between humans and computer systems will be examined. Aspects of input/output devices, software engineering, and human factors will be discussed with respect to human-computer interactions. Topics include: text and graphic display; user modeling; program design, debugging, complexity and comprehension; and current research studies and methodologies.
GenEd: E

COMP 462. ADVANCED OBJECT-ORIENTED PROGRAMMING (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350.
Principles of object-oriented design and programming based on languages such as JAVA, C++ and Smalltalk will be presented. Understanding of the role of objects, methods, message passing, encapsulation, and inheritance for effective programming will be stressed. Language structure versus particular engineering objectives will be analyzed. Design Patterns techniques will be a unifying theme.

COMP 464. COMPUTER GRAPHIC SYSTEMS AND DESIGN I (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 350 and MATH 240.
Fundamental concepts of computer graphics. Graphics devices; graphics languages; interactive systems. Applications to art, science, engineering and business. Trade-offs between hardware devices and software support.

COMP 466. COMPUTER GRAPHIC SYSTEMS AND DESIGN II (3)
Three hours of lecture in the lab per week.
Prerequisite: COMP 464.
Advanced concepts of computer graphics. Topics include computer graphics software and hardware, mathematical basis of geometric modeling, data base management in manufacturing environments, imagining and visualization.

COMP 469. ARTIFICIAL INTELLIGENCE/ NEURAL NETS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 342, programming skills
An exploration of the use of computers to perform computations normally associated with intelligence, pattern formation and recognition using various backpro iterations. Stacks, decision trees and other modern mining tools and computational models for knowledge representation will be covered. Other topics may include natural language and imagining.

COMP 490. TOPICS IN COMPUTER SCIENCE (3)
Three hours of lecture in the lab per week.
Prerequisite: Junior standing.
Current issues in computer science.

COMP 492. INTERNSHIP (3)
Three hours of lecture in the lab per week.
Prerequisite: Junior standing and Program approval or written proposal of internship studies.
Supervised work and study in industrial setting involving development of degree related skills. All students are required to present their projects at the Senior Seminar. Credit/no credit.

COMP 494. INDEPENDENT RESEARCH (3)
Three hours of lecture in the lab per week.
Prerequisite: Senior standing and Program approval or written proposal of independent research studies.
Supervised project involving theoretical research in the field of computer science or its applications. All students are required to present their projects at the Senior Seminar. Credit/no credit.

COMP 497. DIRECTED STUDY (3)
Three hours of lecture in the lab per week.
Prerequisite: Senior standing and Program approval or written proposal of directed studies.
Supervised project involving library research. All students are required to present their projects at the Senior Seminar.

COMP 499. SENIOR COLLOQUIUM (1)
Three hours of lecture in the lab per week.
Prerequisite: Senior standing.
Oral presentation of current advancements in the field, reports on students' projects, and invited lectures. Repeatable.

ECONOMICS

ECON 110. PRINCIPLES OF MICROECONOMICS (3)
Three hours per week.
Prerequisite: none
The application of economic reasoning to the decisions of consumers and producers. Topics include opportunity cost, resource allocation, the price system, the organization of industry, market failures, distribution of income, public sector economics.
GenEd: D

ECON 111. PRINCIPLES OF MACROECONOMICS (3)
Three hours per week.
Prerequisite: none
Study of the workings of the economy. Topics include national income accounting, business cycles, employment and unemployment, inflation, economic growth, financial institutions, fiscal and monetary policy, international trade.
GenEd: D

ECON 300. FUNDAMENTALS OF ECONOMICS (3)
Three hours per week.
Prerequisite: none
Basic economic training for citizens who wish to exercise a reasoned judgment about economic issues in public affairs. Content generally same as ECON 110, 111 in condensed form. Not open to students with credit in ECON 110 or 111.
GenEd: D

ECON 310. INTERMEDIATE MICROECONOMICS (3)
Three hours per week.
Prerequisite: ECON 110, 111 and either MATH 140 or 150.
Economic analysis of the decisions of consumers and producers. Emphasis on the theory of consumer behavior, the theory of the firm, price and output determination in various market structures, factor markets and externalities.

ECON 311. INTERMEDIATE MACROECONOMICS (3)
Three hours per week.
Prerequisite: ECON 110, 111 and either MATH 140 or 150.
Determinants of levels of national income, employment, and price levels. Analysis of secular and cyclical changes in economic activity, and the effects of monetary and fiscal policies on these changes.

ECON 320. MONEY & BANKING (3)
Three hours per week.
Prerequisite: ECON 110, 111 and either MATH 140 or 150.
Nature and functions of money and its relation to prices; the monetary system of the United States; the functions of banks, bank credit, foreign exchange and monetary control. The impact of monetary policy on economic activity.

ECON 329. MANAGERIAL ECONOMICS (3)
Three hours per week.
Prerequisite: ECON 110, 111 and either MATH 140 or 150.
Development of the tools of marginal analysis and their application to managerial decisions and planning. Topics include demand analysis, production and cost, pricing and output decisions under different market structures. Product and factor markets will be analyzed.

ECON 340. BUSINESS AND MONEY IN THE AMERICAN NOVEL (3)
Three hours per week.
Prerequisite: none
What is money, really? How does it work in our society and literature? These are the starting questions which will form the core of exploration as we read and discuss works of American literature.
Same as BUS 340 and ENG 340.
GenEd-ID: A3, C2

ECON 341. DRUG DISCOVERY AND DEVELOPMENT (3)
Three hours per week.
Prerequisite: none
How are drugs discovered? What determines the price for a drug? What is the difference between a generic and non-generic drug? These questions will be examined with an interdisciplinary approach. Topics to be covered may include the isolation of compounds from natural sources, the screening of compounds for biological activity, structure-activity relationships of drugs, computer-assisted drug design, combinatorial chemistry, bioinformatics, the FDA approval process for new drugs, and the economic and business aspects of pharmaceutical development.
Same as CHEM 341.
GenEd-ID: B1, D

ECON 343. CAPITAL THEORY (3)
Three hours per week.
Prerequisite: none
Intertemporal choice and decision-making under uncertainty in our personal and financial lives. Topics include multiperiod consumption, multiperiod production, capital budgeting, modern portfolio theory and financial management.
Same as FIN 343
GenEd-ID: D

ECON 349. HISTORY OF BUSINESS AND ECONOMICS IN NORTH AMERICA (3)
Three hours per week.
Prerequisite: none
Examines the growth and development of economies of North America since colonial times. Addresses social, ethical, economic and management issues during the development of Canada, the United States, and Mexico. Analyzes the business principles underlying the growth and development of the economies.
Same as HIST 349 and BUS 349.
GenEd-ID: D

ECON 362. INTRODUCTION TO ENVIRONMENTAL ECONOMICS (3)
Three hours per week.
Prerequisite: ECON 110 and 111.
Economic analysis of environmental problems and policy. Market failures due to externalities, public goods, and common property resources will be examined. Private (market) and public (governmental) solutions to environmental problems are examined.

ECON 462. ENVIRONMENTAL ECONOMICS (3)
Three hours per week.
Prerequisite: ECON 310 or 329, 362, 486 or 488 (may be taken concurrently).
The measurement of market and non-market benefits with application in measuring environmental benefits. Theory of consumer choice: indirect utility functions, expenditure functions, consumer surplus, willingness-to-pay and willingness-to-accept. Theory of measurement: hedonic models, recreation demand, contingent valuation, economy-ecosystem interactions, valuing human morbidity and mortality.

ECON 463. ENERGY ECONOMICS (3)
Three hours per week.
Prerequisite: ECON 310 or 329.
Application of economic analysis to energy problems and policies. Representative topics include macroeconomic effects of energy price shocks, international financial fragility, OPEC pricing strategies, determinants of demand and supply, industrial organization and finance, investor and publicly owned utilities, domestic and international policies.

ECON 464. NATURAL RESOURCE ECONOMICS (3)
Three hours per week.
Prerequisite: ECON 310 or 329.
Microeconomic and capital theory applied to problems of conserving and managing natural resources. Analysis of public policies affecting renewable and nonrenewable resources including price controls, taxation and leasing. Representative topics include: forestry, energy, water, and mineral economics.

ECON 486. INTRODUCTION TO ECONOMETRICS (3)
Three hours per week.
Prerequisite: ECON 310 or 329, 311, MATH 340.
Development and application of econometric tools.

ECON 488. QUANTITATIVE METHODS IN ENVIRONMENTAL ECONOMICS (4)
Three hours per week and one hour lab.
Prerequisite: ECON 310 or 329, 362; MATH 150, BIOL 202 or MATH 340.
Economic and social impacts of environmental regulations. Applications of input-output analysis and computable general equilibrium models to measure economic consequences to employment and the economy from environmental regulations.

ECON 490. SEMINAR (3)
Three hours per week.
Prerequisite: None.
This seminar explores a different topic each term. This seminar explores a different topic each term. Students may enroll up to four times in different seminars.

ECON 492. SERVICE LEARNING/INTERNSHIP (3)
Six hours per week.
Prerequisite: None.
Enrollment in this course is with permission of faculty member in charge. Individual internship through service learning. Graded Credit/No Credit.

ECON 494. INDEPENDENT STUDY (3)
Variable hours per week.
Prerequisite: None.
Individual contracted study on topics selected by the student for further study. Enrollment in this course is with permission of faculty member in charge. Graded Credit/No Credit.

ECON 497. DIRECTED STUDY (3)
Variable hours per week.
Prerequisite: None.
Reading and library research under the direction of a faculty member. Enrollment in this course is with permission of faculty member in charge. Graded Credit/No Credit.

EDUCATION

EDUC 101. INTRODUCTION TO EDUCATION (3)
Prerequisite: none
The elementary teaching profession; personal goals, teaching-learning environment, and career opportunities. Experiences that assist students gain accurate knowledge schooling in the 21st century. Field experience in elementary school programs of 2 hours per week required.

EDUC 320. EDUCATION IN MODERN SOCIETY (3)
Prerequisite: none
Survey of educational institutions and practices used in different sectors of society. Historical and philosophical foundations of American education.
GenEd: D

EDUC 510. LEARNING THEORY AND DEVELOPMENT APPLIED IN MULTICULTURAL EDUCATION CONTEXTS (3)
Three hours class time per week and participation/observation in the public schools.
Prerequisite: none.
Introduction to psychology of learning and instruction. Major concepts, principles, theories and research related to child and adolescent development; human learning; the cognitive, linguistic, social, emotional and physical development. Candidates begin to use this knowledge to create learning opportunities that support student development, motivation and learning in a social, cultural, and historical context. Includes learning theories and their application to educational practice in multicultural and multilingual classroom settings.

EDUC 512. EQUITY, DIVERSITY AND FOUNDATIONS OF SCHOOLING (3)
Three hours class time per week.
Prerequisite: none.
Principles of effectively teaching students from diverse language, historical, and cultural backgrounds. Includes, skills and abilities and community values. Focus on the major cultural and ethnic groups. Attention to ways of recognizing and minimizing bias in the classroom and ways to create equitable classroom community that emphasize the physical, social, emotional and intellectual safety of all students. Includes study of gender bias, diverse students, families, schools and communities and the candidate's self-examination of his/her stated and implied beliefs, attitudes and expectations related to these areas of diversity.

EDUC 520. OBSERVING AND GUIDING BEHAVIOR IN MULTILINGUAL/ MULTICULTURAL AND INCLUSIVE CLASSROOMS (3)
Three hours class time per week.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program. Students must register for at least one unit of Field Experience concurrent with this course.
Through this course students observe children's behavior in multilingual/ multicultural and inclusive classrooms, learn and apply assessment principles and tools; learn how to guide children's social behavior; and communicate with families. Students learn how to organize and write plans for instruction.

EDUC 560. FIELDWORK/STUDENT TEACHING (1-9)
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program.
Observation and teaching in selected schools under the supervision of classroom teacher and University supervisor, with a student teaching seminar.

EDUC 561. STUDENT TEACHING SEMINAR (1)
Weekly Meetings to discuss observations and teaching practice during the student teaching experience.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program.
Discussion and seminar with University Supervisor to discuss practical issues relevant to the student teaching experience.

EDUCATION MULTIPLE SUBJECTS PROGRAM

EDMS 522. LITERACY I/MULTICULTURAL-MULTILINGUAL (3)
Three hours class time per week.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program. Students must register for at least one unit of Field Experience concurrent with this course.
Includes developmental theory and practice of the reading and writing process across the grade levels. Includes study skills. Foundations of reading and writing theory and practice for students who speak English as a first or second language. Teaching reading and writing to native English speakers and English Language Learners in English Only, Multilingual and Bilingual contexts. Needs of English Language Learners and exceptional children, technology for teaching and learning is integrated.

EDMS 523. LITERACY II/MULTICULTURAL-MULTILINGUAL (4)
Four hours class time per week.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program. Students must register for at least one unit of Field Experience concurrent with this course.
Includes differentiated instruction and scaffolding for English language learners, special education (including gifted) and English only students. Focus on reading and writing skills across the content areas and Literature based instruction for native English speakers and English Language Learners in English Only, Multilingual and Bilingual contexts. Needs of English Language Learners and exceptional children, technology for teaching and learning is integrated.

EDMS 526. MODERN METHODS IN MATHEMATICS TEACHING (3)
Three hours class time per week.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program. Students must register for at least one unit of Field Experience concurrent with this course.
Students learn to apply techniques and materials to teaching mathematics in elementary and middle schools. Special attention will be given to mathematical reasoning, problem solving skills, multiple representations and approaches including verbal, symbolic, and graphic. Modern methods, including mathematical modeling, use of new technology and modern educational software will be stressed. Needs of English Language Learners and exceptional children, technology for teaching and learning is integrated.

EDMS 527. HISTORY AND SOCIAL STUDIES AND INTEGRATED ARTS (4)
Four hours class time per week.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program. Students must register for at least one unit of Field Experience concurrent with this course.
Focuses on curriculum for History, Social Sciences and Arts as delin-

eated by the California Content Area Standards and the Curriculum Frameworks. Includes curriculum development, methods, techniques, planning and assessment in history, social studies and integrated arts. Needs of English Language Learners and exceptional children, technology for teaching and learning is integrated.

EDMS 529. SCIENCE, HEALTH AND PHYSICAL EDUCATION (4)
Four hours class time per week.
Prerequisite: Must be officially admitted to the Multiple Subject Credential Program. Students must register for at least one unit of Field Experience concurrent with this course.
Through this course students learn and apply recommended methods for teaching physical, life and earth science, health and physical education to students (K-8) based on research and theory. Students reflect upon their personal development and abilities to integrate theory and practice in science, health and physical education with other subject areas. Needs of English Language Learners and exceptional children, technology for teaching and learning is integrated.

ENGLISH

ENGL 100. COMPOSITION AND RHETORIC (3)
Three hours lecture/discussion per week
Prerequisite: none
Instruction and practice in writing university-level expository prose. The subject matter of the course will be thematic and variable. The focus of the course is development of proficiency in conceptualizing, analyzing and writing academic papers.
GenEd: A1

ENGL 120. AMERICAN LITERATURE I (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
Study of major works of American literature from colonial times through 1850, with special attention to literary movements. Major writers will be addressed, as well as lesser known writers from various cultural and regional backgrounds.
GenEd: C2

ENGL 150. BRITISH AND EUROPEAN LITERATURE I (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
Survey of major authors in English and European literature from Beowulf to approximately 1650, with special emphasis on the intellectual backgrounds of the Medieval and Renaissance periods.
GenEd: C2

ENGL 220. AMERICAN LITERATURE II (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent and ENGL 120 or equivalent
Study of major works of American literature from 1850 to the present, with special attention to literary movements. Major writers will be addressed, as well as lesser known writers from various cultural and regional backgrounds.
GenEd: C2

ENGL 250. BRITISH AND EUROPEAN LITERATURE II (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent and ENGL 150 or equivalent
Study of major works of English and European literature from approximately 1650 to the present, with special attention to various literary movements.
GenEd: C2

ENGL 310. RESEARCH METHODS (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
Comprehensive investigation of research modalities, including the various forms of electronic research. Writing intensive.

ENGL 312. INTRODUCTION TO CHILDREN'S LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
An inquiry into children's and adolescent literature. Students analyze narrative and expository texts. Focus will be on critical reading for K-12 students and analysis of perspective in fiction and non-fiction. Works studied will be representative of several genres, cultures, and periods of literature. Students evaluate the use of elements of persuasive argument in print, speech, videos, and in other media.

ENGL 315. INTRODUCTION TO LANGUAGE STRUCTURE AND LINGUISTICS (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
An examination of the basic components of human language, including phonology, morphology, syntax and semantics, and the differences/similarities between languages. Students will identify examples of speech parts, their function, morphology, and syntax.

ENGL 326. MAJOR BRITISH AND EUROPEAN AUTHORS (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 and ENGL 250 or equivalents
Concentrated study of selected British and/or European authors. Authors selected change from term to term; therefore, students may take the course for credit more than once. Repeatable by topic.

ENGL 327. MAJOR AMERICAN AUTHORS (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 and ENGL 220 or equivalent
Concentrated study of selected American authors. Authors selected change from term to term; therefore, students may take the course for credit more than once. Repeatable by topic.

ENGL 328. MYTHOLOGY (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent and one literature course.
Study of mythology and the influence it has had on literature, art, music, and the development of cultures. Course topics may include Classical Mythology, Eastern Mythology, Mythology of the Americas, Egyptian Mythology, and others. Repeatable by topic.

ENGL 330. WRITING IN THE DISCIPLINES (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
Individual and collaborative writing in a variety of styles and forms. Students will learn writing and research techniques of various types, with special emphasis on writing for their chosen majors. Oral presentations form a portion of the course.
GenEd-ID: A1, A2

ENGL 333. MULTICULTURAL DRAMA IN PERFORMANCE/PRODUCTION (3)
Three hours lecture/discussion per week. May require additional meetings.
Prerequisite: ENGL 100 or equivalent and ENGL 220 or equivalents
America is a country of many cultures, and each of these has brought legacies of its roots to the American stage. In this course we will read plays written by Native Americans, Hispanic Americans, Asian Americans, African Americans and others. We will also stage mini-

productions of one or more of those plays.
Same as TH 333.
GenEd-ID: C2, C3

ENGL 334. NARRATIVES OF SOUTHERN CALIFORNIA (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 and ENGL 220 or equivalents
Ours is a region made up of many cultures which produce the one we call Southern California. In this class we will take a historical approach to study of the narratives—oral, written and filmed—of Southern California. Course work may also include obtaining oral histories and compiling them.
Same as HIST 334.
GenEd-ID: C3

ENGL 335. AMERICAN ETHNIC IMAGES IN NOVELS FILM AND ART (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
American Ethnic Images in Novels and Film examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and artistic modes of analysis. The course highlights the ways in which artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples.
Same as ART 335 and HIST 335.
GenEd-ID: C3, D

ENGL 337. LITERATURE OF THE ENVIRONMENT (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
Literature of the Environment is structured to involve the student in many forms of dialogue on issues pertinent to humanity's relationship with Earth. By reading works by writers from diverse fields and by writing in response, the student will gain a better understanding of our planet, its needs, and a better control of writing in response to learning.
GenEd-ID: A3, C2

ENGL 339. PSYCHOPATHOLOGY IN LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
This course is co-developed and co-taught by faculty from Psychology and English. Human psychology and its manifestations in literature are the topics of the course, and students will use skills from both disciplines to address the ideas and issues presented by the literature.
Same as PSY 339.
GenEd-ID: C2, E

ENGL 340. BUSINESS AND MONEY IN THE AMERICAN NOVEL (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent, ENGL 330 suggested
What is money, really? How does it work in our society and in our literature? These are the starting questions which will form the core of exploration as we read and discuss works of American literature.
Same as BUS 340 and ECON 340.
GenEd-ID: A3, C2

ENGL 349. SPECIAL INTERDISCIPLINARY TOPICS (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
These courses will vary by topic, but they will all be interdisciplinary by nature, involving information and ways of knowing from at least two disciplines.

ENGL 400. CONTEMPORARY LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent and one upper division literature course.
Survey of world trends in literature, possibly including fiction, non-fiction, poetry and/or drama. Specific topics vary from term to term; the class is therefore repeatable for credit. Repeatable by topic.

ENGL 410. SHAKESPEARE'S PLAYS (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent and one upper division literature course.
Study of the many aspects of Shakespeare's plays as literature— language, context, form and style—as well as the ways in which these elements work as parts of a whole, which includes spoken speech and other sounds as well as physical form and movement. Choices are: Shakespeare's Early Plays (pre-1600) and Shakespeare's Later Plays (post-1600). Repeatable by topic.

ENGL 430. LITERARY THEORY (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent and one upper division literature course.
Survey of literary theory and critical study which investigates various approaches, perspectives, and modes of inquiry. Literary Criticism extends beyond literature to intersect with anthropology, philosophy, psychology, linguistics, political science, and other disciplines, and critical analysis by "literary" scholars encompass all forms of cultural production, literary and non-literary.

ENGL 431. EUROPEAN RENAISSANCE LITERATURE AND ART (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
The Renaissance of the 15th and 16th centuries in Europe and England provided the world with a new way of looking at humankind and our surroundings. By reading the literature of this period and studying the art produced during that time, we will gain an understanding of this "rebirth" of the human spirit and a better understanding of the legacies of the Renaissance artists and writers.
Same as ART 431.
GenEd-ID: C1, C2

ENGL 432. ARTS OF THE HARLEM RENAISSANCE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 100 or equivalent
The Harlem Renaissance was one of the most exciting epochs in American history. The art, literature and music produced in Harlem during the '20s and '30s has had a significant impact on American and world cultures. In this class, we will study these art forms and their historical genesis and legacy.
Same as ART 432, MUS 432.
GenEd-ID: C1, C2

ENGL 449. PERSPECTIVES ON MULTICULTURAL LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 220, ENGL 310 suggested
Each of the cultures present in America today has its own set of qualities which make it different from that of other cultures. In this class, we will study some of those, but the focus of the class will be on issues and/or ideas which affect each of these literatures and discover ways in which they inform each other.
GenEd: C2, C3

ENGL 450. NATIVE AMERICAN LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 449
In this course students study the novels and poetry written by Native American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between Native Americans and Euro-Americans in North America.

ENGL 451. AFRICAN/AFRICAN AMERICAN LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 449
In this course students study the novels and poetry written by African American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between African Americans and other peoples in North America. Authors writing in African countries may also be included in order to gain a more global perspective on the literature.

ENGL 452. ASIAN/ASIAN AMERICAN LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 449
In this course students study the novels and poetry written by Asian American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between Asian Americans and other peoples in North America. Authors writing in Asian countries may also be included in order to gain a more global perspective on the literature.

ENGL 453. HISPANIC/HISPANIC AMERICAN LITERATURE (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 449
In this course students study the novels and poetry written by Hispanic American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between Hispanic Americans and other peoples in North America. Authors writing in Spain, Mexico, Central America or South American countries may also be included in order to gain a more global perspective on the literature.

ENGL 454. MULTICULTURAL LITERATURE PROJECT/SEMINAR (3)
Hours Variable
Prerequisite: Consent of instructor and completion of ENGL 449, 450, 451, 452 and 453.
As the culmination of the Multicultural Literature Emphasis, the purpose of this independent study course is to produce a significant work in the genre of the student's choice, chosen in consultation with his or her instructor.

ENGL 460. PERSPECTIVES ON CREATIVE WRITING (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 330
This course will be writing intensive, but the focus of the course will be reading and discussing what others have written about the processes involved in the creative writing endeavor. Guest lectures by published writers, publishers and other experts may be part of the course.

ENGL 461. FICTION WRITING (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 460
The writing of fiction is the focus of this class. The seminar format allows students the opportunity to talk about their writing and to receive critiques from their peers as well as the instructor.

ENGL 462. POETRY WRITING (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 460
The writing of poetry is the focus of this class. The seminar format allows students the opportunity to talk about their poetry and to receive critiques from their peers as well as the instructor.

ENGL 463. WRITING FOR THE STAGE AND SCREEN (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 460
The writing of stage plays and/or screen plays is the focus of this class. The seminar format allows students the opportunity to talk about their writing and to receive critiques from their peers as well as the instructor.

ENGL 464. CREATIVE NON-FICTION (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 460
The writing of creative non-fiction is the focus of this class. The seminar format allows students the opportunity to talk about their writing and to receive critiques from their peers as well as the instructor.

ENGL 465. CREATIVE WRITING PROJECT (3)
Hours Variable
Prerequisite: Consent of instructor and completion of ENGL 460, 461, 462, 463 and 464.
As the culmination of the Creative Writing Emphasis, the purpose of this independent study course is to produce a significant work in the genre of the student's choice, chosen in consultation with his or her instructor.

ENGL 475. LANGUAGE IN SOCIAL CONTEXT (3)
Three hours lecture/discussion per week
Prerequisite: Completion of ENGL 100 or equivalent and consent of instructor.
Focus is on the nature of literacy, with emphasis on literacy development for English Only (EO) and English Language Learners (ELLs), investigation and knowledge of the development and acquisition of English literacy, and understanding the role of concepts and contexts in word meanings, vocabulary development, and multiple meanings. Also stressed will be differences between English and other languages that impact the acquisition of English literacy by ELLs, the role of primary language literacy in the development of English language among ELLs, and the impact of disabilities on oral and written English language development.

ENGL 476. LANGUAGE DEVELOPMENT AND ASSESSMENT (3)
Three hours lecture/discussion per week
Prerequisite: Completion of ENGL 100 or equivalent and consent of instructor.
Introduction to language development issues for first and second language speakers. Examination of the linguistic theories of language acquisition including the study of child language development and situated in a cognitive, social, and cultural context. Study of second language acquisition in children, adolescents and adults. Includes the nature of assessment for language development, including speaking, reading, and writing.

ENGL 477. LITERATURE FOR ENGLISH SECONDARY EDUCATION (3)
Three hours lecture/discussion per week
Prerequisite: Admission to the Secondary Education Program
An inquiry into adolescent literature. A survey of adolescent literature in which students analyze narrative and expository texts. Questions raised may include: What purpose does literature serve in the cultural milieu of a community? What cultural patterns, symbols, mythologies and traditions are included? Focus will be on critical reading for single subject subject matter preparation. Specific works studied will be representative

of several genres, cultures, and periods of literature.

ENGL 478. WRITING FOR ENGLISH SECONDARY EDUCATION (3)
Three hours lecture/discussion per week
Prerequisite: Admission to the Secondary Education Program
Introduction to current theory and practice of teaching writing in the secondary schools, in a writing context and across the curricula. Special attention to advanced critical reading, thinking, and writing skills.

ENGL 482. TECHNICAL WRITING (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 330
This course is an overview of the field of technical writing. Research, interviewing, and the various forms of technical writing are addressed. Students will produce work in a variety of forms of technical writing.

ENGL 483. TECHNICAL VISUAL COMMUNICATION (3)
Three hours lecture/discussion per week
Prerequisite: none.
The focus of this course is two-fold. First, the student will research and write a presentation on a topic of his or her choice, suitable for a specific application (conference, meeting, etc.) and receive critiques from his or her peers and the professor. Second, the student will use that paper to form the basis of a visual presentation using up-to-date technology of various forms.
GenEd: A2

ENGL 484. TECHNICAL WRITING FOR THE SCIENCES (3)
Three hours lecture/discussion per week
Prerequisite: ENGL 330. For Technical Writing Certificate students, ENGL 482
Writing for the Sciences requires a specialized understanding of the process of writing as well as the content of the final essay or article. Students will learn to do research in specialized fields and to write for a variety of scientific journals and other publications.

ENGL 485. TECHNICAL WRITING PROJECT/SEMINAR (3)
Hours Variable
Prerequisite: ENGL 310, 330, 482, 483, and 484, and a passing portfolio of work from the prerequisite courses.
As the culmination of the Technical Writing certificate program, this course may be an internship, independent study, seminar or a project course. Projects will be devised in consultation with an advisor.

ENGL 494. INDEPENDENT STUDY/SENIOR RESEARCH (3)
Hours Variable
Prerequisite: senior status and consent of instructor.
Students may do an independent study to further coursework begun in other courses, obtain an internship which utilizes knowledge gained thus far, or do research in preparation for the senior project.

ENGL 499. CAPSTONE PROJECT/SENIOR SEMINAR (3)
Three hours lecture/discussion per week
Prerequisite: Senior status, a passing evaluation of the cumulative portfolio, and consent of instructor or advisor.
This course is an interdisciplinary experience in which students work in teams, contributing their expertise to a community-based group project.

ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

ESRM 120. THE WORLD EATERS: CO-EVOLUTION OF HUMAN AND NATURAL SYSTEMS (3)
Three hours per week.
Prerequisite: None.
Are natural systems real, or have humans so altered the Earth to meet our needs that no purely natural systems survive? This course examines the human impact on the environment from the discovery of fire to the present, using case studies from throughout the world, including fire farming in Australia, deforestation in Africa, Asia, and America; human role in faunal and floral extinctions through time.
Same as ANTH 120.
GenEd-ID: D

ESRM 328. INTRODUCTION TO GEOGRAPHICAL INFORMATION SYSTEMS (3)
Two hours of lecture and one two-hour lab per week. Lab fee required.
Prerequisite: None
Introduction to fundamental concepts and techniques of geographic information systems, including problems of acquiring and processing machine-readable map data.

ESRM 330. ENVIRONMENTAL INSTITUTIONS, LAW AND REGULATION (3)
Two hours of lecture and one hour lab discussion per week.
Prerequisite: None
Political institutions, property rights, federal and state roles in decision-making, and challenges for environmental policy. Decision-making is examined in the context of the rights and limits of both private parties and the broad public interest. Emphasis is on the use of science in decision-making, choices between regulations and incentives, and the role of bureaucracy in resource policy. Examples of legal principles as applied to environmental regulation by federal and state governments. Case studies from air pollution, water pollution, land development, wetlands and coastal management.
GenEd-ID: D

ESRM 332. POPULATION AND RESOURCE CONSTRAINTS (3)
Three hours of lecture per week.
Prerequisite: None
This human ecology course places humans into the environment in historical and global contexts. Discusses systems theory as it applies to human adaptation to the environment. Studies the relations between political power, ideology, and resources, integrating concepts from ecology with those from social sciences. Theories and forecasts of human population growth and migration among regions and cultures. Social and environmental impacts of population and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars.
Same as ANTH 332.
GenEd-ID: D

ESRM 410. ENVIRONMENTAL IMPACT ANALYSIS (3)
Three hours of lecture per week.
Prerequisite: BIOL 330, ECON 362, ESRM 328 and 330
Required components of environmental impact reports and assessments, and the processes involved in preparation and approval. Problems related to environmental impacts, mitigation, alternatives, benefits, costs, and consequences.

ESRM 481. TOPICS IN ENVIRONMENTAL POLLUTION (3)
Three hours of lecture/discussion per week.
Prerequisite: BIOL 330 and 432, CHEM 250 and 251
Analysis of pollution transformation and transport. Impacts on human and natural systems. Examples from tropospheric air pollution, water pollution, soil pollution, climate change. May be repeated for credit, with permission.

ESRM 482. TOPICS IN ENVIRONMENTAL PLANNING & RESOURCE MANAGEMENT (3)
Three hours of lecture/discussion per week.
Prerequisite: BIOL 330, ECON 362, ESRM 330
Topics from land use planning and urban development, forest management, integrated water resource planning and demand-side management, surface water run-off, air quality management, coastal development and planning, marine protected area planning and management, preservation of cultural and natural heritage, recycling and waste management, and power plant siting. May be repeated for credit, with permission.

ESRM 483. TOPICS IN GLOBAL RESOURCE MANAGEMENT (3)
Three hours of lecture/discussion a week.
Prerequisite: BIOL 330, ECON 362, ESRM 330
International pollution and resource use. Topics from climate change, ocean resources, tropospheric air pollution, ozone depletion, water pollution, and water use. May be repeated for credit, with permission.

ESRM 490. SEMINAR (3)
Three hours per week.
Prerequisite: None.
This seminar explores a different topic each term. Students may enroll up to four times in different seminars.

ESRM 492. SERVICE LEARNING/INTERNSHIP (3)
Six hours per week.
Prerequisite: None.
Enrollment in this course is with permission of the faculty member in charge. Individual internship through service learning. Credit/No Credit.

ESRM 494. INDEPENDENT STUDY (3)
Variable hours per week.
Prerequisite: None.
Individual contracted study on topics or research selected by the student for further study. Enrollment in this course is with permission of faculty member in charge. Credit/No Credit.

ESRM 497. DIRECTED STUDY (3)
Variable hours per week.
Prerequisite: None.
Reading and library research under the direction of a faculty member. Enrollment in this course is with permission of the faculty member in charge. Credit/No Credit.

ESRM 499. CAPSTONE (3)
Two hours of lecture and one hour of discussion/field trips per week.
Prerequisite: Upper division required courses in the ESRM major
This course consists of an interdisciplinary evaluation of the physical, biological, social, economic, and legal dimensions of environmental decision-making. The instructor will select from Southern California ecosystems – and decisions with associated environmental impacts – for evaluation and analysis. Examples include decisions to reduce, control, or treat surface water run-off, establishing or changing the management of marine protected areas, dredging in harbors, and permits for coastal development. Students will transmit results to appropriate national, state, or local agencies for consideration and deliberation in administrative decisions.

FINANCE

FIN 343. CAPITAL THEORY (3)
Three hours per week.
Prerequisite: none
Intertemporal choice and decision-making under uncertainty in our personal and financial lives. Topics include multiperiod consumption, multiperiod production, capital budgeting, modern portfolio theory and financial management.
Same as ECON 343
GenEd-ID: D

GEOLOGY

GEOL 121. PHYSICAL GEOLOGY (4)
Three hours of lecture and one three-hour lab per week.
Prerequisite: none
This course examines the basic composition of the Earth and the dynamic forces which have altered the Earth's surface through time, including sedimentation, erosion, volcanism, earthquakes, plate tectonics, and mountain-building. Students will gain an appreciation for the immense processes affecting their environment. Lab fee required.
GenEd: B2

GEOL 122. HISTORICAL GEOLOGY (3)
Three hours lecture per week.
Prerequisite: none
This course focuses upon the geological history of the Earth and the Solar System from the origin of the cosmos to the explosion of Mt. St. Helens, tracing the evolution of the continents and ocean basins, and the broad development of plants and animals through time. Surveys events in Earth's past of relevance to present environmental issues.
GenEd: B2

GEOL 300. FOUNDATIONS OF EARTH SCIENCE (4)
Three hours lecture and one three-hour lab per week. Lab fee required.
Prerequisite: CHEM 170.
An analysis of the Earth's physical systems and the solar system/ universe. Selected topics include climates of the world, minerals and rocks, flood hazards, aspects of physical oceanography, plate tectonics, natural resources, and the motion of planets and planetary bodies.
GenEd: B2

GEOL 321. ENVIRONMENTAL GEOLOGY (3)
Three hours of lecture and three hours of laboratory per week.
Prerequisite: none
Interrelationships between human and natural geologic hazards: tsunamis, earthquakes, landslides, subsidence, volcanoes. Explores environmental impact of resource extraction and usage. Importance of understanding the geologic processes and landscape in land use planning. Means of using geology to minimize conflicts in resource management and disaster preparation.
GenEd: B2

GEOL 327. OCEANS AND THE GLOBAL ENVIRONMENT (3)
Three hours lecture per week.
Prerequisite: none
Oceanography is explored to present the student with an understanding of the interrelationship between oceans and global climate. Other topics include marine geology, plate tectonics, evolution of ocean basins, coastal erosion and sea level changes, energy resources.

HISTORY

HIST 211. WORLD HISTORY: ORIGINS TO 1500 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
This survey examines world civilizations beginning with the Neolithic age. Topics include the development and growth of religions, economics,

and other cultural institutions.

HIST 212. WORLD HISTORY: SINCE 1500 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
This survey examines world civilizations from both regional and global perspectives. The intellectual, political, and cultural development of nations will be among the major themes of the course.

HIST 270. THE UNITED STATES TO 1877 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Survey of the political, social, economic as well as cultural institutions of the United States from the pre-colonial era to reconstruction. Issues of multiculturalism, race, sexuality, and gender frame many of the problems examined in the course.

HIST 271. THE UNITED STATES SINCE 1865 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Survey of the political, social, economic as well as cultural institutions of the United States from the gilded age to the present. Issues of multiculturalism, race, sexuality, and gender frame many of the problems examined in the course.

HIST 331. HISTORY OF MATHEMATICS (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Study of breakthrough mathematical ideas and their creators, including historical and scientific context. Important concepts of current mathematics are studied: inception, development, difficulties, significance and various viewpoints will be presented. Lecture-discussion. At least one significant writing assignment is required.
Same as MATH 331.
GenEd-ID: B3, D

HIST 333. HISTORY OF SOUTHERN CALIFORNIA CHICANA/O ART (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
A survey of the Southern California Chicana/o culture exploring the genesis, vitality and diversity represented in the painting, sculpture and artistic traditions of Mexican American artists. Historical movements, politics, cultural trends and Mexican folklore underlying the development of this dynamic style of art will be investigated within a variety of contexts.
Same as ART 333.
GenEd-ID: C1, C3

HIST 334. NARRATIVES OF SOUTHERN CALIFORNIA (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Ours is a region made up of many cultures which produce the one we call "Southern Californian." In this class we will take a historical approach to study of the narratives--oral, written and filmed--of Southern California. Course work may also include obtaining oral histories and compiling them.
Same as ENGL 334.
GenEd-ID: C3

HIST 335. AMERICAN ETHNIC IMAGES IN NOVELS, FILM AND ART (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
American Ethnic Images in Novels and Film examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, literary, historical, and artistic modes of analysis. The course highlights the ways in which artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples.
Same as ART 335, ENGL 335
GenEd-ID: C3, D

HIST 349. HISTORY OF BUSINESS & ECONOMICS IN NORTH AMERICA (3)
Three hours per week.
Prerequisite: none
Examines the growth and development of the economies of North America since colonial times. Addresses social, ethical, economic and management issues during the development of Canada, the United States, and Mexico. Analyzes the business principles underlying the growth and development of the economies.
Same as BUS 349.
GenEd-ID: D

HIST 350. CHICANO HISTORY AND CULTURE (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
An examination of the settlement and culture of Mexicanos in the United States to the present. Particular attention is given to the relationship of Mexicanos to the political and economic institutions of the United States.

HIST 365. THEMES IN WORLD CIVILIZATION BEFORE 1500 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Compares and contrasts the cultural, economic, political, and social development of World Civilizations before 1500.

HIST 366. THEMES IN WORLD CIVILIZATION SINCE 1500 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Compares and contrasts the cultural, economic, political, and social development of World Civilizations since 1500.

HIST 369. CALIFORNIA HISTORY AND CULTURE (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Examines the cultural and institutional development of California prior to the 16th century and since.

HIST 370. UNITED STATES COLONIAL HISTORY (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Examines the European colonization of the United States from the 1600s to the French and Indian War. The transformation of social, political, and cultural institutions of Europe in North America are studied.

HIST 371. THE FOUNDING OF THE UNITED STATES (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Study of the Revolutionary era and its influence on the constitution of the nation politically as well as socially.

HIST 372. UNITED STATES INDUSTRIALIZATION AND PROGRESSIVISM (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
This course examines the nation's geographic and industrial expansion. Social and political problems are concurrently examined to the end of World War I.

HIST 374. UNITED STATES SINCE1945 (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Examines the social and political movements of the nation after World War II. Among the various topics of the course, specific attention is given to how international affairs influenced domestic policy politically as well as socially.

HIST 401. UNITED STATES IMMIGRATION HISTORY, 1840-1945 (3)
Three hours lecture per week.
Prerequsites:None
Examines the experiences and contributions of immigrant groups in the United States. Constitutional, political, and social considerations of United States immigrant history frames the content study of this course.

HIST 402. SOUTHERN CALIFORNIA HISTORY AND CULTURE (3)
Three hours lecture per week.
Prerequisite: completion of lower division writing requirement.
Examines the cultural, economic, political, and social experience of Mexicanos of the region since the American conquest to the 1990s. Particular attention is given to the interactions of this community with other ethnic and racial groups. Although designed within the disciplinary framework of history, the course utilizes literature, film, and art as mediums of learning about the culture and history of Chicanos. (G.E.)

HEALTH

HLTH 322. HEALTH FOR EDUCATORS (2)
Prerequisite: none
Survey of school health programs with in-depth study of selected health education curricula and topic areas, including alcohol, tobacco, drugs, communicable diseases and nutrition. Development of strategies and methods for teaching controversial areas.

HLTH 344. HEALTH PSYCHOLOGY (3)
Prerequisite: none
This course will focus on those areas of psychology which relate to health and medicine including, mind-body interactions, Psychoneuroimmunology, psychology as it relates to nutrition, psychology as it relates to illness, and behavioral medicine.
Same as PSY 330
GenEd-ID: E

LIBERAL STUDIES

LS 392. INTERNATIONAL EXPERIENCE (1-3)
Prerequisite: none
Provides an opportunity for students to earn credit for travel and study in a country outside the US, where the student is immersed in a foreign language and culture. A student may, in consultation with a faculty advisor, obtain credit for his or her international experience by participating in a university-sponsored trip abroad or a personal trip abroad. In either case, a plan of study must be approved by the faculty advisor prior to the experience.
GenEd: C3

LS 492. INDEPENDENT RESEARCH (1-3)
Prerequisite: Upper Division Standing in the Liberal Studies Major.
Students design and implement a study project in conjunction with a faculty member.

LS 494. SERVICE LEARNING/INTERNSHIP (1-3)
Prerequisite: Upper Division Standing required in the Liberal Studies Major.
Students design a community project, individually or in small group, related to areas studied in Liberal Studies major. The project must respond to a community need, involve participants in reciprocal activities, provide opportunities for student's on-going reflection, and evaluate the activity.

LS 497. DIRECTED STUDIES (1-3)
Prerequisite: Upper Division Standing in the Liberal Studies Major.
Supervised project involving research or creative activity related to Liberal Studies.

LS 499. CAPSTONE PROJECT (1-3)
Prerequisite: Senior Standing in the Liberal Studies Major.
Provides an integration of prior subject matter by requiring teams of students to design, enlighten, and/or solve a problem. Also, provides interdisciplinary exposure to complex issues using Web, library and community-based analytical processes.

MATHEMATICS

The University entrance requirements for freshmen (two years of high school algebra and one year of geometry) and a passing score on the Entry Level Mathematics (ELM) Examination or an approved exemption are the basic prerequisites to all math courses. Additional prerequisites may be listed in the course descriptions that follow.

MATH 101. COLLEGE ALGEBRA (3)
Three hours of lecture in the lab per week.
Basic set theory, number systems and their algebraic properties; systems of equations and inequalities; basic analytic geometry, matrix algebra and elementary functions. Problem solving.

MATH 105. PRE-CALCULUS (4)
Three hours of lecture in the lab per week.
Number systems and their algebraic properties; systems of equations and inequalities; basic analytic geometry of lines and conic sections; elementary functions including polynomial, rational, exponential, and logarithmic, with emphasis on trigonometric functions, fundamental theorem of algebra and theory of equations; polar equations and curves.

MATH 108. MATHEMATICAL THINKING (3)
Three hours of lecture in the lab per week.
A course presents the diversity of mathematics and the spirit in which it is employed in various situations, including different problem solving strategies, inductive- deductive reasoning, paradoxes, puzzles and mathematical modeling. The contributions of various cultures and influences of other disciplines are studied. At least one significant writing assignment is required.
GenEd: A3, B3

MATH 140. CALCULUS FOR BUSINESS APPLICATIONS I (3)
Three hours of lecture in the lab per week.
Prerequisite: A passing score on the Entry Level Mathematics Examination, or credit in Math 105.
An integrated course in analytic geometry and calculus in the context of business and economics applications. Functions, limits, derivatives, integrals and mathematical modeling are used in problem solving in decision making context.
GenEd: B3

MATH 150. CALCULUS I (4)
Three hours of lecture in the lab per week.
A course in analytic geometry and calculus. Elementary and transcendental functions are introduced and their properties are studied, limits, derivatives, integrals and mathematical modeling are used in problem solving in sciences.
GenEd: B3

MATH 151. CALCULUS II (4)
Three hours of lecture in the lab per week.
Prerequisite: MATH 150 with a Grade of C or better.
Includes the study of differentiation, integration, sequences, infinite series, and power series.

MATH 202. BIOSTATISTICS (4)
Three hours of lecture in the lab per week.
Prerequisite: A passing score on the Entry Level Mathematics Exam or credit in MATH 105.
Introduction to modern statistical methods in biosciences, especially in studies of population and experimental data analysis. Descriptions of sample data, probability, theoretical frequency distributions, sampling, estimation, testing hypotheses. Course will include treatment of quantitative data, problems and problem-solving techniques, and use of technology in statistics.
Same as BIOL 202.
GenEd-ID: A3

MATH 208. MODERN MATH FOR ELEMENTARY TEACHERS I- NUMBERS AND PROBLEM SOLVING (3)
Three hours of lecture in the lab per week.
Current issues of modern math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of numeration, nature of numbers and fundamental operations, relations and functions, properties of integers, rational and real numbers, and mathematical modeling. Problem solving strategies and geometric interpretations are stressed. Designed for students intending to teach in K-8. This course is not open to students who have credit for Calculus.
GenEd: B3

MATH 230. LOGIC (3)
Three hours of lecture in the lab per week.
Introduction to modern deductive logic. Critical thinking and abstract approach to common language. Includes abstract sets and number sets, relations, prepositional logic- including common language cases, and theory of quantification.
GenEd: A3

MATH 240. INTRODUCTION TO LINEAR ALGEBRA (3)
Three hours of lecture in the lab per week.
Prerequisite: Completion of MATH 151.
Vector spaces, linear transformations, orthogonality, characteristic polynomial, quadratic forms, spectral decomposition.

MATH 250. CALCULUS III (3)
Three hours of lecture in the lab per week.
Prerequisite: Completion of MATH 151 with a grade of C or better.
Functions of several variables, solid analytic geometry, partial differentiation, multiple integrals with applications. Vector analysis, line and surface integrals.

MATH 300. DISCRETE MATHEMATICS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 151 and MATH 230.
Sets, algebraic systems, axioms, definitions, propositions and proofs. Combinatorics, graph theory, moduli calculus. Coding, coding errors and Hamming codes. Students are expected to write mathematical proofs, and communicate mathematical ideas clearly in written and oral form.

MATH 308. MODERN MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS II- GEOMETRY, PROBABILITY AND STATISTICS (3)
Three hours of lecture in the lab per week.
Current issues of modern math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of geometry and geometric interpretation of real numbers, geometric constructions, mathematical modeling, basic probability and statistics. Problem solving strategies are stressed. Designed for students intending to teach.

MATH 318. MATHEMATICS FOR SECONDARY SCHOOL TEACHERS II- GEOMETRY, PROBABILITY AND STATISTICS (3)
Three hours of lecture in the lab per week.
Current issues of modern secondary school math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of geometry, algebra, precalculus, calculus, probability and statistics. Designed for students intending to teach.

MATH 330. MATHEMATICS FOR ARTISTS (3)
Three hours of lecture in the lab per week.
The course is specially designed for students interested in fine arts, with the emphasis on understanding geometric patterns and concepts by self-explorations. Instead of concentrating on abstraction, the course creates a vast reservoir of art-related examples and hands-on experiences, and will give an innovative mathematical background for future artistic endeavors of students.
GenEd: B3, A1

MATH 331. HISTORY OF MATHEMATICS (3)
Three hours of lecture in the lab per week.
Study of breakthrough mathematical ideas and their creators, including historical and scientific context. Important concepts of current mathematics are studied: inception, development, difficulties, significance and various viewpoints will be presented. Lecture-discussion. At least one significant writing assignment is required.
Same as HIST 331.
GenEd-ID: B3, D

MATH 340. STATISTICS FOR BUSINESS AND ECONOMICS (3)
Three hours of lecture in the lab per week.
Introduction to modern statistical methods used in business analysis and economics, especially in experimental data evaluation and decision making contexts. Topics include: sampling, probability, various distributions, correlation and regression, statistical inferences, hypothesis testing, problem solving and the consequences to underlying economical systems. Includes a project in the community.
GenEd: A3, B3

MATH 342. PROBABILITY AND STATISTICS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 151.
Data gathering, analysis and display. Validity of sampling methods and statistical conclusions. Probability, conditional probability, Bayes' Theorem, discrete and continuous random variables and their distribution (e.g., binomial, Poisson, hypergeometric, negative binomial, normal, exponential, gamma), moments, bivariate distributions, transformations of random variables, central and other limit theorems. Bayesian estimates, tests of hypotheses, nonparametric tests, decision theory. Modern computer software applications in statistics.
GenEd: A3, B3

MATH 344. ANALYSIS OF ALGORITHMS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 300 and some computer programming experience.
Computer oriented study of seminumerical and non-numerical algorithms. Sorting, tree searching, generation of combinatorial structures, algorithm proof techniques, best algorithms, programming complexity, string matching.
GenEd: B3

MATH 346. SCIENTIFIC AND PROFESSIONAL ETHICS (3)
Three hours of lecture in the lab per week.
Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues.
Same as BIOL346, MGT 346, CHEM 346
GenEd-ID: A3, D

MATH 350. DIFFERENTIAL EQUATIONS AND DYNAMICAL SYSTEMS (3)
Three hours of lecture in the lab per week.
Prerequisite or Corequisite: MATH 250.
Ordinary differential equations, existence and uniqueness of solutions. Linear equations. Laplace methods. Flows and diffeomorphisms, limit sets, iterations of maps. Positive entropy systems, chaotic behavior of trajectories.

MATH 351. REAL ANALYSIS (3)
Three hours of lecture in the lab per week.
Prerequisite or Corequisite: MATH 250
Real number system, metric spaces, norms, function spaces. Continuity, differentiability, integrability of functions. Sequences and series.

MATH 393. ABSTRACT ALGEBRA (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 300.
Rings, modules, fields and their extensions. Groups and group actions, crystallographic groups.

MATH 430. RESEARCH DESIGN AND DATA ANALYSIS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 324 or MATH 202
Experimental design, sampling methods, sampling distributions and statistical conclusions in biomedical fields. Bayesian estimates, tests of hypotheses, nonparametric tests. Regression and correlation. Replication, experimental errors, randomization. Modern computer software applications in statistics.
Same as BIOL 430, CHEM 430.
GenEd-ID: B1, B3

MATH 440. OPERATIONS RESEARCH (3)
Three hours of lecture in the lab per week.
Prerequisite: Course in statistics.
Introduction to applied mathematical methods in management sciences. Topics include linear programming, managerial optimization methods, duality and equilibrium theorems, the simplex method, development of tools and methods required to make decisions and to solve operational problems in economy, decision and risk analysis, modeling and game theory. Other topics selected from parametric programming, large scale methods, generalized programming.
GenEd: B3, D

MATH 450. PARTIAL DIFFERENTIAL EQUATIONS AND MATHEMATICAL PHYSICS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 350 or consent of instructor. Vector field theory, Fourier series.

MATH 451. NUMERICAL ANALYSIS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 350 and COMP 151.
Techniques of applied mathematics, solution of equations, finite differences, wavelets.

MATH 452. COMPLEX ANALYSIS (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 250.
Complex variable, analytic functions, complex integration, power series and conformal mappings.

MATH 480. DIFFERENTIAL AND RIEMANNIAN GEOMETRY (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 351.
Implicit Function theorem. Reimannian manifolds, curvature, local isometries. Gauss- Bonnet Theorem.

MATH 482. NUMBER THEORY AND CRYPTOGRAPHY (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 300.
Unique factorization theorem, congruencies, primitive roots and indices, quadratic residues and the law of quadratic reciprocity, distribution of primes. Cryptography.

MATH 484. ALGEBRAIC GEOMETRY AND CODING THEORY (3)
Three hours of lecture in the lab per week.
Prerequisite: MATH 393
Study of algebraic varieties over algebraically closed fields. Modern application to coding theory.

MATH 490. TOPICS IN MODERN MATHEMATICS (3)
Prerequisite: Junior standing.
New developments in mathematics.

MATH 492. INTERNSHIP (3)
Prerequisite: Junior standing and Program approval of written proposal of internship studies.
Supervised work and study in industrial or scientific setting involving development of degree related skills. All students are required to present their projects at the Senior colloquium. Graded credit/no credit.

MATH 494. INDEPENDENT RESEARCH (3)
Prerequisite: Senior standing and Program approval of written proposal of independent research studies.
Supervised project involving theoretical research in the field of mathematics or its applications. All students are required to present their projects at the Senior Seminar.

MATH 497. DIRECTED STUDY (3)
Prerequisite: Senior standing and Program approval of written proposal of directed studies.
Supervised project involving library research. All students are required to present their projects at the Senior Seminar.

MATH 499. SENIOR COLLOQUIUM (1)
Prerequisite: Senior standing.
Oral presentation of current advancements in the field, reports on students' projects, and invited lectures. Repeatable.

MANAGEMENT

MGT 307. MANAGEMENT OF ORGANIZATIONS (3)
Three hours per week.
Prerequisite: none
Explores the fundamental concepts of managing people within an organizational context. Uses cases and in-class exercises to present management principles. Topics include planning, staffing, directing, measuring and controlling.

MGT 310. MANAGEMENT OF INTERNATIONAL BUSINESSES (3)
Three hours per week.
Prerequisite: none
Identification and analysis of management systems in cross-border environments. Explores the impact of economic, social, cultural political variables on the conduct of profit-making business. Extensive use of case analysis; and a "country study" project.

MGT 325. ENTREPRENEURIAL MANAGEMENT (3)
Three hours per week.
Prerequisite: none
Explores the management of start-up and small businesses. Concentrates on initial strategy, location, financing, staffing, daily activities and controls, taxes. Students develop a business plan for a small business.

MGT 346. SCIENTIFIC & PROFESSIONAL ETHICS (3)
Three hours per week.
Prerequisite: none
Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues.
Same as BIOL 346, CHEM 346, MATH 346.
GenEd-ID: A3, D

MGT 421. HUMAN RESOURCE MANAGEMENT (3)
Three hours per week.
Prerequisite: MGT 307
Principles, methods and procedures in the management of human resources. Topics include developing planning objectives for HR management, legal compliance, job analysis, recruiting, selection, training, compensation and employee relations.

MGT 425. MANAGEMENT OF EDUCATIONAL ORGANIZATIONS (3)
Three hours per week.
Prerequisite: MGT 307
Explores the principles of management of organizations and applies them to the unique environment of educational organizations. Topics include design and management of educational programs, goal setting and budgeting, resource management, differentiated staffing, performance measurement and special problems in school administration.

MGT 426. MANAGEMENT OF HEALTHCARE ORGANIZATIONS (3)
Three hours per week.
Prerequisite: MGT 307
Explores the principles of management of organizations and applies them to the unique environment of healthcare organizations. Topics include volatile environment, escalating costs, identification of stakeholders, organizational design, use of technology, quality control, and special issues in healthcare management (bio-ethics, chemical dependency, stress, workforce diversity).

MGT 427. MANAGEMENT OF NOT-FOR-PROFIT ORGANIZATIONS (3)
Three hours per week.
Prerequisite: MGT 307
Explores the principles of management of organizations and applies them to the unique environment of not-for-profit organizations. Topics include differences with profit-making organizations, identification of stakeholders, organizational and governance structure, financial sources, reward processes and accountability measures.

MARKETING

MKT 310. PRINCIPLES OF MARKETING (3)
Three hours per week.
Prerequisite: none
Presents and analyzes the fundamental principles of modern marketing: planning, pricing, distribution, and promotion. Applies the principles to products and services. Topics include market research, consumer behavior and market success measures. Focuses on domestic and international markets.

MUSIC

MUS 333. VARIETIES OF MUSICAL EXPERIENCES (3)
Three hours per week.
Prerequisite: none
The study of music in its cultural and historical contexts, with an emphasis on the role of music as a form of human expression. A broad range of musical styles will be studied, including, but not limited to, European, Asian, and Middle Eastern classical music; American jazz and popular music; and folk music of Western and non-Western cultures. Students will study the unifying and authenticating nature of music within groups of people, as well as study the experience of music on a personal level.

MUS 432. ARTS OF THE HARLEM RENAISSANCE (3)
Three hours lecture per week.
Prerequisite: Upper division standing
Study focusing on the dramatic upsurge of creativity in art, music and literature resulting from social and political undercurrents in the African American cultural revolution in New York during the 1920s. Historical geneses and subsequent artistic legacies will be also be explored.
Same as ENGL 432, ART 432.
GenEd-ID: C1, C3

PHYSICAL EDUCATION

PHED 101. WALKING FOR HEALTH (1)
Three hours per week.
Prerequisite: none
Knowledge of cardiovascular fitness, including walking as aerobic exercise. Physical development through cardiovascular training, muscle strengthening, and stretching.

PHED 102. SEMINAR IN TRADITIONAL ASIAN MARTIAL ARTS - TAI JI (1)
Three hours per week.
Prerequisite: none
Development of personal skills in traditional martial and health arts. Understanding history, cultural background, patterns, and strategies for participation in and effects on personal health.

PHED 103. YOGA (1)
Three hours per week.
Prerequisite: none
Development of personal skills in yoga. Understanding of effects on strength, flexibility and mind body connections.

PHED 105. ZEN OF SURFING (1)
Three hours per week.
Prerequisite: none
Exploration into the physiological and psychological benefits that result from human interaction with forces of nature. Students develop an increased understanding of the ocean and complex dynamics that underlie the sport of surfing. The interrelationship between physical activity and personal aesthetics are explored through weekly surfing activities.

PHED 302. MOTOR LEARNING, FITNESS AND DEVELOPMENT IN CHILDREN (2)
Three hours per week.
Prerequisite: none
Factors affecting motor learning; theories of learning and their application to the learning of physical skills; motor learning at beginning through advanced skill levels; health, fitness and activities for children; planning and teaching age appropriate developmental movement experiences.

PHYSICS

PHYS 200. GENERAL PHYSICS I (4)
Three hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: MATH 150
An introduction to the properties of matter, classical mechanics, wave motion and thermal physics.
GenEd: B2

PHYS 201. GENERAL PHYSICS II (4)
Three hours of lecture and one three-hour lab per week. Lab fee required.
Prerequisite: PHYS 200
An introduction to electromagnetic theory, light, and atomic and nuclear physics.
GenEd: B2

PSYCHOLOGY

PSY 100. INTRODUCTION TO PSYCHOLOGY (3)
Three hours lecture per week.
Prerequisite: none
The purpose of this course is to introduce the theories, research and applications that constitute the field of psychology as it is broadly defined. Students will learn about the field of psychology through lectures, discussions, demonstrations, group activities, and multi-media presentations. Emerging issues in the field of psychology, what different types of psychologists do, and how to critically evaluate psychological literature will be covered.
GenEd: E

PSY 200. HISTORY AND SYSTEMS OF PSYCHOLOGY (3)
Three hours lecture per week.
Prerequisite: Psychology major
This course examines the historical development of psychological thought and methodology from its origins in philosophy, its attempts to become a natural science, through the diaspora of contemporary psychological thought. The major schools of psychology (e.g., Behaviorism, Cognitive, Gestalt, Humanistic, Psychoanalysis), will be explored in context of their philosophical and cultural influences.

PSY 210. LEARNING, COGNITION AND DEVELOPMENT (3)
Three hours lecture per week.
Prerequisite: none
This course presents an overview of the theories of learning and human development. Major theories of learning and of psychological, emotional, and ethical development will be addressed across the lifespan from birth to old age, with consideration given to the application of these theories in real life setting such as schools and other organizations.
GenEd: E

PSY 212. NEUROBIOLOGY AND COGNITIVE SCIENCE (3)
Three hours lecture per week.
Prerequisite: BIOL 100
Principles of brain organization and function underlying behavior. Topics include neuroanatomy and physiology of language, vision, sexual behavior, memory and abnormal behavior.
Same as BIOL 212.
GenEd-ID: B1

PSY 215. COGNITION AND LEARNING (3)
Three hours lecture per week.
Prerequisite: PSY 300 / equivalent or consent of instructor
This courses examines psychological theories of cognition as they apply to learning. Theories introduced in this course will seek to explain learning phenomena and provide a conceptual framework for understanding and discussing behavior and cognition. Practical applications and current research in the cognitive sciences will also be discussed.

PSY 220. HUMAN SEXUAL BEHAVIOR (3)
Three hours lecture per week.
Prerequisite: none
This course covers knowledge about the processes and variations in: sexual functions and reproduction; intimate relationships; sexual and gender role development and behavior; and the social, cultural, historical and moral contexts of sex and love.
GenEd: E

PSY 330. HEALTH PSYCHOLOGY (3)
Three hours lecture per week.
Prerequisite: none
This course will focus on those areas of psychology which relate to health and medicine including, mind-body interactions, Psychoneuroimmunology, psychology as it relates to nutrition, psychology as it relates to illness, and behavioral medicine.
Same as HLTH 344.
GenEd-ID: E

PSY 333. MEASUREMENT AND TESTING OF GROUPS AND INDIVIDUALS (3)
Three hours lecture per week.
Prerequisite: none
This course covers the principles of measurement as applied to group standardized measures of achievement, special aptitude, intelligence, personality, and interest for use in educational settings. This course will also survey the administering, scoring, and interpreting of these measures. Language and culture issues related to testing will be discussed.

PSY 338. PSYCHOLOGY OF ART AND ARTISTS (3)
Three hours lecture per week.
Prerequisite: none
An inquiry into the mind of the artist and the emotional dynamics that underlie the creative process. Emphasis is placed on deciphering personal allegory and universal symbolism hidden within a wide range of

visual and conceptual genres. Concepts underlying the evolution of artistic style, spirituality, and aesthetics in traditional Eastern and Western cultures will also be examined.
Same as ART 338.
GenEd-ID: C1, E

PSY 339. PSYCHOPATHOLOGY IN LITERATURE (3)
Three hours lecture/discussion per week.
Prerequisite: ENGL 100 or equivalent
This course is co-developed and co-taught by faculty from Psychology and English. Human psychology and its manifestations in literature are the topics of the course, and students will use skills from both disciplines to address the ideas and issues presented by the literature.
Same as ENGL 339.
GenEd-ID: C2, E

PSY 341. CULTURE AND PERSONALITY (3)
Three hours lecture per week.
Prerequisite: none
This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures.
Same as ANTH 341.
GenEd-ID: D, E

PSY 344. PSYCHOLOGY AND TRADITIONAL ASIAN THOUGHT (3)
Three hours lecture per week.
Prerequisite: consent of instructor
This course examines the differences and similarities between the Western practice of psychology and traditional Asian systems of philosophy and religion. Concepts of health, well-being & enlightenment, and pathology will be considered from both Western and Asian viewpoints. Particular attention will be given to Buddhism, Taoism, and depth psychologies. Readings will be drawn from classical Asian literature as well as contemporary psychology. Mediation and other practices will be explored the context of Western Psychology.
GenEd-ID: E

PSY 345. INDIVIDUALS WITH DISABILITIES AND SOCIETY (3)
Three hours lecture per week.
Prerequisite: none
Major types of disabilities and giftedness, including definitions, causes, characteristics, and educational implications. Disability perspectives. Social, legal, and educational considerations of disability issues.
Same as SPED 345

PSY 349. TRADITIONAL AND ALTERNATIVE VIEWS OF HEALING (3)
Three hours lecture per week.
Prerequisite: none
This course surveys the history and cultural contexts of health and healing from around the world. Through presentations of different medical traditions, the psychological, cultural, practical, and spiritual dimensions of traditional and alternative healing systems will be elucidated. When appropriate the empirical, theoretical and scientific foundations of selected healing systems will be discussed. This course will also attempt to place traditional Western modes of healing including biomedicine and clinical psychology in context of some of the other traditions.

PSY 350. CLINICAL AND COUNSELING PSYCHOLOGY (3)
Three hours lecture per week.
Prerequisite: PSY 300 / equivalent or consent of instructor
This course introduces students to the clinical practice of psychology. The major theories of psychotherapy and the process of psychotherapy will be covered as well as other modalities for the treatment of mental and behavioral disorders such as learning therapies and psychopharmacology. The course will also seek to develop an awareness of ethnic and cultural differences related to the practice of psychology.

PSY 355. ORGANIZATIONAL AND INDUSTRIAL PSYCHOLOGY (3)
Three hours lecture per week
Prerequisite: PSY 300 or consent of instructor
This course surveys the field of industrial/organizational Psychology. Subfields of personnel psychology, human factors engineering, industrial social, and industrial clinical Psychology will be viewed from practical and theoretical perspectives. The course will also cover concepts of organizational development, communication, and corporate group behavior.

PSY 457. CRIMINAL BEHAVIOR (3)
Three hours lecture per week.
Prerequisite: PSY 300 / equivalent or consent of instructor
This course introduces students to the fundamentals of criminal psychology through the study of the psychological factors which relate to or cause criminal behavior in individuals. The practice of forensic psychology, the legal system, law enforcement psychology, prison psychology, and the criminal behavior of groups will also be discussed.
GenEd: E

PSY 461. ADVANCED TOPICS IN CHILD AND ADOLESCENT DEVELOPMENT (3)
Three hours lecture per week.
Prerequisite: Previous course in developmental psychology or consent of instructor
This course represents an in-depth study of aspects of growth and development which influence behavior of school-age children and adolescents. Using primary sources and current research findings students will gain an understanding of research methods in child development and a critical appreciation of the practice of child psychology. Different areas of child and adolescent development will be considered from cross-cultural perspectives.

PSY 473. BIZARRE BEHAVIOR AND CULTURE BOUND SYNDROMES (3)
Three hours lecture per week.
Prerequisite: PSY 350 or previous course in clinical or counseling psychology or consent of instructor
This course examines behaviors which seem to be at the extreme edge of the human repertoire. Nevertheless, such behaviors have at different times and cultures been considered normal. Students in this course will examine such behaviors with an open mind, while attempting to understand that so-called normal behaviors in our own culture could be construed as “bizarre”.
GenEd: E

PSY 482. SEMINAR IN QUANTITATIVE METHODS (3)
Three hours lecture per week.
Prerequisite: Consent of instructor
This course examines the application of various quantitative methodologies in detail. Topics can vary but may include non-parametric methods such as logistic, survival analysis, and non-linear regression.

PSY 483. QUALITATIVE RESEARCH METHODS IN THE SOCIAL SCIENCES (3)
Three hours per week.
Prerequisite: none.
This course provides the student with an understanding of how social scientists collect and analyze data. Explores methods and procedures used in anthropology research, including creating a research design, interviewing, cross-verifying data, and interpreting data. This course also details the various methods employed by ethnographers, folklorists, and

oral historians in collecting oral testimony in a structured, systematic method. Particular attention is given to ethical and legal issues.
Same as ANTH 483.

PSY 489. ADVANCED TOPICS IN PSYCHOLOGY (1-3)
Three hours lecture per week.
Prerequisite: PSY 300 / equivalent or consent of instructor
A seminar course, which provides an in-depth study of some aspect of psychology. Content varies and so the course is repeatable.

PSY 492. PSYCHOLOGICAL INTERNSHIP OR SERVICE LEARNING (1-3)
Three hours lecture per week
Prerequisite: Consent of instructor.
Supervised work/volunteer experience in an appropriate setting with supervision in the field from an appropriate person with credentials and/or experience in a specialty related to psychology. Students are required to write a report of their experience.

PSY 494. INDEPENDENT RESEARCH IN PSYCHOLOGY (1-3)
Three hours lecture per week
Prerequisite: Consent of instructor.
Research project for undergraduate students supervised by members of the psychology faculty. Research to be elected on basis of interest of student. A written report of the research is required.

PSY 497. DIRECTED STUDY IN PSYCHOLOGY (1-3)
Three hours lecture per week
Prerequisite: Consent of instructor.
An intensive study of some aspect of psychology, Usually via an in-depth review of the literature. Intended for undergraduate students supervised by members of the psychology faculty. A written report summarizing the study is required.

PSY 499. SENIOR CAPSTONE COURSE (1-3)
Three hours lecture per week
Prerequisite: Senior standing as a Psychology student.
This course is an interdisciplinary experience in which students work in teams, contributing their expertise to a community-based project group.

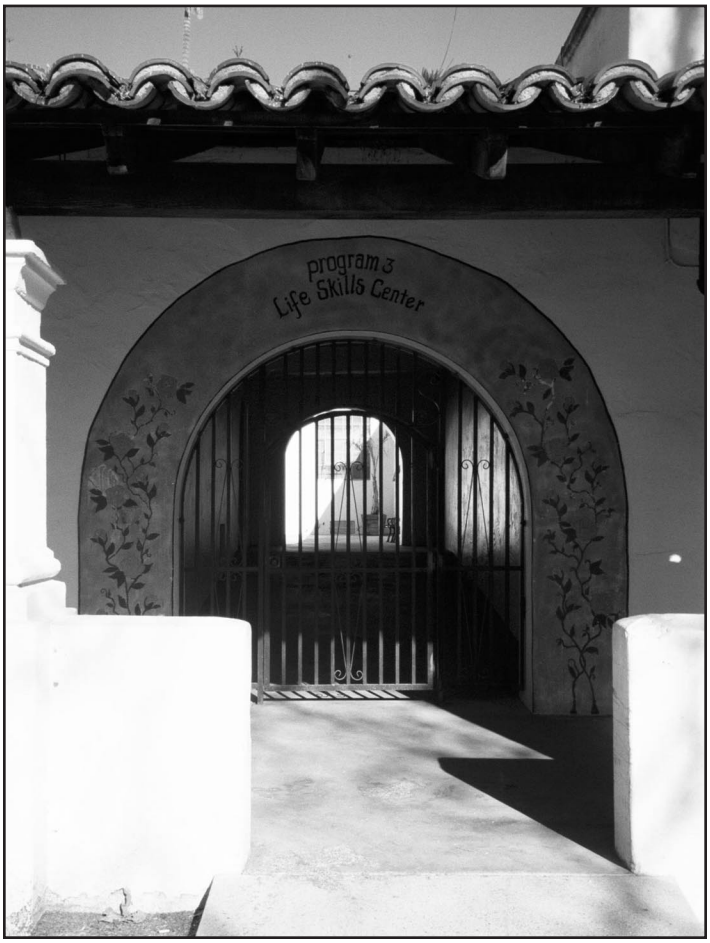
SPECIAL EDUCATION

SPED 345. INDIVIDUALS WITH DISABILITIES IN SOCIETY (3)
Prerequisite: none
Major types of disabilities and giftedness, including definitions, causes, characteristics, and educational implications. Disability perspectives. Social, legal, and educational considerations of disability issues.
GenEd: D

THEATRE

TH 333. MULTICULTURAL DRAMA IN PERFORMANCE/ PRODUCTION (3)
Prerequisite: none
America is a country of many cultures, and each of these has brought legacies of its roots to the American stage. In this course we will read plays written by Native Americans, Hispanic Americans, Asian Americans, African Americans and others. We will also stage mini-productions of one or more of those plays.
Same as ENGL 333.
GenEd-ID: C2, C3

TH 410. SHAKESPEARE'S PLAYS (3)
Prerequisite: one writing course and one upper division literature course.
Study of the many aspects of Shakespeare's plays as literature— language, context, form and style—as well as the ways in which these elements work as parts of a whole, which includes spoken speech and other sounds as well as physical form and movement. Choices are: Shakespeare's Early Plays (pre-1600) and Shakespeare's Later Plays (post-1600). Repeatable by topic
Same as ENGL 410.



Faculty, Staff, and Administration

PRESIDENT'S CABINET 2002

Richard R. Rush
President and Professor of English Literature

President of Minnesota State University, Mankato, 1992-2001

Executive Vice President, California State University, San Marcos 1989-1992

Alexander W. McNeill
Vice President for Academic Affairs

Dean of the College of Health, Education, and Social Welfare, University of Alaska, Anchorage, 1994-2001

Head of the Department of Health and Human Development, Montana State University, 1987-1994

Joanne M. Coville
Vice President for Finance and Administration

Executive Vice President, Oregon Graduate Institute of Sciences and Technology, 1995-2001

Controller, Stanford University, 1991-1995

Wm. Gregory Sawyer
Vice President for Student Affairs

Founding Dean of Student Services, Florida Gulf Coast University, 1995-2001

Dean of Students, University of North Texas, 1990-1995

Alma D. González
Vice President for University Advancement

Director of Development, RAND, Santa Monica, 2001-2002

Director of Development and Marketing, National Multiple Sclerosis Society, Southern California Chapter, 1998-2001

MaryAnn L. Dase
Chief Information Officer

Associate Vice President for Information Services, Loyola Marymount University, 1997-2001

Executive Director of Information Resources, Pacific Lutheran University, 1996-1997

Theodore D. Lucas
Executive Assistant to the President

Director and Chair of the School of Music and Dance, San José State University, 1989-1999

Dean of Fine Arts, Southwestern University, Georgetown, Texas, 1976-1989

Administration Building

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Cochran, Jim	Administrative Assistant	8412
Coville, Joanne	Vice President for Administration & Finance	8457
Enos, Diana	Personnel Assistant	8487
Flores, Art	Associate Vice President for Human Resource Programs	8490
Gill, Nancy	Associate Director of Development	8456
Gonzalez, Alma	Vice President for University Advancement	8417
Harrington, Kate	Interim Controller	8890
Hernandez, Theresa	Fiscal Support Assistant	8479
Kirklin, Leah	Budget Finance Coordinator	8481
Lucas, Ted	Executive Assistant to the President	8483
Natale, Michael	Accounting Technician	8489
Pavin, Anna	Administrative Coordinator	8425
Ramirez, Jolie	Interim secretary to Joanne Coville	8457
Smith, Carmen	Special Assistant to the President	8410
Stacey, Elizabeth	Director of Development	8429
Tapia, Jeannette	Temporary Buyer	8478
Velasco, Elizabeth	Administrative Assistant	8416
Wickel, Teresa	Accounting Technician	8454

Bell Tower Building 1st Floor

MacMichael, Linda	**Director of Admissions and Records**	**8500**
Downes, Kathy	Admissions and Records Specialist	8537
Eaves, Cindy	Events Coordinator	8548
Hirschhorn, Gretchen	Admissions Evaluator	8504
Tauber, Maria	Administrative Coordinator	8543
Ward, Dianne	Admissions Evaluator	8503
Zendejas, Maria Elena	Admissions and Records Specialist	8530

Bell Tower Building 2nd Floor

Saunders, Sue	**Outreach and Advisement Coordinator**	**8514**
Cantu, Veronica	Outreach Counselor	8522
Flores, Maria	EOP Advisor	8515
Gilmore, Jackie	Student Teachers/Internships	8525
Love, Cheryl	Credential Advisor	8573
Reyes, Ginger	Outreach Counselor	8521

Academic Affairs

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Flores, Sharon	Administrative Assistant	8540
Kirks, Heather	Human Resources Specialist	8485
Le, Judilyn	Academic Support Assistant	8497
Lefevre, Steve	Associate Vice President for Academic Affairs, Director of Off Campus Programs	8541
Parra, Brian	Academic/HR Support Assistant	8876
Schoenwald, Ira	Associate Vice President for Academic Affairs, Faculty Affairs, and Academic Resources	8482
Thorpe, Barbara	Associate Vice President for Academic Affairs - Academic Programs	8441
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Wakelee, Dan	Academic Affairs	8542
Wanberg, Jane	Academic Support Assistant	8495
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Belote, Terry	Assistant Director of Building Trades	8465
Covarrubias, Linda	Administrative Support Assistant	8461
Doll, Caroline	Special Consultant	8438
Kersten, Vicky	Receiving Coordinator	8468
Prendergast, Bob	Campus Planner	8472

CSUCI Faculty

Adams, William	Associate Professor of Anthropology	8866
Barajas, Frank	Assistant Professor of History	8862
Castaneda, Lillian	Professor of Education	8872
Cordeiro, William	Professor of Management	8860
Grzegorczyk, Ivona	Professor of Mathematics	8868
Hampton, Philip	Associate Professor of Chemistry	8869
Karp, Joan	Professor of Special Education	8871
Kilpatrick, Jacque	Associate Professor of English	8865
Lutze-Mann, Louise	Professor of Biology	8873
Muraoka, Dennis	Professor of Economics	8861
Reilly, Jack	Professor of Fine Arts	8863
Volkan, Kevin	Associate Professor of Psychology	8867
Wang, Ching-Hua	Professor of Immunology & Biology	8870

Library

Taylor, Evelyn	Largomarsino Archives	8830
Wagoner, Loretta	Library Assistant	8562

Parking and Police

Porras, Ray	**Parking Director**	**8434**
Young, Jeff	**Chief of Police**	**8447**
Doolittle, Lashanor	Parking Coordinator	8433
Watson, Martha	Support Services Coordinator	8446

Student Services

Sawyer, Greg	**Vice President for Student Affairs**	**8547**
Guillen, Arjelia	Administrative Assistant	8510
Morten, George	Student Affairs Coordinator	8516
Pencoff, Nick	Director of Financial Aid	8518
Konheim, Jay	Interim Assistant to Greg Sawyer	8547

Tech Center

Dase, MaryAnn	**Chief Information Officer**	**8552**
Aquino, Herb	Technology Consultant	8552
Buena, Noel	Technology Consultant	8552
Kennerly, Andrew	Equipment Systems Specialist	8552
Le, Hai	Equipment Systems Specialist	8552
Reyna, Alex	Equipment Assistant	8552
Velador, Dale	Information Systems Coordinator	8552

FACULTY & STAFF LIST

A

Adams, William	Anthropology Faculty
Allen, Bill	Facilities, Development & Operations
Allen, Lu Ann	Facilities, Development & Operations
Aquino, Herb	Tech Center
Arciniega, Lupe	Police Department
Arias, Richard	Facilities, Development & Operations, Engineer Shop

B

Banuelos, Raudel	Facilities, Development & Operations
Barajas, Frank	History Faculty
Bastone, Jacinta	Payroll
Belote, Terry	Facilities, Development & Operations
Berndtson, Tim	Facilities, Development & Operations, Grounds
Buena, Noel	Tech Center

C

Calica, Romy	Facilities, Development & Operations, Engineer Shop
Cantu, Veronica	Outreach & Recruitment
Castaneda, Lillian	Education Faculty
Chang, Joanne	President's Office
Cochran, Jim	President's Office
Cooper, Wesley	Facilities, Development & Operations, Bldg Trades
Cordeiro, William	Management Faculty
Corelli, Jodie	Academic Affairs
Cormier, Jodie	Police Department
Covarrubias, Linda	Facilities, Development & Operations
Coville, Joanne	Vice President for Administration and Finance

D

Dase, MaryAnn	Chief Information Officer
DeLeo, Anthony	Transportation & Parking Services
Delgado, Johnny	Facilities, Development & Operations, Electric Shop
Doll, Caroline	Facilities, Development & Operations
Doolittle, Lashanor	Transportation & Parking Services
Downes, Kathy	Admissions & Records
Dransart, Tim	Police Department
Dutra, George	Facilities, Development & Operations

E

Eaves, Cindy	Campus Events
Ellis, Richard	Facilities, Development & Operations, Carpenter Shop
Enos, Diana	Human Resources

F

Fernandez, Fred	Police Department
Finnerty, Tom	Police Department
Fitzgerald, Linda	Admissions & Records
Fleming, Don	Facilities, Development & Operations, Electric Shop
Flores, Art	Administration, Human Resources & Budget
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Flores, Sharon	Academic Affairs
Fox, Dannie	Facilities, Development & Operations, Grounds

G

Gill, Nancy	Development
Gilmore, Jackie	Outreach & Recruitment
Gonzalez, Alma	Vice President for University Advancement
Grzegorczyk, Ivona	Mathematics Faculty

H

Hajducko, Sonnia	Police Department
Hampton, Philip	Chemistry Faculty
Hernandez, Theresa	Budget & Finance
Hirschhorn, Gretchen	Admissions & Records
Hoffman, Tony	Police Department
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J

Jacquemin, Joy	Facilities, Development & Operations
Johnston, Steven	Police Department

K

Karp, Joan	Special Education Faculty
Kersten, Konrad	Facilities, Development & Operations, Plumbing Shop
Kilpatrick, Jacque	English Faculty
King, Dave	Police Department
Kirklin, Leah	Budget & Finance
Kirks, Heather	Academic Affairs
Klausner, Chris	Police Department

L

Le, Judi	Academic Affairs
Lefevre, Steve	Academic Affairs
Love, Cheryl	Credential
Lucas, Theodore	Executive Assistant to the President
Lutze-Mann, Louise	Biology Faculty

M

Mahnken, John	Facilities, Development & Operations, Engineer Shop
Mallen, Greg	Police Department
MacMichael, Linda	Admissions & Records
McCabe, Allen	Facilities, Development & Operations, Bldg Trades
McNeill, Alex	Vice President for Academic Affairs
Michel, Sal	Facilities, Development & Operations, Grounds
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Mills, Don	Facilities, Development & Operations, Paint Shop
Morales, Sylvia	Transportation & Parking Services
Morten, George	Student Affairs
Muraoka, Dennis	Economics Faculty

O

Ocampo, Hannah	President's Office

P

Parra, Brian	Academic Affairs
Paulson, Richard	Facilities, Development & Operations, Engineer Shop
Pavin, Anna	Human Resources & Payroll
Pencoff, Nick	Financial Aid
Porras, Ray	Transportation & Parking Services
Price, Dan	Facilities, Development & Operations, Grounds

R

Reilly, Jack	Fine Arts Faculty

Reyes, Ginger	Outreach & Recruitment
Reyna, Alex	Tech Center
Rush, Richard	President

S

Santana, Cipriano	Facilities, Development & Operations, Lock Shop
Saunders, Sue	Outreach & Recruitment
Sawyer, Greg	Vice President for Student Affairs
Schoenwald, Ira	Academic Affairs
Shubb, Scott	Facilities, Development & Operations, Engineer Shop
Shuler, Mike	Police Department
Smith, Carmen	President's Office
Smith, Dawn	Police Department
Stacey, Elizabeth	Development
Sturgeon, Robert	Facilities, Development & Operations, Plumber Shop

T

Tapia, Martin	Facilities, Development & Operations, Grounds
Tauber, Maria	Admissions & Records
Taylor, Evelyn	Library
Thaxton, Dan	Facilities, Development & Operations, Bldg Trades
Thorpe, Barbara	Academic Affairs
Torpey, Frank	Police Department

U

Ulisse, Cindy	Academic Affairs

V

Velador, Dale	Tech Center
Velasco, Elizabeth	President's Office
Vicera, Joe	Facilities, Development & Operations, Electric Shop
Volkan, Kevin	Psychology Faculty

W

Wagoner, Loretta	Library
Wakelee, Dan	Academic Affairs
Wanberg, Jane	Academic Affairs
Wang, Ching-Hua	Immunobiology Faculty
Ward, Dianne	Admissions & Records
Watson, Martha	Police Department
Wickel, Teresa	Budget & Finance
Williams, Phyllis	Academic Affairs

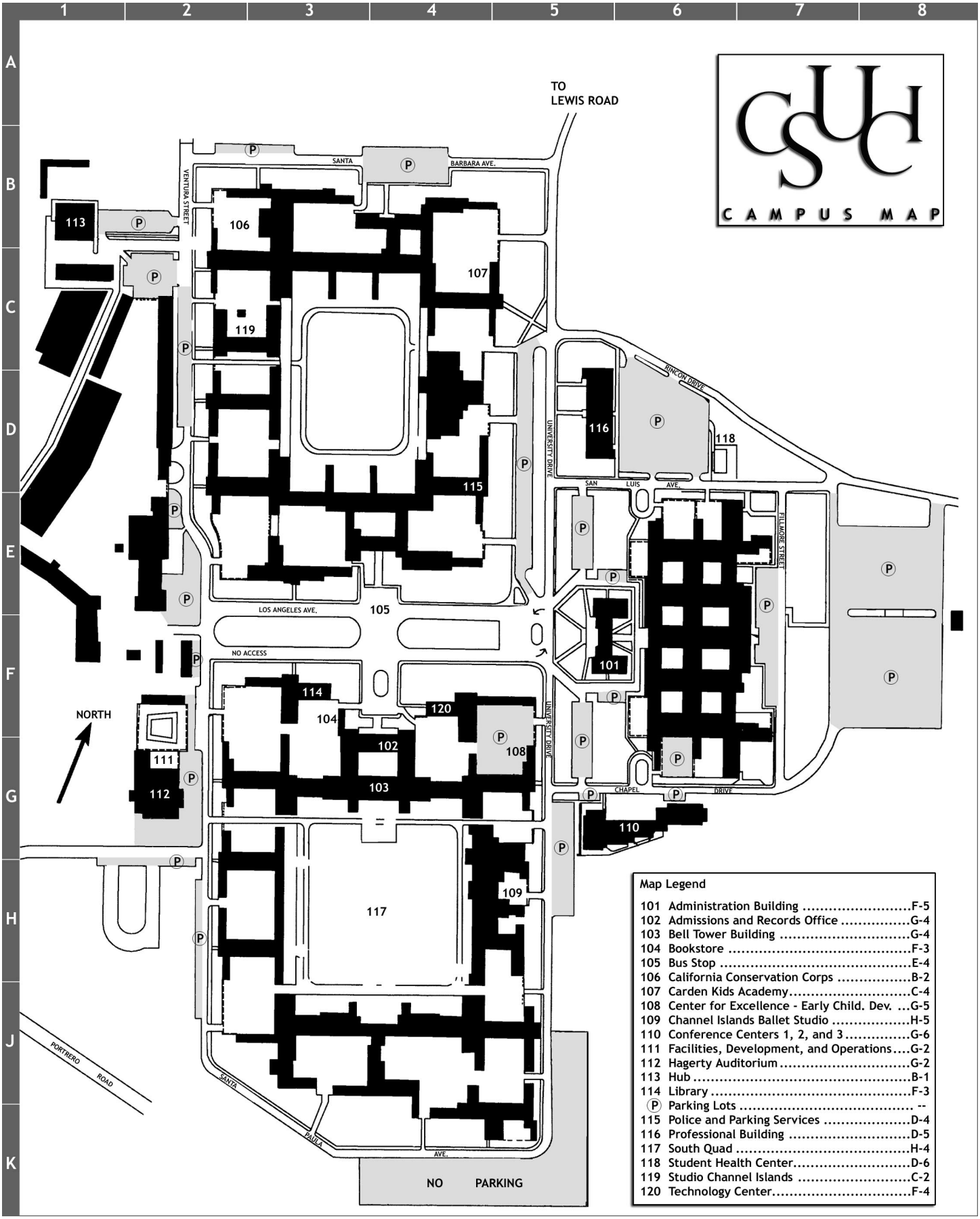
Y

Young, Jeff	Police Department

Z

Zendejas, Maria Elena	Admissions & Records
Zuniga, Cesar	Police Department

Campus Map



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