## ENVISION * EXPLORE * CREATE



## 2004-2005 Catalog

CS $\frac{\text { Calroonn atati unveratr }}{\text { CHANNEL ISLANDS }}$

## MISSION

Placing students at the center of the educational experience, 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 multicultural and international perspectives.


Welcome to the 2004/2005 academic year at California State University Channel Islands. This year promises to be one filled with challenges, accomplishments, and the reaching of new milestones, both for you and for this young campus.

During our early years as a University, we have embarked on many firsts - first year as CSUCI; arrival of first upper division and transfer students; first freshman class; and the opening of our first student housing complex in August 2004. Now, our charge is to continue on the strong trajectory that has been taking place in every area of this campus.

We are all aware of the financial challenges that are facing this state and the CSU system, but we remain steadfast in our commitment to providing the highest quality education for you and your fellow Cal State Channel Island students.

I assure you that while at CSUCI you will receive outstanding instruction and be provided with a stimulating student-centered environment. We will provide you with the knowledge, skills, and experiences that will serve you well while here and will also prepare you for a successful future.

On behalf of the CSUCI community, we are delighted that you have chosen this University, and we will do all that we can to assure that your experience here is a rewarding one.

Sincerely yours,


Richard R. Rush
President
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## CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

 CALENDAR FOR 2004-2005 ACADEMIC YEARFall 2004 Semester

| August 24-26, 2004 | Tuesday-Thursday | Faculty Orientation/Late Student Registration |
| :--- | :--- | :--- |
| August 28 | Saturday | Saturday classes begin |
| August 30 | Monday | First official day of classes |
| September 6 | Monday | Labor Day Holiday; all offices closed |
| November 25-26 | Thursday - Friday | Thanksgiving Recess; all offices closed |
| December 10 | Friday | Last day of formal instruction except for |
|  | Saturday classes | meeting once weekly. |
| December 13-18 | Monday - Saturday | Final examinations |
| December 20-21 | Monday - Tuesday | Department meetings and conferences |
| December 22 | Wednesday | Evaluation Day |
| December 23 | Thursday | Instructors' grades due |
| December 23 | Thursday | Last day of the Fall 2004 semester |
| December 24-December 31 | Friday - Friday | CAMPUS CLOSED |

January 20-21, 2005
January 24
January 29
March 21-26
March 31
May 6
May 13
May 16-20
May 21
May 26-27
May 27
May 30

Spring 2005 Semester
Thursday - Friday
Monday
Saturday
Monday - Saturday
Thursday
Friday
Friday
Saturday classes
Monday - Friday
Saturday
Thursday - Friday
Friday
Monday

Faculty Orientation/Late Student Registration First official day of classes
Saturday classes begin
Spring Recess; no instruction
Cesar Chavez Holiday; all offices closed Honors Convocation
Last day of formal instruction, except for meeting once weekly.
Final examinations
Commencement
Instructors' grades due
Last day of 2004-2005 academic year Memorial Day Holiday; all offices closed

## University Holiday Schedule

Labor Day - Monday, September 6, 2004
Thanksgiving Day - Thursday, November 25, 2004
Admission Day Observed - Friday, November 26, 2004
Christmas Day Observed - Friday, December 24, 2004
Columbus Day Observed - Monday, December 27, 2004
Veterans' Day Observed - Tuesday, December 28, 2004
Lincoln's Birthday Observed - Wednesday, December 29, 2004
Washington's Birthday Observed - Thursday, December 30, 2004
New Year's Day Observed - Friday, December 31, 2004
Martin Luther King, Jr. Day - Monday, January 17, 2005
Cesar Chavez Day - Thursday, March 31, 2005
Memorial Day Observed - Monday, May 30, 2005
Independence Day - Monday, July 4, 2005

## Fall 2004 Saturday Classes

August 28
September 4, 11, 18, 25
October 2, 9, 16, 23, 30
November 6, 13, 20
December 4, 11

## Spring 2005 Saturday Classes

February 5, 12, 19, 26
March 5, 12, 19
April 2, 9, 16, 23, 30
May 7, 14, 21


## Introduction to CSU Channel Islands




## INTRODUCTION TO CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

The California State University Channel Islands catalog is published to help prospective and continuing students make informed decisions to fulfill their academic goals. This catalog is available at the University Library for reference, at the Student Bookstore for purchase, and can also be viewed online at the CSU Channel Islands' web site at: www.csuci.edu

## FIVE WAYS TO FIND INFORMATION ABOUT CSU CHANNEL ISLANDS:

1. Use the Table of Contents in this catalog.
2. Check the Index at the end of this catalog for an alphabetical list of virtually everything you might need to know about CSU Channel Islands. Page numbers will direct you to the appropriate information.
3. Check the Schedule of Classes. Every semester, important information is published in a separate Schedule of Classes which is available at the Student Bookstore, the Enrollment Center in the Professional Building, and throughout the Bell Tower Building. The Schedule of Classes is also available online at www.csuci.edu. The Schedule of Classes contains information about current course offerings, new and revised curriculum and policy changes, and academic calendars. It also provides updates on fees and costs, and other important information (such as the time and location of individual classes).
4. Visit our campus via the World Wide Web at www.csuci.edu.
5. Telephone numbers are listed throughout this catalog. If you need more information about a topic and cannot find a telephone number, dial the CSU Channel Islands general information line at (805) 437-8400.

## AVAILABILITY OF INSTITUTIONAL AND FINANCIAL ASSISTANCE INFORMATION

The following information concerning student financial assistance may be obtained from Nick Pencoff, Director of Financial Aid, 1st floor of the Professional Building, (805) 437-8530.

1. A description of the federal, state, institutional, local, and private student financial assistance programs available to students who enroll at CSU Channel Islands;
2. For each aid program, a description of procedures and forms by which students apply for assistance, student eligibility requirements, criteria for selecting recipients from the group of eligible applicants, and criteria for determining the amount of a student's award;
3. A description of the rights and responsibilities of students receiving financial assistance, including federal Title IV student assistance programs, and
the criteria for continued student eligibility under each program;
4. The satisfactory academic progress standards that students must maintain for the purpose of receiving financial assistance and criteria by which the student who has failed to maintain satisfactory progress may reestablish eligibility for financial assistance;
5. The method by which financial assistance disbursements will be made to students and the frequency of those disbursements;
6. The terms of any loan received as part of the student's financial aid package, a sample loan repayment schedule, and the necessity for repaying loans;
7. The general conditions and terms applicable to any employment provided as part of the student's financial aid package;
8. The responsibility of CSU Channel Islands for providing and collecting exit counseling information for all student borrowers under the federal student loan programs; and
9. The terms and conditions for deferral of loan payments for qualifying service under the Peace Corps Act, the Domestic Volunteer Service Act of 1973, or comparable volunteer community service.

Information concerning the cost of attending CSU Channel Islands is available from the Enrollment Center, 1st floor of the Professional Building, (805) 437-8500, and includes fees and tuition (where applicable); the estimated costs of books and supplies; estimates of typical student room, board, and transportation costs; and, if requested, additional costs for specific programs.

Information concerning the refund policies of CSU Channel Islands for the return of unearned tuition and fees or other refundable portions of institutional charges is available from the Enrollment Center, 1st floor of the Professional Building, (805) 437-8500.

Information concerning policies regarding the return of federal Title IV student assistance funds as required by regulation is available from Nick Pencoff, Director of Financial Aid, 1st floor of the Professional Building, (805) 437-8530.

Information regarding special facilities and services available to students with disabilities may be obtained from Dr. Terri Goldstein, Disability Accommodations Coordinator, 1st floor, Bell Tower Building, (805) 437-8510.

Information concerning CSU Channel Islands policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus may be obtained from Jeff Young, Chief of Police, North Quad, (805) 437-8447.

Information concerning CSU Channel Islands annual campus security report may be obtained from Jeff Young, Chief of Police, North Quad, (805) 437-8447.

Information concerning the prevention of drug and alcohol abuse and rehabilitation programs may be obtained from Dr. George Morten, Director of C.HA.P.s, 1st floor, Bell Tower Building, (805) 4378510.

Information regarding student retention and graduation rates at CSU Channel Islands and, if available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest may be obtained from Dr. J.E. Gonzalez, Director of Institutional Research and Assessment, 2nd floor, Professional Building, (805) 437-8979.

Information concerning athletic opportunities available to male and female students and the financial resources and personnel that CSU Channel Islands dedicates to its men's and women's teams may be obtained from Dr. Wm. Gregory Sawyer, Vice President for Student Affairs, 2nd floor, Bell Tower Building, (805) 437-8530.

Information concerning teacher preparation programs at CSU Channel Islands, including the pass rate on teach certification examinations, may be obtained from Suzanne Garrett, Credential Office, Bell Tower Building, (805) 437-8936.

Information concerning grievance procedures for students who feel aggrieved in their relationships with the university, its policies, practices and procedures, or its faculty and staff may be obtained from Trae Cotton, Director of Student Development, 1st floor, Bell Tower Building, (805) 437-8998.

## 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 campus. It is not possible in a publication of this size to include all of the rules, policies and other information, which pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

Nothing in this catalog shall be construed as, operate as, or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the Chancellor of the California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies which apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or the California State University. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the President and their duly authorized designees.

## CATALOG PRODUCTION TEAM

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We hope you find this catalog convenient and easy to use. If you have ideas about how we could improve this catalog, please e-mail your suggestions to Nancy Covarrubias Gill at nancy.gill@csuci.edu. Thank you!

## CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS HISTORY

Located minutes from the Pacific Ocean where the Oxnard Plain meets the Santa Monica Mountains, the 670-acre site of California State University Channel Islands is truly dramatic. The main entrance to the campus winds through agricultural fields, orchards, and rocky foothills with spectacular rock formations. Equally dramatic is the campus architecture. Built in the early part of the twentieth century, the sprawling 1930s Spanish revival buildings, cloistered hallways, bell tower, tiled fountains, open space, and many courtyards house a state-of-the-art, 21st century university.

Planning for a public, four-year university began as early as 1965 when then Governor Pat Brown signed
a bill authorizing $\$ 20,000$ for an advance acquisition site study for a state college for Ventura County. In 1974, Dr. Joyce Kennedy arrived in Ventura County to help establish the joint UC/CSU Ventura Learning Center. Her two-month contract became a multi-year commitment to public higher education in Ventura County, and she ultimately served as director of the CSUN Ventura Campus for more than 15 years.

In 1996, then CSU Vice Chancellor J. Handel Evans arrived in Ventura County as Planning President to take charge of developing a public, four-year university in the region. In September 1997, on the recommendation of the chancellor and a community task force appointed by then Governor Pete Wilson, the CSU Board of Trustees voted unanimously to accept the former Camarillo State Hospital site for the purpose of transforming it into the CSU's 23rd campus. In July 1996 the CSU Board of Trustees, again acting on a recommendation by the chancellor and with support from a community task force, formally adopted the name California State University Channel Islands for the new University. In September 1997, Governor Wilson signed into law S.B. 623 ( $\mathrm{O}^{\prime}$ Connell), providing for the financing and support of the transition of the site for use as a university campus. Shortly thereafter, the state legislature and the CSU Board of Trustees, along with significant support from community residents and local governmental agencies of Ventura County, provided funds to begin the conversion of the facility with the goal of being a fully operational campus by the fall 2002.

The CSU Board of Trustees appointed Richard R. Rush president of California State University Channel Islands in April 2001, and Dr. Rush assumed his duties on June 18, 2001. Dr. Rush's formal presidential inauguration was held at the campus on April 19, 2002, with more than 1,000 guests in attendance. During the course of establishing the initial structures of the University, Dr. Rush hired the first cadre of faculty and senior administrative staff and has overseen the development of the academic and physical master plans.

Dr. Rush pursued his undergraduate work in classics, English, and philosophy (magna cum laude) from Gonzaga University. He holds a master's degree in English literature from the University of California Los Angeles and a Ph.D. in English, also from UCLA. He completed his doctoral dissertation while in residence at The Huntington Library as a Woodrow Wilson Fellow. Prior to joining CSU Channel Islands, Dr. Rush was President and Professor of English Literature at Minnesota State University Mankato for nine years.

The formal opening of CSU Channel Islands was held on August 16, 2002, which included a ceremony with Governor Gray Davis, educational leaders and representatives from throughout the State, faculty, staff, students, as well as many prominent members of the community. Classes began on August 24 with approximately 1,320 full-time transfer students enrolled for the first year. The first freshmen class arrived in fall 2003. At its full capacity targeted for 2025, CSU Channel Islands will serve more than 15,000 full-time equivalent students, many of whom will be the first in their families to attend a university. CSU Channel Islands is a student-centered university committed to academic excellence, community involvement, environmental responsibility, and leadership for the 21 st century.

## UNIVERSITY MASCOT

A petition was presented to CSU Channel Islands by local Chumash leaders that the dolphin be the University's official mascot. The sacred story of why the Chumash cherish the dolphin is contained in "The Rainbow Bridge" legend. Simultaneously, the founding student leadership of CSUN-CI petitioned to have the dolphin as CSU Channel Islands' mascot. The request was warmly received by the students, faculty, and staff.

## "The Rainbow Bridge" - A Chumash Legend

The first Chumash people were created on Santa Cruz Island. They were made from seeds of a Magic Plant by the Earth Goddess, whose name was Hutash. Hutash was married to the Sky Snake (the Milky Way). He could make lightning bolts with his tongue. One day, he decided to make a gift to the Chumash people. He sent down a bolt of lightning, and this started a fire. After this, people kept fires burning so that they could keep warm, and so that they could cook their food.

In those days, the Condor was a white bird. But the Condor was very curious about the fire he saw burning in the Chumash village. He wanted to find out what it was. So he flew very low over the fire to get a better look. But he flew too close; he got his feathers scorched and they turned black. So now the Condor is a black bird, with just a little white left under the wings where they didn't get burned.

After Sky Snake gave them fire, the Chumash people lived more comfortably. More people were born each year, and their villages got bigger and bigger. Santa Cruz Island was getting crowded. And the noise the people made was starting to annoy Hutash. It kept her awake at night. So, finally, she decided that some of the Chumash would have to move off the island. They would have to go to the mainland, which was less populated. But how were the people going to get across the water to the mainland? Finally, Hutash had the idea of making a bridge out of a rainbow. She
made a very long, very high rainbow, which stretched from the tallest peak on Santa Cruz Island all the way to the tall mountains near Carpinteria.

Hutash told the people to go across the Rainbow Bridge and fill the whole world with people. So the Chumash people started to go across the bridge. Some of them got across safely, but some of them made the mistake of looking down. It was a long way down to the water, and the fog was swirling around. They got so dizzy that some of them fell off the Rainbow Bridge, down, down, through the fog, into the ocean. Hutash felt very badly about this, because she had told them to cross the bridge. She didn't want them to drown. Instead, she turned them into dolphins. So the Chumash always said that dolphins were their brothers and sisters.

## UNIVERSITY COLORS

The school colors of CSU Channel Islands are red and silver. The red is consistent with the tradition of the region, and the silver is for the dolphin, the University mascot.

## UNIVERSITY MISSION

Placing students at the center of the educational experience, 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 multicultural and international perspectives.

## CHARACTERISTICS OF CSUCI GRADUATES

## CSUCI Graduates are:

- Informed about past, present, and future issues affecting human society and natural world, and the inter-relatedness of society and the natural world.
- Empowered with the disciplinary and interdisciplinary knowledge necessary to evaluate problems, the ability to translate knowledge into judgment and action, and excellent communication skills for conveying their interpretations and opinions to a diverse audience.
- Creative in developing imaginative self-expression and independent thinking, with joy and passion for learning.
- Dedicated to maintaining the principles of intellectual honesty, democracy, and social justice, and to participating in human society and the natural world as socially responsible individual citizens.


## PRESIDENT'S CABINET

Richard R. Rush<br>President, 2001 - Present<br>President of Minnesota State University, Mankato, 1992-2001<br>Executive Vice President, California State University, San Marcos 1989-1992

## Theodore D. Lucas

Provost and Vice President
for Academic Affairs, 2004 - Present
Interim Vice President, Academic Affairs, 2003-2004
Chief of Staff, 1999-2003
Director and Chair of the School of Music and Dance, San José State University, 1989-1999

## Joanne M. Coville

Vice President
for Finance and Administration, 2001 - Present
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, 2002 - Present
Founding Dean of Student Services, Florida Gulf Coast University, 1995-2001
Dean of Students, University of North Texas, 1990-1995

## Jane Sweetland

Executive Assistant to the President, 2003 - Present
Coordinator of Communications, CSUCI Division of Student Affairs, 2002-2003
Teacher, Oxnard Unified High School District; Pleasant Valley School District, 1993-2000


## HUMAN RESOURCES PROGRAMS

Human Resources Programs provides campus departments with the administrative processing of student assistants and work-study candidates. Student assistant employees must complete required federal, state and California State University System employment forms. This includes the Student Payroll Action Request (social security verification required), Authorization to Use Privately Owned Vehicles on State Business, Federally required Employment Eligibility Verification, and the Employee Information and Emergency Contact Form. Paychecks are distributed on a monthly basis through the Cashier's Office.

## SAFE ON CAMPUS

SAFE (Students, Administrators and Faculty for Equality) is a program sponsored by the Lesbian, Gay, Bisexual and Transgender (LGBT) subcommittee of the Commission on Human Relations, Diversity and Equity
Mission: The SAFE On Campus program seeks to reduce homophobia and heterosexism at CSU Channel Islands. Through education, advocacy, and promoting awareness, the program contributes to building a campus climate that is safe and accepting of all members of the University community.

Purpose: SAFE On Campus provides an avenue through which all members of the campus community can actively show their support of lesbian, gay, bisexual and transgender people. SAFE On Campus members identify themselves by displaying the SAFE On Campus sign at their office. Members attend an orientation session, following which they receive the SAFE On Campus logo. By displaying the logo, members signal to students and employees that they can be "out" or reveal their sexual orientation or gender identity. In addition, members can serve as a valuable source to help locate resources on campus, or help report harassment or discrimination.

Definition of an Ally: Someone who, regardless of their gender identity and/or sexual orientation, is supportive of LGBT people and who wants to foster a campus climate that is safe for everyone.

## INFORMATION TECHNOLOGY SERVICES

The CSU Channel Islands Technology Center houses three computer labs. Additional computers are located in the library and in various locations on campus. Help desk staff is available to assist students with technical support. The Technology Center hours are Monday through Thursday: 8 a.m. -8 p.m.; Friday: 8 a.m. -5 p.m.; Saturday: 8 a.m. - Noon; and Sunday, closed.

## Open Lab

Located in Room 102, this is a drop-in lab for students (pick up a schedule at the IT Help Desk). This lab provides commonly used software including the latest word processing, spreadsheet/data analysis, and networking/Internet connectivity tools.

PC Lab
Located in Room 118, this lab is utilized for instructional use.

## Mac Lab

Located in Room 116, this lab is utilized for instructional use.

## Student "Dolphin" Web Mail

All registered students automatically have a Web-based CSU Channel Islands e-mail account. Complete the following steps to $\log$ on:

- Log on to: http://mail.dolphin.csuci.edu
- User name: your e-mail user name is your PeopleSoft user name. Example: pat.jones999
- Password: your default email password is your PeopleSoft Student ID number (on your student ID card).

Your e-mail address is your username@dolphin.csuci.edu Example: pat.jones999@dolphin.csuci.edu

## Blackboard

Blackboard is a Web-based course supplement. Many of the courses will make use of this software. You can access Blackboard course information from any computer with Internet access. The URL is http://csuci.blackboard.com (note there is no www). You will see a log-in screen. Your user name is your PeopleSoft user name. Example: pat.jones999. Your password is your PeopleSoft Student ID number.

For additional assistance with any of our services, please visit the Technology Center, call us at (805) 437-8552, or send an e-mail to: helpdesk@csuci.edu.

## POLICE DEPARTMENT

CSU Channel Islands enjoys the benefits associated with living in a rural area outside of heavily populated areas. The campus is located within one of the safest areas in the western United States. There have been no significant crimes reported in the area since the campus opened in 1999.

The CSU Channel Islands Police Department is responsible for providing law enforcement services for the campus. Police officers are the only campus officials designated to receive crime reports. The Police Department is located on University Drive, one block from the campus entrance, adjacent to Lot A1. The Police Department is open 24 hours a day, 7 days a week. The department encourages prompt reporting of all crimes, potential criminal actions, and other emergencies on campus, either in person or by calling 911 or from any telephone. For non-emergencies please call (805) 4378444.

CSU Channel Islands police officers are commissioned, sworn peace officers with full enforcement authority throughout the state. Officers are responsible for reporting
and investigating crimes and traffic accidents, responding to medical emergencies, enforcing laws and local ordinances, and all other incidents requiring police assistance. Criminal cases are forwarded to the Ventura County District Attorney's Office for prosecution. Police officers provide 24-hour patrol of the campus and surrounding neighborhood on foot, in vehicles, and on bicycles. Most police officers are also certified emergency medical technicians (EMT-1) and are the first responders to all medical emergencies.

## Safe Campus Management

The CSU Channel Islands Police Department strives to support the mission of the University by creating an atmosphere that encourages learning and safety.

The Police Department takes a proactive approach to safety that includes four interactive elements: prevention, intervention, education, and enforcement. All of these elements require collaboration with the key components of our campus community: students, faculty, staff, and visitors. While the Police Department takes pride in its leadership role, safety is everyone's concern.

The department takes steps to notify the campus community of potential criminal activity through a variety of methods. These include crime alert bulletins, the department's Web page, e-mail, voicemail, the campus newspaper, and local television and radio stations. The department encourages faculty, staff, students, and visitors to take responsibility for their own safety by taking proactive steps to reduce the likelihood of crime on campus. Crime prevention literature is available in the University Police Department lobby and via the department's Web page
(www.csuci.edu/campserv/police/index.htm). The department's crime prevention program offers numerous programs and workshops that are open to students, faculty, and staff.

Some of the programs available include:

- Rape Aggression Defense (RAD)
- Sexual Assault Awareness and Prevention
- Alcohol/Drug Awareness/Anti-Drunk Driving Workshops
- Personal Safety Awareness

Department members work closely with other departments on campus such as Housing and Residential Life, Student Health Services, and Personal Counseling Services in a teamwork approach to educating the campus community on such issues as alcohol and drug abuse, drinking and driving, sexual assault, and domestic violence.

## Individual Responsibility

Every student, faculty, or staff member must bear an appropriate amount of individual responsibility for their own safety and security as well as that of their fellow students, faculty, or staff. To this end, please observe the following guidelines:

- Report all crimes immediately. Prompt reporting may assist in apprehension and the prevention of future crimes. Call 911.
- Report all suspicious persons and circumstances. This may prevent a crime from occurring. Call 911.
- Please keep all wallets, checkbooks, credit cards, and cash on your person and out of sight. Ideally, backpacks should be within your view at all times.
- Do not leave items such as a laptop computer, cell phone, or wallet/purse visible in a car.
- Don't prop open or try to defeat the security features of any exterior door. If you find such a door propped open, please close it. If it won't lock, please notify any staff member or call the Police Department at ext. 8444.
- Adequately secure any property left outside, such as bicycles.
- If you must walk across campus late at night, consider going with a friend or two. The campus is very safe, but that doesn't mean crimes will never occur here. Don't be lulled into a false sense of security because of the peaceful surroundings.


## Identifying Yourself to Campus Officials

When requested, you are required to properly identify yourself to any campus official, including police officers. Failure or refusal to do so may result in disciplinary action.

## Crime Reporting

Immediately call the Police Department at 911 to report a crime on campus. Special crime alerts are prepared and distributed campuswide via e-mail in circumstances involving violence and/or the safety of others. The Police Department maintains a daily activity $\log$, which can be viewed at the Police Department dispatch center. The Police Department also prepares an annual security report for distribution. This information is available to students, parents, and employees through the Division of Student Affairs. This information is also available on the Police Department Web site at
www.csuci.edu/campserv/police/index.htm.

## Important Telephone Numbers

Public Safety
On Campus - ext. 8444
Off Campus - (805) 437-8444

## Emergency

On Campus - 911
Off Campus - 911
Evening Escort Service - (805) 437-8444 or ext. 8444

## Rape and Sexual Violence

As a proactive approach to preventing rape and sexual violence, the CSU Channel Islands Police Department offers educational and informational programs throughout the year to decrease the likelihood of assault occurring on campus or to our students.
The CSU Channel Islands Police Department takes every reported case of rape, attempted rape, or other forms of
sexual violence very seriously. If you are a victim of sexual violence, call the Police Department immediately. If the assault occurred off campus, the Police Department will assist you in contacting the appropriate police department and the victim's services unit, which provides resources for counseling and medical assistance. The CSU Channel Islands Police Department shall consider the victim's position and preferences throughout these investigations.

In the occurrence of an assault, the Director of Student Development will be contacted. Assistance will be provided with contacting professionals, family, or friends. The Office of Student Development will also make or assist in making any changes in the victim's academic and living situations after an alleged sex offense, if available. The Director of Student Development will also coordinate any campus disciplinary process.

## Harassment

The University takes any type of harassment complaint very seriously. Harassment is conduct that is reasonably perceived as:

- Creating an intimidating, hostile, or offensive environment
- Interfering with an individual's work performance, educational activities, or programs
- Adversely affecting an individual's employment opportunity, educational activities, or programs


## Fire Safety

Call Public Safety at 911to report a fire. Public Safety will contact the Ventura County Fire Department.

The University is subject to and obeys all state fire regulations. Please acquaint yourself with fire evacuation routes for your building as well as the location of all fire extinguishers. Fire alarm systems, smoke detectors, and other fire equipment are placed throughout all campus facilities for your protection. Fire drills are conducted periodically. During fire alarms, all students, visitors, and employees must evacuate the building and report to designated evacuation sites. Failure to respond is subject to disciplinary action.

Note: Misuse of fire equipment is punishable by law and subject to a fine of $\$ 500$.

## Emergency Disaster Procedures

When an emergency is declared and evacuation ordered or when it becomes obvious that evacuation is necessary, all students should report to the appropriate evacuation sites. Staff will assist students as needed, take attendance, and keep students in their assigned areas until all persons are accounted for. Students are asked to remain at the evacuation site until otherwise instructed. Do not attempt to re-enter any building until you are advised that it is safe to do so.

Injured persons should go, or be taken to, the Student Health Center, Police Department, or designated First Aid Station. Health Center personnel and other trained personnel will be available to assist injured persons.

Code Blue Telephones/Emergency Telephones
Distinctive "code blue" phones are located in many areas on campus, and dial directly to the Police Department.

Pay phones may also be used as emergency phones by dialing *88.

## Lost and Found

If you believe that you have lost an item, check with the Police Dispatch Center, which is located in the Public Safety Building. Property that has been turned in will be recorded and held for six months. After six months, if the owner does not claim the item, it may be disposed of in accordance with CSU regulations.

If you believe an item has been stolen, a police employee will file a report or assist you in filing a report with the appropriate jurisdiction.

## Substance Abuse

The legal drinking age in California is 21 . California state law deals strongly with underage drinking and makes it a crime to furnish alcohol to underage individuals. Any person found responsible for illegal possession, distribution, or consumption of any controlled substance, including alcohol, will be subject to disciplinary action by the University and may be subject to action by civil authorities. The Police Department works closely with Personal Counseling Services to provide education and information programs to prevent substance abuse.

## Weapons

To prevent personal injury, CSU Channel Islands prohibits the possession or use of any potentially dangerous weapon or explosives on University property.
Firearms, ammunition, a knife with more than a two-inch blade, paint-ball guns, air guns, CO 2 powered BB or pellet guns, spring-type weapons and slingshots, and firecrackers are among prohibited items. All prohibited weapons needed for employment must be checked in with the Police Department and stored there.

## Pets/Animals

With the exception of certified service animals, pets or animals are not allowed on campus. This restriction does not apply to University Glen. Limited exceptions for educational purposes are allowed with prior approval of the Dean of Faculty.

## Access to Campus Buildings

Laboratories and classrooms are typically open from 8 a.m. to 10 p.m. daily. After hours, a member of the faculty and/or department chairs must authorize access to classrooms. Please protect yourself and others by helping us keep the campus secure. Do not prop open doors and be sure to secure in locked areas.

There are still large portions of the campus facilities that are not in use and have not been renovated. Entering these areas could create a safety hazard. Entering these areas is trespassing and is strictly prohibited. Students violating this rule will be subject to discipline. If you
have questions about a particular area, please contact the Police Department.

## Off-Campus Safety

The University's concern for its students does not end at the edge of campus. Although CSU Channel Islands police officers do not respond to off-campus locations for calls, they will assist you in any way possible concerning criminal or safety matters in the Ventura County area. If you are concerned for your immediate safety, dial 911. Students living off campus should follow these precautions:

1. Install and use a deadbolt and a peephole on your door and effective locking devices on your windows.
2. Be sure to request identification or call a visitor's business before admitting an unknown visitor into your home. Police officers, salesmen, or repairmen on legitimate business will display credentials whenever asked.
3. Do not open your door to strangers in need; instead, offer to call for assistance.
4. If you live alone, don't advertise it. Use only your first initial and last name on your mailbox or in the telephone book.
5. When moving into a house or apartment, it's wise to have the door locks changed. Previous owners, tenants, or past employees may still have keys.
6. If you receive a wrong number telephone call, do not give the caller your name, number, address, or any information to indicate you are alone. Don't prolong the conversation. If you receive an obscene call, hang up immediately and notify the local Police Department.
7. Window shades and drapes should be drawn after dark. Leave lights on in two or more rooms to indicate the presence of other persons.
8. Apartment laundry rooms, parking garages, and elevators are environments for trouble. Be alert and cautious. If your suspicions are aroused, avoid the area.
9. Get to know your neighbors so you can watch out for each other and provide mutual protection.

## TRANSPORTATION AND PARKING SERVICES

Transportation and Parking Services (TPS) provides a variety of services to the campus community. Information about these services is available on the TPS Web page at www.csuci.edu/campserv/parking/index.htm or by calling (805) 437-8430 or ext. 8430.

Parking permits are required for all vehicles on campus, 24 hours a day, 7 days a week. This includes holidays and periods when classes are not in session. Vehicles without proper permits or that are in violation of parking regulations according to the California Vehicle Code are subject to citation. Citation appeals may be filed through TPS. Parking Regulations are also available on the TPS Web page.

## Shuttle Bus Service

As an alternative to parking on campus, a shuttle service is offered at a reduced cost of $\$ 50$ (fee increase pending) per semester, with no cost during summer session. For your convenience, the shuttle operates from three (3) sites:

| Oxnard | "C" Street Transfer Point |
| :--- | :--- |
|  | "C" Street and Channel Islands Boulevard |
|  | Near Oxnard College <br> Southwest corner of Bard Road and <br> Simpson Drive |
| Camarillo | Camarillo Metrolink Station |

The shuttle service is available Monday through Friday, 7 a.m. to 10:30 p.m., and Saturday, 7:30 a.m. to 5:30 p.m. Parking at the sites is free. To utilize this service and purchase your photo transit card, stop by TPS to complete an application and have your photo taken. Please allow 10 minutes to process your card.

## Bicycles

Bicycles and bicyclists shall comply with the California Vehicle Code while riding on campus. Riding is restricted to roadways and main pedestrian pathways. Riding inside buildings, on stairs, and other facilities is strictly prohibited.

## Skateboards, Scooters, and Rollerblades

For safety reasons, the use of skateboards, scooters (both motorized and non-motorized), and rollerblades is prohibited on campus, except in the University Glen area.

## Escort/On-Campus Shuttle Service

Escorts and on-campus shuttles are available Monday through Thursday, 6 to 10 p.m. These shuttles transport students from the Bell Tower to the parking lots. If a student is uncomfortable or feels unsafe about walking to a vehicle after these hours or has any other special needs, a police officer will be dispatched for escort services. Please call ext. 8888 or 8444 to request this service.




## About the

## California State

 University System (CSU)


## 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 newest-CSU Channel Islands--opened in fall 2002, with freshmen arriving in fall 2003.

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 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 1,800 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 2003 totaled 409,000 students, who were taught by some 22,000 faculty. The system awards more than half of the bachelor's degrees and 30 percent of the master's degrees granted in California. Nearly 2 million persons have been graduated from CSU campuses since 1960.

## TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

## EX OFFICIO TRUSTEES

The Honorable Arnold Schwarzenegger State Capitol Governor of California Sacramento 95814

The Honorable Cruz Bustamante Lieutenant Governor of California

State Capitol

The Honorable Fabian Núñez
State Capitol
Speaker of the Assembly
Sacramento 95814
$\begin{array}{lr}\text { The Honorable Jack O'Connell } & \text { 721 Capitol Mall } \\ \text { State Superintendent of } & \text { Sacramento } 95814\end{array}$
Public Instruction

Dr. Charles B. Reed<br>401 Golden Shore<br>Chancellor of The California<br>Long Beach 90802-4210<br>State University

OFFICERS OF THE TRUSTEES
The Hon. Arnold Schwarzenegger President

Murray Galinson

Debra S. Farar
Christine Helwick
Chair
Secretary
Richard P. West
Treasurer

## 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.

Roberta Achtenberg (2007) Kathleen Kaiser (2005)
Debra S. Farar (2006) M. Alexander Lopez (2004)
Robert Foster (2006) Shailesh J. Mehta (2005)
Murray L. Galinson (2007) Frederick W. Pierce IV (2004)
Eric Guerra (2005) Kyriakos Tsakopoulos (2009)
William Hauck (2009) Anthony M. Vitti (2005)
Ricardo F. Icaza (2008)
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 <br> Chief Academic Officer |
| Mr. Richard P. West | Executive Vice Chancellor and <br> Chief Financial Officer |
| Ms. Jackie McClain | Vice Chancellor, Human <br> Resources |
| Ms. Christine Helwick | General Counsel |
| Dr. Keith Boyum | Associate Vice Chancellor, <br> Academic Affairs |



CAMPUSES - THE CALIFORNIA STATE UNIVERSITY


California State University, Bakersfield
9001 Stockdale Highway
Bakersfield, CA 93311-1099
Dr. Horace Mitchell, President (effective July 15, 2004) (661) 664-2011

## California State University Channel Islands

One University Drive
Camarillo, CA 93012
Dr. Richard R. Rush, President
(805) 437-8400

## California State University, Chico

400 West First Street
Chico, CA 95929-0150
Dr. Paul J. Zingg, President
(530) 898-4636

California State University, Dominguez Hills
1000 East Victoria Street
Carson, CA 90747-0005
Dr. James E. Lyons, Sr., President
(310) 243-3300

## California State University, Fresno

5241 North Maple Avenue
Fresno, CA 93740
Dr. John D. Welty, President
(559) 278-4240

## California State University, Fullerton

800 N. State College Boulevard
Fullerton, CA 92834-9480
Dr. Milton A. Gordon, President
(714) 278-2011

California State University, Hayward
25800 Carlos Bee Boulevard
Hayward, CA 94542
Dr. Norma Rees, President
(510) 885-3000

## Humboldt State University

One Harpst Street
Arcata, CA 95521-8299
Dr. Rollin C. Richmond, President
(707) 826-3011

California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-0115
Dr. Robert C. Maxson, President
(562) 985-4111

California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
Dr. James M. Rosser, President
(323) 343-3000

## California Maritime Academy

200 Maritime Academy Drive
Vallejo, CA 94590
Dr. William B. Eisenhardt, President
(707) 654-1000

## California State University, Monterey Bay

100 Campus Center
Seaside, CA 93955-8001
Dr. Peter P. Smith, President
(831) 582-3330

## California State University, Northridge

18111 Nordhoff Street
Northridge, CA 91330
Dr. Jolene Koester, President
(818) 677-1200

## California State Polytechnic University, Pomona

3801 W. Temple Avenue
Pomona, CA 91768
Dr. J. Michael Ortiz, President
(909) 869-7659

## California State University, Sacramento <br> 6000 J Street

Sacramento, CA 95819
Dr. Alexander Gonzalez, President (916) 278-6011

## California State University, San Bernardino

5500 University Parkway
San Bernardino, CA 92407-2397
Dr. Albert K. Karnig, President
(909) 880-5000

## San Diego State University

5500 Campanile Drive
San Diego, CA 92182
Dr. Stephen L. Weber, President
(619) 594-5000

## San Francisco State University

1600 Holloway Avenue
San Francisco, CA 94132
Dr. Robert A. Corrigan, President
(415) 338-1111

## San José State University

One Washington Square
San Jose, CA 95192-0001
Dr. Paul Yu, President
(408) 924-1000

California Polytechnic State University, San Luis Obispo
One Grand Avenue
San Luis Obispo, CA 93407
Dr. Warren J. Baker, President
(805) 756-1111

California State University, San Marcos
333 S. Twin Oaks Valley Road
San Marcos, CA 92096-0001
Dr. Karen S. Haynes, President
(760) 750-4000

## Sonoma State University

1801 East Cotati Avenue
Rohnert Park, CA 94928-3609
Dr. Ruben Armiñana, President
(707) 664-2880

California State University, Stanislaus
801 West Monte Vista Avenue
Turlock, CA 95382-0299
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 15,000 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 18 countries, the International Programs also offers a wide selection of study locales and learning environments.

| Australia | Griffith University <br> University of Western Sydney <br> Macquarie University <br> Queensland University of Technology <br> University of Queensland <br> Victoria University of Technology |
| :---: | :---: |
| Canada | The universities of the Province of Quebec including: <br> Université de Montréal <br> Concordia University <br> Université Laval <br> McGill University <br> Université du Quebec system <br> Bishop's University |
| Chile | Pontificia Universidad Católica de Chile (Santiago) |
| China | Peking University (Beijing) |
| Denmark | Denmark's International Study Program (the international education affiliate of the University of Copenhagen) |
| France | Institut des Etudes Françaises pour Étudiants Étrangers, L'Académie d'Aix-Marseille (Aix-en-Provence), Universités de Paris III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, the Institute of Oriental Languages and Civilizations, and Université Evry |
| Germany | Universität Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg |
| Israel | Tel Aviv University <br> The Hebrew University of Jerusalem University of Haifa |


| Italy | CSU Study Center (Florence) <br> Universitá degli Studi di Firenze <br> La Accademia di Belle Arti Firenze |
| :--- | :--- |
| Japan | Waseda University (Tokyo) |
| Korea | Yonsei University (Seoul) |
| Mexico | Instituto Tecnológico y de Estudios Superiores <br> de Monterrey, Campus Querétaro |
| New | Lincoln University (Christchurch) <br> Zealand <br> Massey University (Palmerston North) |
| Spain | Universidad Complutense de Madrid |
| Universidad de Granada |  |

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/.


## Policies and Regulations




## POLICIES AND REGULATIONS

## 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 campus. It is not possible in a publication of this size to include all of the rules, policies and other information, which pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

Nothing in this catalog shall be construed as, operate as, or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the Chancellor of the California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies which apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or the California State University. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the President and their duly authorized designees.

## NONDISCRIMINATION POLICY Race, Color, and National Origin

The California State University complies with the requirements of Title VI and Title VII of the Civil Rights Act of 1964 as amended and the regulations adopted thereunder. No person shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program of the California State University.

## Disability

The California State University does not discriminate on the basis of disability in admission or access to, or treatment or employment in, its programs and activities. Section 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder and the Americans with Disabilities Act of 1990 prohibit such discrimination. Dr. Terri Goldstein, Disability Accommodations Coordinator, has been designated to coordinate the efforts of CSU Channel Islands to comply with these Acts and their implementing regulations. Inquiries concerning compliance may be addressed to this person in the Office of C.H.A.P.s located in the Bell Tower Building, or by telephone or TDD at (805) 437-8510.

## Sex/Gender

The California State University does not discriminate on the basis of sex or gender in the educational programs or activities it conducts. Title IX of the Education Amendments of 1972, as amended, and the administrative regulations adopted thereunder prohibit discrimination on the basis of sex in education programs and activities operated by CSU Channel Islands. Such programs and activities include admission of students and employment. Inquiries concerning the application of Title IX to programs and activities of [name of institution] may be referred to [name of person], the campus officer(s) assigned the administrative responsibility of reviewing such matters or to the Regional Director of the Office of Civil Rights, Region IX, 50 United Nations Plaza, Room 239, San Francisco, California 94102.

The California State University is committed to providing equal opportunities to male and female CSU students in all campus programs, including intercollegiate athletics.

## Sexual Orientation

By CSU Board of Trustees policy, the California State University does not discriminate on the basis of sexual orientation.

## 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 students' privacy in their records maintained by the campus. The statute and regulations govern access to student records maintained by the campus and the release of such records. The law provides that the campus must give students access to records directly related to the student, and must also provide opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The law generally requires the institution to receive a student's written consent before releasing personally identifiable data about the student. The institution has adopted a set of policies and procedures governing implementation of the statute and the regulations. Copies of these policies and procedures may be obtained at the Office of Admissions and Records. Among the types of information included in the campus statement of policies and procedures are: (1) the types of student records maintained and the information they contain; (2) the official responsible for maintaining each type of record; (3) the location of access lists indicating persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) student access rights to their records; (6) the procedures for challenging the content of student
records; (7) the cost to be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office 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, grade level, enrollment status, degrees, honors, 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 be released. Written objections should be sent to the Office of Admissions and Records.

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 have responsibilities in the campus's academic, administrative or service functions and have reason for using student records associated with their campus or other related academic responsibilities. Student records may also be disclosed 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; or to other institutions to which the student is transferring).

## USE OF SOCIAL SECURITY NUMBER

Applicants are required to include their correct social security numbers in designated places on applications for admission pursuant to the authority contained in Section 41201, Title 5, California Code of Regulations, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109). The University uses the social security number to identify students and their records including 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.

## IMMIGRATION REQUIREMENTS FOR LICENSURE

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), also known as the Welfare Reform Act, includes 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. Information concerning the regulation is available from Art Flores, Associate Vice President for Human Resources Programs, located in the Administration Building or by telephone at (805) 437-8849.

## 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.

## CAREER PLACEMENT

The Office of Career, Health, Accommodations and Personal Counseling (C.H.A.P.s) may furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University system.

## CANCELLATION OF REGISTRATION OR WITHDRAWAL FROM THE INSTITUTION

Students who find it necessary to cancel their registration or to withdraw from all classes after enrolling for any academic term are required to follow the university's official withdrawal procedures. Failure to follow formal university procedures may result in an obligation to pay fees as well as 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 canceling registration and withdrawal procedures is available from the Office of Admissions and Records.

Students who receive financial aid funds must consult with Financial Aid Office prior to withdrawing from the University regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. If a recipient of student financial aid funds withdraws from the institution during an academic term or a payment period, the amount of grant or loan assistance received may be subject to return and/or repayment provisions.

## SYSTEMWIDE PLACEMENT TEST REQUIREMENTS

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) 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. Undergraduate students who do not demonstrate college-level skills both in English and in mathematics will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.

Students register for the EPT and/or ELM at their local CSU campus. Questions about test dates and registration materials may be addressed to the Office of C.H.A.P.s located on the 1st floor, Bell Tower Building, (805) 437-8510.

## English Placement Test (EPT)

The CSU English Placement Test (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 "Exempt" on the augmented English CST taken in grade 11.
- 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 the 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.


## Directed Self Placement (DSP)

Directed Self Placement will be the only method used on the Channel Islands campus to place students into freshman composition courses. EPT scores will not be used. Students will be given guidance in Directed Self Placement during Orientation, and will select either English 105, Composition and Rhetoric, or the English 102, 103 Stretch Composition sequence. Completion of either English 105 or English 102 plus English 103 satisfies the freshman writing requirement.

## Entry Level Mathematics (ELM) Placement Examination

The Entry Level Mathematics (ELM) Placement 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 "Exempt" on the augmented mathematics CST taken in grade 11.
- 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) or 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.


## 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 property 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, 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) Unauthorized recording, dissemination, and publication of academic presentations for commercial purposes. This prohibition applies to a recording made in any medium, including, but not
limited to, handwritten or typewritten class notes.
(1) The term "academic presentation" means any lecture, speech, performance, exhibition, or other form of academic or aesthetic presentation, made by an instructor of record as part of an authorized course of instruction that is not fixed in a tangible medium of expression.
(2) The term "commercial purpose" means any purpose that has financial or economic gain as an objective.
(3) "Instructor of record" means any teacher or staff member employed to teach courses and authorize credit for the successful completion of courses.
(o) 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.
(p) This Section is not adopted pursuant to Education Code Section 89031.
(q) 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 immediately 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.

## STUDENT ACADEMIC POLICIES

## Declaration of Majors

To help ensure timely completion of graduation requirements, students who have a total of 60 units completed and in progress must have declared a major before they may register for the next term. Upperdivision transfer students are required to declare their intended major on their application for admission. (SP02-06)

## Policy on Catalog Rights

Undergraduate students who have maintained continuous attendance at a CSU or a California Community College may elect to qualify for graduation from CSUCI under general education, United States history, Constitution and American ideals, and other non-major catalog requirements in effect either (1) at the time they began attending any California Community College or CSU campus, or (2) at the time they entered the CSU campus from which they will graduate, or (3) at the time they graduate from the CSU. (Title 5, Section 40401)
Transfer students, returning students, and students changing their major or minor field of study may be required by the individual program to meet updated major or minor requirements. All students may be subject to any other requirements mandated by system-wide policy changes affecting all CSU students.
Requirements must have been met within the seven years prior to the date of award of the degree.
Absence related to an approved educational leave or for attendance at another accredited institution of higher learning is not considered an interruption, providing such absence does not exceed two years. The absence must be consistent with the CSU definition of educational leave and with CSU policy.

Students who have been academically disqualified lose previously established catalog rights.
(SP17-03)

## Double-Counting of Course Requirements

A course may meet the requirements for two or more program areas (majors, minors, and other subprograms) if the coordinators for those program areas agree; 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 also allowed. Only six of the nine units of upper-division, interdisciplinary General Education courses may be double counted between a major and General Education.
(SP01-34)

## Multiple Majors

Students may declare more than one major. If all majors completed lead to the same degree, BA or BS, they will all appear on the diploma. If the majors lead to different degrees, the policy on double degrees applies. Double counting of courses shall conform to the policy in Senate Resolution 34-01.
(SP02-07)

## Double Degrees

If two baccalaureate programs, one leading to a BA and one leading to a BS, are completed concurrently, only one degree (BA or BS) will be conferred. Only one degree, the one of the student's choice, will appear on the diploma. The fact that requirements of another degree have been completed will be noted on the transcript. Double counting of courses shall conform to the policy in Senate Resolution 34-01.
(SP02-16)

## Wait List Policy

Prior to the start of classes, students wishing to enroll in a closed course may choose to be added to a wait list. Wait listed students will be automatically enrolled in the course as space becomes available. At the instructor's discretion, students may be added to the course after the start of classes.
(SP03-20)

## Add Policy

1. Students may add courses during the first three weeks of classes with approval signatures from the instructor.
2. During the fourth week of instruction a student may add a class with the approval of the instructor and the approval of the Vice President for Academic Affairs (or designee) as indicated by their signatures on the appropriate forms.
(SP03-05)

## Withdrawal from Courses

1. Students may drop courses during the first three weeks of classes without instructor permission.
2. After the third week of classes and before the end of the tenth week of classes, withdrawal from courses is permissible only for serious and compelling reasons. Approval signatures from the instructor and program chairs must be obtained to withdraw during this period. The withdrawal will be noted as a "W" on the student's permanent record.
3. After the tenth week of instruction, withdrawal is not permitted except in cases beyond the student's control such as accident or serious illness where the assignment of an Incomplete is not practical. Approval signatures from the instructor, program chair and Vice President for Academic Affairs (or designee) must be obtained. Withdrawal in this category will typically involve total withdrawal from the University and will be noted as a "W" on the student's permanent record.
4. Instructor Initiated Withdrawal: Instructors may drop students within the first three weeks of classes and as early as the first day of classes for any the following reasons:
a. Student failure to attend class without having made prior arrangements with the instructor.
b. Student failure to complete the prerequisites for a course before enrolling.
c. Student failure to secure properly the permission of the instructor before enrolling when such permission is required.
(SP03-07)

## Class Attendance

1. Students are expected to attend class regularly.
2. Instructors must include their class attendance requirements in the course syllabus.
3. If students have a valid reason to miss class (excused absence), they are responsible for informing their instructors of the absence at the earliest possible date (preferably before class if possible). Instructors may require students to provide documentation for excused absences. Excused absences include, but are not limited to:
a. Illness or injury to the student
b. Death, injury, or serious illness of an immediate family member
c. Religious reasons (California Education Code section 89320)
d. Jury duty or government obligation
e. University sanctioned or approved activities (examples include: artistic performances, forensics presentations, participation in research conferences, intercollegiate athletic activities, student government, required class field trips, etc.)
4. It is the responsibility of the student to give advance notification, contact the instructor to make arrangements to make up any academic work that may be missed, submit assignments on time, and make arrangements regarding activities, tests, quizzes, or exams that may be scheduled during the absences.
5. If a student does not notify the instructor one week in advance of the dates of excused absences, the instructor is not required to adjust the class schedule or to allow for make-up activities, tests, or exams. However, students shall not be penalized for excused absences when circumstances make it impossible to provide advance notice (e.g. student is engaged in a University sanctioned event such as a playoff game that cannot be anticipated).
6. Students who expect to be absent from the University for any valid reason, and who have found it difficult
to inform their instructors, should notify the Division of Academic Affairs. The Division of Academic Affairs shall notify the student's instructors of the nature and duration of the absence. It remains the responsibility of the student to arrange with instructors to make up any academic work.
7. In circumstances where an actual assignment, some specific class work, an activity, a quiz, or an exam cannot reasonably be made up, it is the instructor's option to assign alternative work.
8. Instructors are not obligated to consider other absences as excused.
(SP01-56)

## Academic Leave

Students who take a one semester leave of absence from CSUCI are considered continuing students and do not need to take any action prior to registration. Any student in good academic standing may apply to take a leave of absence from the university for up to four consecutive semesters. While a student may apply for multiple leaves, no student will be permitted more than six total semesters of leave from CSUCI. Academic Leave Forms are available at the Office of Admissions and Records.
(SP03-06)

## Grades

1. "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 may be 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.
(SP01-38)

## Changing Basis for Grading

If either traditional letter grading or credit/no credit grading is allowed for a course, a student may change the basis of his or her grading for the course from traditional letter grading to credit/no credit grading, or vice versa, through the second week of instruction without instructor approval by filing the appropriate form. Grade changes are only permitted when the program area for the course and the student's major do not require a specific grading option for the course. (SP01-53)

## Course Load for Undergraduate Students

An undergraduate student may enroll in 18 units without advisor approval. Students enrolling in 19 or more units are required to have a program advisor's written approval.
(SP03-04)

## Incomplete Grade Policy

An "Incomplete Authorized" (I) signifies that a portion of required course work has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified reasons and that there is still a possibility of earning credit. After the request of the student for the " I " grade, the faculty member makes the decision as to whether or not an " I " grade is issued. If an "I" grade is issued, the faculty member determines what conditions must be met for the "I" to be removed. However, to protect both students and faculty, it is necessary that there be a written record of the conditions. Thus, if there is a later disagreement, or if the instructor is no longer available, the "I" can still be handled by the program. The Request for an Incomplete form which is to be used for writing the conditions mentioned above is available in the program administrative support offices. This form shall include a statement of:

1. the work not completed and the percentage that each uncompleted assignment will count toward the final grade; and
2. the final grade the instructor will assign if the course requirements are not completed within one calendar year, or a shorter period as specified on the form, immediately following the term in which the " $I$ " was assigned, without respect to continuous enrollment of the student during this period.

A copy of the agreement is to be given to the student and a copy is to be retained in the program office. The completed forms are filed in the program office. The awarding of an "I" requires prior consultation with the student. The student has the responsibility to confer with the faculty member to learn the requirements for removal of the "I". At that time the student is given a copy of the form detailing the conditions to be met. An "I" must be made up within the time period set forth by the instructor with a maximum allowable time span of one calendar year immediately following the end of the term in which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment. Failure to complete the assigned work will result in an " I " being converted to an "IC" symbol, unless the faculty member assigns a specific letter grade at the time the Incomplete is assigned, which would replace the "I" in the student's record at the end of the calendar year deadline. The "IC" is counted as a failing grade (equivalent to an " $F$ ") for grade point average and progress point computation. Although the one-year maximum for incomplete grades will be the general university policy, Executive Order 171 specifies that exceptions can be made in special cases, such as military service and serious health problems. An extension of an "I" grade in any one course shall be
allowed only one time, for a maximum total extension of one year. An "I" may not be changed to a passing grade as the result of re-enrolling in the course. In cases where repetition of the course is appropriate, the student will be assigned a withdrawal or failing grade rather than an " I " grade. A failing grade is not an acceptable reason to request or grant an incomplete grade. If a student subsequently completes a course that is recorded as incomplete on a transcript from another institution, it is the student's responsibility to submit a corrected official transcript and advise the Office of Admissions and Records that he/she wishes to receive credit.
(SP03-18)

## Course Grade Appeals

1. Each student has the right to appeal the final course grade, but only the final course grade. For example, a student may not appeal grades on individual assignments and/or 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 seven weeks of the first regular semester after assignment of the grade. A student who believes that a course grade has been assigned inappropriately must follow the proper steps in the appeal process, observing the time limits for completion of the steps as follows:

Step 1: The grade appeal must first be directed to the instructor of the course, in writing by the end of the seventh week of the semester and copied to the Chair. If the grade is not correct, the instructor can change the grade with a change of grade form. The instructor has two weeks to respond to the student's request in writing and copied to the Chair. Students who file a grade appeal after the fifth week may not have their appeals settled by the end of the semester.
Step 2: If the grade is correct and the student is not satisfied with the instructor's explanation, and intends to appeal the grade, the student must make an appointment to speak with the program chair. If the instructor is not available or does not respond to the student's appeal within the given time frame, the program chair may act on behalf of the instructor. If the program chair is the instructor, the student should speak with the Vice President of Academic Affairs (or designee). The program chair or Vice President of Academic Affairs (or designee) cannot change the grade, but will then discuss the issue with the instructor and provide a response by the end of the ninth week of the semester to the student.
Step 3: If the student is not satisfied after receiving the response from the appropriate administrator, the student should submit a
written appeal by the end of the eleventh week of the semester to the University Appeals Committee through the office of Academic Affairs.
Step 4: The University Appeals Committee will forward the student's statement to the instructor. The instructor will be required to respond in writing by a specified date within the semester. The student's statement and the instructor's response will be reviewed by the entire committee, after which the committee can:
a. Request more information from the student and/or the instructor
b. Decide to change or maintain the grade

Step 5: When the committee has made its decision, it will notify the student and instructor in writing, and the student will be given a copy of the instructor's written response by the end of the semester.
4. The University Appeals committee shall consist of faculty and at least one student.
5. Individuals may not participate as a member of the University Appeals Committee in review of an appeal if they are a participant in the appeal.
6. The decision of the University Appeals Committee is final.
(SP03-02)

## Forgiveness of Previously Earned Grade (Repeat And Delete)

A student may repeat a maximum of 10 different courses at CSUCI for the purposes of improving his or her undergraduate GPA. Each different course may be taken a maximum of 3 times. After consultation with his or her faculty advisor a student may petition the academic appeals board to repeat additional times if he or she has special circumstances. Only the most recent grade for the course will be used in calculation of the GPA.
(SP01-40)

## Semester Honors

CSUCI undergraduate students completing 12 or more units with a letter grade in a single semester or completing 12 or more units with a letter grade in one academic year assessed at the end of the Spring semester, shall be named to the Semester Honors list if they earn a 3.75 or higher grade point average. (SP03-19)

## Program Honors

Program honors will be awarded based on criteria developed by individual programs.
(SP01-41)

## University Honors

To receive honors at graduation at CSU Channel Islands, a student must:

1. Complete a minimum 30 units of courses taken at CSUCI for a letter grade.;
2. Earn a grade point average of 3.50 or above in all work taken at CSUCI.
3. Earn the following cumulative grade point average in all undergraduate courses, including transfer work:

Summa Cum Laude - this honor is awarded to all students who earn a grade point average of 3.90-4.0.

Magna Cum Laude - this honor is awarded to all students who earn a grade point average of 3.75-3.89

Cum Laude - this honor is awarded to all students who earn a grade point average of 3.50-3.74. (SP01-41)
Participating in Commencement Ceremonies
Students may participate in commencement ceremonies if they have no more than 10 units pending toward completion of their degrees.
(SP02-05)

## Grade Point Average (GPA)

An overall GPA of 2.0 is required in:

1. Total courses attempted
2. CSU Channel Islands courses attempted; and
3. Courses in the major

## Title V: Graduation Requirements in United States History, Constitution and American Ideals

Students are required to demonstrate competencies in U.S. History, U.S. Constitution and California state and local government for graduation. Competencies can be met by enrollment in six units as follows:

1) POLS 150 American Political Institutions (3)
2) Choose from one of the following:

HIST 270 The United States to 1877 (3)
HIST 271 The United States since 1877 (3)
HIST 272 Constitutional History of the U.S. (3)
HIST 275 The United States to 1900 (3)
HIST 350 Chicano/A History and Culture (3)

## Language and Multicultural Requirement

1. One semester of a language other than English (e.g., foreign language, computer language, American Sign Language) with a grade of "C" or better. 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). Their non-English language will be evaluated using a valid and reliable instrument. Students will also be required to complete a multicultural experience.

2 a . The multicultural experience will be completed as an approved GE course in Category C3b.
(SP01-46)

## Academic Dishonesty

1. Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill that he/she does not possess.
2. Course instructors have the initial responsibility for detecting and dealing with academic dishonesty. Instructors who believe that an act of academic dishonesty has occurred are obligated to discuss the matter with the student(s) involved. Instructors should possess reasonable evidence of academic dishonesty. However, if circumstances prevent consultation with student(s), instructors may take whatever action (subject to student appeal) they deem appropriate.
3. Instructors who are convinced by the evidence that a student is guilty of academic dishonesty shall assign an appropriate academic penalty. If the instructors believe that the academic dishonesty reflects on the student's academic performance or the academic integrity in a course, the student's grade should be adversely affected. Suggested guidelines for appropriate actions are: an oral reprimand in cases where there is reasonable doubt that the student knew his/her action constituted academic dishonesty; a failing grade on the particular paper, project or examination where the act of dishonesty was unpremeditated, or where there were significant mitigating circumstances; a failing grade in the course where the dishonesty was premeditated or planned. The instructors will file incident reports with the Vice Presidents for Academic Affairs and for Student Affairs or their designees. These reports shall include a description of the alleged incident of academic dishonesty, any relevant documentation, and any recommendations for action that he/she deems appropriate.
4. The Vice President for Student Affairs shall maintain an Academic Dishonesty File of all cases of academic dishonesty with the appropriate documentation.
5. Student may appeal any actions taken on charges of academic dishonesty to the "Academic Appeals Board."
6. The Academic Appeals Board shall consist of faculty and at least one student.
7. Individuals may not participate as members of the Academic Appeals Board if they are participants in an appeal.
8. The decision of the Academic Appeals Board will be forwarded to the President of CSU Channel Islands, whose decision is final.
(SP01-57)

## Academic Probation and Disqualification

This CSU Channel Islands policy does not supersede additional policies or procedures mandated by Chancellor's Executive Order 823.

Academic Probation: An undergraduate student is subject to academic probation if at any time the cumulative grade point average (GPA) in all college work attempted or cumulative GPA at CSUCI falls below 2.0. Probationary students will be advised of their
status by letter at the end of the semester. The letter will include conditions for removal from probation and the circumstances that would lead to disqualification. An undergraduate student shall be removed from academic probation when the cumulative GPA in all college work attempted and the cumulative GPA average at CSUCI is 2.0 or higher.

Academic Disqualification: An undergraduate student on academic probation is subject to academic disqualification when: as a freshman the student falls below a GPA of 1.50 in all units attempted or in all units attempted at CSU Channel Islands; as a sophomore the student falls below a GPA of 1.70 in all units attempted or in all units attempted at CSU Channel Islands; as a junior the student falls below a GPA of 1.85 in all units attempted or in all units attempted at CSU Channel Islands; as a senior the student falls below a GPA of 1.95 in all units attempted or in all units attempted at CSU Channel Islands. Students' records will be evaluated for disqualification at the end of spring semester.

A post-baccalaureate student will be subject to academic probation if, after attempting 12 or more graded units, his or her post-baccalaureate cumulative GPA for units attempted at CSU Channel Islands falls below a 2.50 average. The GPA will determine whether a student is subject to probation only when the student has attempted 12 semester units. A student enrolled in a graduate degree program in either conditionally classified or classified standing shall be subject to academic probation if he or she fails to maintain a cumulative GPA of at least 3.0 in all units attempted; no course in which the student receives lower than a C may be counted toward a Master's degree.

Administrative-Academic Probation: An undergraduate or graduate student may be placed on administrativeacademic probation for any of the following reasons:

- Withdrawal from more than half the units in which a student is enrolled in two successive semesters or in any three semesters. (Withdrawals directly associated with a medical condition are not included.)
- Repeated failure to progress toward the stated degree objective.
- Failure to comply, after due notice, with an academic requirement or regulation.

Probationary students will be advised of their status by letter at the end of the semester. The letter will include conditions for removal from probation and the circumstances that would lead to disqualification.

Administrative-Academic Disqualification: A student who has been placed on administrative-academic probation may be disqualified if:

- The conditions for removal of academicadministrative probation are not met within the specified period.
- The student becomes subject to academic probation while on administrative-academic probation.
- The student becomes subject to administrativeacademic probation for the same or similar reason to a previous placement on academic-administrative probation, although not currently in such status.

When such action is taken, the student will receive written notification including an explanation of the basis for the action and the process for appeal.

## Reinstatement

In order to be considered for reinstatement to the University, a disqualified student must demonstrate academic ability. This can be achieved by completing classes at other academic institutions. All classes taken must be applicable for degree credit. After reducing the grade-point deficiency, the student may petition the Academic Appeals Board for reinstatement. The Academic Appeals Board will only consider the petition for reinstatement of students who have remained outside of the university for at least one regular (Fall or Spring) semester after their dismissal.
(SP02-04)

## 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

CSU 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

CSU 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 have taken a required course in their major/minor at a college or university other than CSUCI must petition to receive major/minor credit for this course. The Petition for Course Substitution is available in the Advising Center. A photocopy of the course syllabus or catalog course description is required for each course being petitioned. Advisors in the Advising Center can assist students in completing the Petition for Course Substitution. Once completed, all Petitions for Course Substitution must be submitted to the Advising Center, which will then route the petition to the appropriate Faculty Major Advisor, Academic Coordinator, or Committee (GE or Curriculum) for review. A copy of the petition with the determination will be mailed to the student and a copy will be kept in the student's file in the Advising Center.

## Internships

The following policies will pertain to all courses or programs designated as academic internships.

1. Definition

Internships integrate the students'academic study with practical experience in cooperating organizations. Through the integration of practical and academic experience, students enhance their academic knowledge in their area of study, their personal development, and their professional preparation. The teaching faculty and the on-site supervisors share in the educational process of interns.
Any academic department/program/unit/faculty can develop their appropriate guidelines and procedures and structure regarding internships. However, for the purposes of legally minimizing the risk of liability and ensuring a safe and effective internship program for the University, students, faculty and partner organizations, the following policy should be incorporated into any university-related internship program.
2. All internships should:
a. *Include a signed agreement with a senior representative of the partner agency or corporation and the University procurement officer as designated signature authority. In this agreement, it must be stated that the university assumes no risk or liability and that the sponsoring agency/ corporation assumes full responsibility for the liability of the intern, affirming that they have requisite insurance to cover any potential harm to the intern, and include basic information such as location, contact person, and organization description.
b. Include a learning agreement signed by the student, sponsoring faculty, and placement supervisor listing the learning goals of the internship and the duties and responsibilities of each party, notifying the student of the assignment of liability, terms and conditions and the listing of relevant agency policies, and the date the internship begins. This includes mention of whether the intern is paid and conditions for receiving academic credit.

Faculty and/or programs must maintain a file of the aforementioned signed forms. The Dean of faculty will also retain a sample copy of internship forms that are used.
*This requirement is pursuant to Executive order 849, page 6: "Student placement agreements must be in writing and shall specify minimum insurance requirements applicable to the contracting parties and appropriate hold harmless provisions based upon the needs of the contracting parties. The following hold harmless provisions may be used as a minimum: Hold Harmless Provision: (insert entity) shall be responsible for damages caused by the negligence of its officers, employees and agents. Trustees shall be responsible for the damages caused by the negligence of its officers, employees and agents. The intent of this paragraph is to impose responsibility on each part for the negligence of its officers employees and agents." (SP03-17)

## Waiver of Course Requirement

In addition, 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.
(SP01-37)

## Credit Toward Graduation for Courses Taken Outside CSU Channel Islands

A student may earn credit toward graduation for courses taken outside of CSU Channel Islands as follows:

## Transfer of Undergraduate and Graduate Credit from

 Another Accredited InstitutionStudents 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 while the University will accept transferred courses for unit credit towards admission, it is under no obligation to accept those same courses for subject credit to fulfill requirements. 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 CollegesA 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 upperdivision general education courses at CSU Channel Islands.

## High School Students

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment.

## Service-Learning Policy

The following policies will be adhered to at California State University Channel Islands for all courses designated as Service Learning-Courses, ServiceLearning Internships or courses with Service Learning components (hereafter collectively referred to as "Service- Learning Courses").

1. Definition: *Service learning is a teaching and learning approach that integrates community service with academic study to enrich learning, teach civic responsibility, and strengthen communities, while engaging students in reflection upon what was experienced, how the community was benefited, and what was learned.
*Adapted from the National Commission on Service Learning Definition.
2. All Service Learning Courses must:
(a) Serve a genuine community need.
(b) Integrate course learning and teaching objectives with the service-learning activities.
(c) Provide activities to engage students in reflection about the service experience and the achievement of learning outcomes.
(d) Generate for each student, before placement, a Student Learning Plan, signed by the student, faculty instructor and authorized Community Organization ("CO") representative, that identifies course goals and risks.
(e) Complete feedback forms on the value and effectiveness of the service-learning experience from the perspective of the student, faculty instructor and CO. ${ }^{1}$
(f) Provide a description of the service-learning component of the class in the syllabus, stating whether service learning is a required component or not and what percentage of the course grade the service learning component comprises.
3. Service-Learning Agreement: A signed Service-

Learning Agreement between California State University Channel Islands and the CO must be on file before any students are placed at the CO. (SP03-16)

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## Extension Courses

Students may take extension courses without matriculating at CSU Channel Islands 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 at CSU Channel Islands, 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. Up to 24 units earned through Open University and Extension (see Extension Programs) may be applied to a bachelor's degree at CSU Channel Islands, and up to 9 units may be applied to a master's degree.

## International Program Credit

Course credits earned in universities abroad may be accepted for degree credit at CSU Channel Islands subject to evaluation by the Office of Admissions and Records. Specific course equivalencies may require consultation with individual program coordinators. CSU Channel Islands 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.
(SR 36-01)




## DIVISION OF ACADEMIC AFFAIRS

## PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS

Location: Bell Tower Building - West Wing, 2nd floor
(805) 437-8441

The office of the Provost and Vice President for Academic Affairs is responsible for providing leadership in the development and implementation of academic programs and policies for the University.
The office provides direction regarding accreditation, faculty selection, evaluation, and performance; is responsible for analysis of the division's academic programs, policies, and procedures; and directs studies on major operational concerns. The office consults with the Academic Senate and University committees to advance the campus mission and to improve institutional and academic performance. The office also provides direction to the Office of Institutional Research, the Office of Research and Sponsored Programs, the Office of Faculty Development, and the University Library.

## DEAN OF THE FACULTY

Location: Bell Tower Building - West Wing, 1st floor (805) 437-8540

The office of the Dean of the Faculty provides academic direction and support for the University faculty, meeting regularly with the program chairs and faculty to discuss program implementation and planning, student enrollment, and academic support. Working within Academic Affairs, the office helps identify priorities in instruction and planning for undergraduate and graduate programs. The office implements and reviews student academic policies, and with the Associate Dean directs the operations of the Advising Center, the Credential Office, and the Writing and Math Centers. The office serves as the academic liaison for programs offered through the offcampus center of CSU Northridge.

## Program Areas

Art
Location: Bell Tower Building - West Wing, 1st floor (805) 437-8545

Biology and Physics
Location: Science Building, Room 104
(805) 437-8815

## Business and Economics

Location: Professional Building, Room 290
(805) 437-8967

Computer Science
Location: Bell Tower Building - West Wing, 1st floor (805) 437-8594

## Education

Location: Bell Tower Building - West Wing, 2nd floor
(805) 437-8594

# English: Literature and Writing 

Location: Bell Tower Building - West Wing, 1st floor (805) 437-8545

History<br>Location: Professional Building, Room 290<br>(805) 437-8967

Liberal Studies<br>Location: Science Building, Room 104<br>(805) 437-8815

Mathematics<br>Location: Bell Tower Building - West Wing, 2nd floor<br>(805) 437-8594

Multiple Programs<br>Location: Bell Tower Building - West Wing, 1st floor (805) 437-8545

Psychology
Location: Professional Building, Room 290
(805) 437-8967

## ADVISING CENTER

Location: Bell Tower Building, 1st floor (805) 437-8571

At CSU Channel Islands, the role of advising is shared with faculty advisors and professional advisors. Academic advising is a continuous process that supports students throughout their academic journey at the University. Students are ultimately responsible for their education planning and meeting all graduation requirements. Students need to be familiar with the University catalog policies and major and degree policies. To ensure academic success and to remain on course, students are encouraged to maintain regular contact with academic advisors.
Advisors in the Advising Center provide guidance with general education and graduation requirements, monitoring of the student's degree progress, undeclared major advising, clarification of academic probation policies, and other institutional policies and procedures. In addition to taking advantage of the center's professional advisors, students can develop a mentoring relationship with a faculty advisor upon declaration of a major. Faculty advisors assist students with clarification of major requirements and assist students with internship and career opportunities.
Students may stop by the Advising Center check-in counter to schedule an appointment with one of our professional academic advisors. Major faculty advisors are available on a walk-in basis or by appointment. For availability and office locations of program advisors, please contact the Advising Center. Advisors are busiest during registration periods and the first few weeks of the semester. Therefore, students are encouraged to schedule advising sessions during non-peak times. The Advising Center hours are: Monday - Thursday, 8:30 a.m. -6 p.m.; Friday, 8 a.m. -5 p.m.

## MATH TUTORING LAB AND THE UNIVERSITY WRITING CENTER

Location: Bell Tower Building
(805) 437-8409

Check the display in front of the Advising Center for current schedules and locations.

At the Math Tutoring Lab and the University Writing Center, the process is collaborative. Tutors work with students to encourage effective, independent learning and to further knowledge and understanding during their education at CSU Channel Islands.

## Math Tutoring Lab

Location: Bell Tower Building
(805) 437-8409

Tutors are available to accommodate students' needs, such as completing homework, studying for a test, or understanding a concept. Tutors are able to consult in virtually every math course offered on this campus and tutor specialties are posted in front of the lab.

## University Writing Center <br> Location: Bell Tower Building <br> (805) 437-8409

Trained student consultants are available to assist students with composing a first draft, editing, and polishing their completed work. Students who would like to review the fundamentals of grammar, syntax, and word usage are invited to work with consultants on an individual basis or in small group sessions with the center's coordinator. The center is also available to assist students with organizing their studies, taking notes, and using research materials.

## CREDENTIAL OFFICE

Location: Bell Tower Building (805) 437-8953

The Credential Office is responsible for facilitating admission to all credential programs. Our staff serves as a campus resource to provide advice, assistance, and current information to students, members of the faculty, and other interested parties on matters regarding the State and the campus credential requirements. Credentials staff members serve as a liaison between the campus and the California Commission on Teacher Credentialing, by recommending the issuance of teaching credentials.

Advising services are available with the goal of supporting individuals interested or engaged in the teaching profession. Information meetings are conducted to provide admissions assistance and an overview of the teaching field. Resource materials, including admissions and credential materials, test bulletins, and test preparation referrals are provided.

## OFFICE OF RESEARCH AND SPONSORED PROGRAMS

Location: Professional Building, Rooms 229 \& 233 (805) 437-8495

The Office of Research and Sponsored Programs is responsible for University grants and contracts and the support of the Institutional Review Board. The office oversees a number of special projects, including the University Preparatory School, the Center for Excellence in Early Childhood Development, the Child Abuse Training and Technical Assistance Center, the Faith Leaders and Domestic Violence Project, and the Technology Enhanced Learning for great Careers and Higher achievement (T.E.C.H.) project. ORSP also promotes civic engagement and service-learning initiatives on campus and in the community.

FACULTY AFFAIRS AND ACADEMIC RESOURCES
Location: Bell Tower Building - West Wing
(805) 437-8455
The office of Faculty Affairs and Academic Resources advises on faculty personnel and human resources matters, including faculty appointments, collective bargaining administration, faculty recruitment, selection, and retention processes. Overseeing academic resources for the Division of Academic Affairs, the office directs the budgeting process, purchase of equipment and supplies, and advises on space utilization and facilities. The office also promotes faculty development and provides assistance on funded projects, instructional and curriculum design, Web-based instructional efforts, and orientation of incoming faculty.

## EXTENDED EDUCATION

Location: Professional Building, Room 227
(805) 437-2748
exed@csuci.edu
The office of Extended Education is designed to respond to important needs in the community for continuing access to higher education, and to provide overall support of the University's commitment to lifelong learning. It assists individuals seeking to enhance their lives through personal and cultural enrichment. Extended Education serves professionals throughout their career life cycles with job skills training, career upgrades, professional certifications, and accelerated courses of study. It offers credit and non-credit courses including Open University and certificate programs in production and inventory management, human resources, and data communications. Additionally, the office custom designs courses for various groups and businesses in Ventura County. It utilizes a mix of evening and weekend schedules, distance-learning technologies, and variable formats.

Open University

Open University provides an opportunity for those people who are not currently admitted to CSU Channel Islands to enroll in courses offered by the regular University.

- Begin Working Towards a Degree: Have you missed the deadline for admission? Do you want to improve your grade point average to better qualify for admittance?
- Sample a Field or Possible Career: Are you thinking of a career change? Do you want to examine a new field before enrolling in a degree program?
- Professional and Personal Enrichment: Do you want to update your professional training in specific fields? Interested in learning more about a particular subject for your own personal growth?
CSU Channel Islands' Open University program allows enrollment in regular University credit classes on a "space available" basis, subject to the approval of the instructor and Academic Affairs. Check the CSU Channel Islands Schedule of Classes for class meeting times and location. The registration process is easy. Admission to the University is not required, and the same fees apply to everyone. The course fees range from \$155-244 per unit, and students receive degree credit.
Students may apply up to 24 units taken through Open University toward a baccalaureate degree. Grades received through this program will be factored into your grade point average at CSU Channel Islands. Units earned through Open University may not be applied toward the 30 unit residency requirement.


## Limitations

We cannot guarantee a space nor assure that you will be permitted to enroll in any class. Instructors are not required to accept Open University students even if space is available.
Open University is NOT Available to:

- Matriculated students (those admitted for the current semester)
- Non-matriculated international students with a score of less than 450 on the TOEFL examination or its equivalent
- International students on F-1 or J-1 visas without proper authorization.
Four Easy Registration Steps (for Open University Only)

1. Check the CSU Channel Islands Schedule of Classes for the days and times of the courses you need.
2. You must use an Open University registration form to enroll in courses through this program (available by calling (805) 437-2748).
3. Attend the first class meeting and get instructor and Academic Affairs signatures. Registration is done on a "space available basis." Note: some departments may have additional requirements for
certain classes. Attend the first class to obtain the instructor's signature. Instructors are not permitted to sign forms before the first day of class when they can determine space availability. Forms will not be accepted by Extended Education before the first day of class.
4. Return the completed form to Extended Education by the end of the second week of classes

## Open University Registration Deadlines:

Regular Registration: 1st two weeks of session
Late Registration Dates (late fee applies): 3rd week Drop (with $65 \%$ refund, instructor signature required): end of 2nd week
Late Withdrawal (no refund) - Instructor Signature Required: end of 3rd week
To confirm the schedule and to receive an enrollment form, call (805) 437-2748.

## UNIVERSITY LIBRARY

www.csuci.edu/library
(805) 437-8561

The University Library provides an atmosphere and space conducive to study and inquiry for both individuals and small groups. Use of the adjacent courtyard has expanded both individual and group study areas and has provided students with the largest library outdoor study facility in the CSU.
Students have access to a knowledgeable and serviceoriented staff and a newly developed print collection of 75,000 volumes, along with numerous databases, electronic journals, and digital images available 24/7. With all these resources, the Library enhances student learning through one-on-one assistance with research, the offering of an active instructional program, providing a space to display student art and outstanding projects, and providing meaningful and thought provoking exhibits.

The University Library has been designated a Digital Teaching Library incorporating up-to-date technologies and instructional support. There is wireless Internet connection throughout the Library and a complete instructional space with 21 wireless computers. The Library's staff provides one-on-one instruction and support for student use of multimedia applications such as web authoring, digital photography, and digital video editing.

## The Robert J. Lagomarsino Collection

Located in the department of archives and special collections in the University Library, the Lagomarsino collection contains papers, photographs, furniture, and memorabilia relating to Mr. Lagomarsino's years of political service as a California Senate member from 1961-1974 and as a United States Congressman from 1974-1992.

## FACULTY BIOGRAPHIES

## WILLIAM HAMPTON ADAMS

Associate Professor of Anthropology
Ph.D., Anthropology, 1976, Washington State University
M.A., Anthropology, Washington State University
A.B., Anthropology, Indiana University


Areas of Specialization: historical archaeology; oral history; ethnohistory; ethnoarchaeology; human ecology; environmental history; cultural heritage management; cultural preservation; applied anthropology; African-American history; USA; Oceania; Australia

VIRGIL H. ADAMS III
Assistant Professor of Psychology
Ph.D., Psychology, 1994, University of California, Santa Cruz
M.S., Psychology, University of California, Santa Cruz
B.A., Psychology, California


State University, Fresno
Areas of Specialization: social psychology, intergroup relations, hope, quality of life, African American families

## MARY ADLER

Assistant Professor of English
Ph.D., Curriculum and Instruction, 2002, University at Albany, State University of New York
M.A., English/Creative Writing, University at Albany, State University of New York

B.A., History, University of

California, Los Angeles
Areas of Specialization: English education, literature instruction, classroom discourse studies, writing development and processes, second language acquisition

## SIMONE ALOISIO <br> Assistant Professor of Chemistry

Ph.D., Analytical Chemistry, 2000, Purdue University
B.A., Chemistry, Bradley University

Areas of Specialization:

atmospheric chemistry, theoretical chemistry, infrared spectroscopy

## HARLEY BAKER <br> Assistant Professor of Psychology

Ed.D., Organization and Leadership, 1999, University of San Francisco
M.S., Developmental

Psychology, University of California, Santa Cruz
M.A., Psychology, San Jose
 State University
B.A., Psychology, California State University Stanislaus

Areas of Specialization: psychometrics, adolescence, attachment theory, psychoanalytic thought, psychology of religion

## JULIA BALÉN <br> Assistant Professor of English

Ph.D., Comparative Cultural and Literary Studies, 1993, University of Arizona
M.A., English Literature, University of Arizona
B.A., English/Creative Writing, University of Arizona


Areas of Specialization: twentieth century world literature, feminist studies, activism and social change, sexuality and gender studies

## TERRY L. BALLMAN Associate Professor of Spanish and Chair, Multiple Programs

Ph.D., Spanish Linguistics, 1985, University of Texas
M.A., Spanish, California State University Long Beach
B.A., Spanish, California State University Long Beach


Areas of Specialization: Spanish language acquisition, second/foreign language teaching

FRANK P. BARAJAS
Assistant Professor of History
History Program
Ph.D., History, 2001, Claremont Graduate University
M.A., B.A., History, California State University, Fresno

## Areas of Specialization:



California history, Chicano studies, twentieth century United States history

## ROBERT BLEICHER

## Assistant Professor

 of Science EducationPh.D., Educational Psychology, 1993, University of California, Santa Barbara
M.A., Educational Psychology, University of California, Santa Barbara

B.A. (Honors), Chemistry, University of California, Davis

Areas of Specialization: classroom discourse, selfefficacy, science education, service learning

## MERILYN BUCHANAN

Assistant Professor of Education
Ph.D., Education: Study of Schooling, 1991, University of California, Los Angeles
M.Ed., Education: Curriculum Design and Evaluation, Liverpool University, UK.
B.Ed., Education: Environmental
 Science, Liverpool Institute of Higher Education, U.K.

Cert. ED., Primary Education: Environmental Studies, Notre Dame College, U.K.

Areas of Specialization: K-6th grade mathematics education, teacher's work experiences, organization and function of professional development schools

## RAINER F. BUSCHMANN Assistant Professor of History <br> Ph.D., History, 1999, University of Hawai'i at Manoa <br> M.A., Anthropology, University of Hawai'i at Manoa <br> B.A., Anthropology, University of Illinois at UrbanaChampaign



Areas of Specialization: world history, Pacific Islands history, modern European history, history of oceans

## RENNY CHRISTOPHER

Associate Professor of English
Ph.D., Literature, 1992, University of California, Santa Cruz
M.A., Linguistics, San Jose State University
B.A., English/Creative Writing, Mills College


Areas of Specialization: twentieth century multicultural U.S. literature, working-class studies, gender studies

## C. B. CLAIBORNE

Professor of Marketing
Ph.D., Marketing, 1992, Virginia Polytechnic State University
M.B.A, Marketing/Management, Washington University
M.E., Mechanical Engineering, Dartmouth College
B.S., Mechanical Engineering, Duke University

Areas of Specialization: product innovation, consumer behavior, quality-of-life studies

## CATHY CLAIBORNE <br> Associate Professor of Accounting

Ph.D., Business Administration, 1994, University of Tennessee
M.S., Accounting, University of Tennessee
B.A., Accounting, Carroll
 College


CPA, CMA, CGFM
Areas of Specialization: accounting education, cost/managerial accounting, CPA, CMA, CGFM

## WILLIAM P. CORDEIRO Professor of Management and Chair, Business and Economics Program

Ph.D., Executive Management, 1986 Claremont Graduate University
M.A., Management, Claremont Graduate University
B.S., Biology, University of San Francisco

Areas of Specialization: strategic planning, professional ethics

## IRINA D. COSTACHE

Associate Professor of Art History
Ph.D., Art History, 1993, University of California, Los Angeles
M.A., Art History, University of California, Los Angeles
M.A., B.A., Art and Art Conservation, Institute of Fine Arts, Bucharest, Romania

Areas of Specialization: art history and humanities

## MARIA K. DENNEY <br> Assistant Professor of Special Education

Ph.D., Education, 2003, University of California, Santa Barbara
M.A., Education, University of California, Santa Barbara
B.A., Spanish, University of California, Santa Barbara


Areas of Specialization: special education, disability and risk studies

AMY L. DENTON
Assistant Professor of Biology
Ph.D., Botany, 1997, University of Washington
B.A., Environmental Studies, State University of New York (SUNY) at Binghamton

## Areas of Specialization:


molecular evolution of adaptation to extreme environments in plants; comparative genomics; plant molecular systematics and population genetics

## BEATRICE M. DE OCA

Associate Professor of Psychology
Ph.D., Psychology, 1997, University of California, Los Angeles
B.A., Psychology, California State University, Los Angeles


Areas of Specialization: psychophysiology of emotion, biological bases of emotion, animal defensive behaviors, learning and memory

## NIKOLAOS DIAMANTIS <br> Assistant Professor of Mathematics <br> Ph.D., Mathematics, 1997, Columbia University <br> M.A., Mathematics, Columbia University <br> B.S., Mathematics, University of Patras, Greece



Areas of Specialization: number theory

## GEOFF DOUGHERTY Professor of Physics

Ph.D., Biophysics, 1979, Keele University, England
PG.C.E., Physics and Education, Leeds University, England
B.Sc., Physics, Manchester University, England

Areas of Specialization:

medical imaging, image analysis, biophysics, instrumentation

## JESSE ELLIOTT <br> Assistant Professor of Mathematics

Ph.D., Mathematics, 2003, University of California, Berkeley
B.S., Mathematics,

Massachusetts Institute of Technology


Areas of Specialization: commutative algebra and number theory

## SCOTT A. FRISCH <br> Associate Professor of Political Science

Ph.D., Political Science, 1997, Claremont Graduate University
M.A. Political Science /International Relations, University of Pennsylvania

M.G.A., Government

Administration, University of Pennsylvania
A.B., International Affairs, Lafayette College

Areas of Specialization: American institutions (Congress, the presidency), public policy, public budgeting

## MATTHEW FURMANSKI

Assistant Professor of Art
M.F.A., Sculpture, 1995, Claremont Graduate University
B.F.A., 1993, Chapman University

Areas of Specialization: sculpture, digital media and new
 genres

## JORGE GARCIA

Assistant Professor of Mathematics
Ph.D., Mathematics, 2002, University of WisconsinMadison
M.S., Mathematics, University of Wisconsin-Madison
M.S., Mathematics, National University of Mexico

B.A., Mathematics, National University of Mexico

Areas of Specialization: large deviations, stochastic integrals

## JEANNE M. GRIER Assistant Professor of Secondary EducationScience

Ph.D., Teaching and Teacher Education, 1998, University of Arizona
M.Ed., Curriculum and Instruction-Science
Education, University of Missouri-Columbia
B.A. Interdisciplinary Studies--Biology, Chemistry, Art, University of Missouri-Columbia

Areas of Specialization: secondary science teacher education, professional development of science teachers, secondary methods, science content knowledge and curriculum influences

## IVONA GRZEGORCZYK

 Professor of Mathematics and Chair, Mathematics ProgramPh.D., Mathematics, 1990, University of California, Berkeley
M.S., Mathematics, University of Warsaw, Poland


Areas of Specialization: algebraic geometry, vector bundles, mathematics and art, mathematics education

## PHILIP HAMPTON

Professor of Chemistry
Ph.D., Organic Chemistry, 1989, Stanford University
B.A., Chemistry, St. Olaf College

Areas of Specialization: organic and inorganic synthesis,
 catalysis, mechanistic studies, organometallic chemistry, and polymer chemistry

NIAN-SHENG HUANG Associate Professor of History and
Chair, History Program
Ph.D., History, 1990, Cornell University
M.A., History, Cornell

University
M.A., History, Tufts University
B.A., History/Political Science,


Teachers University of Inner
Mongolia, P. R. China
Areas of Specialization: early America

## ANTONIO F. JIMÉNEZ JIMENEZ <br> Assistant Professor of Spanish

Ph.D., Spanish Linguistics, 2003, Pennsylvania State University
B.A., Translation and Interpreting, University of Malaga, Spain


Areas of Specialization: second language acquisition, language attrition, bilingualism, technology-enhanced language learning, corpus-linguistics, translation, and sociocultural theory

## JOAN M. KARP

Professor of Special
Education and
Chair, Education Program
Ph.D., Special Education, 1982, University of Connecticut
M.S., Mental Retardation, Syracuse University
B.S., Elementary Education and Special Education, Rhode
 Island College

Areas of Specialization: Inclusion of preschool and primary grade students with disabilities in general education; educators with disabilities

JACQUELYN KILPATRICK
Professor of English and
Chair, English Program
Ph.D., Literature, 1996, University of California, Santa Cruz
M.A., English, California State University Fresno
B.A., English, California State University Fresno


Areas of Specialization: British literature, world literature, Native American literature, renaissance drama, multicultural literature and film

## LIZ KING <br> Assistant Professor of Graphic Design

 Technology and Multimedia M.F.A., Art, 1990, University of California, Los AngelesB.A., Art, University of

California, Los Angeles
Areas of Specialization:

computer graphics and multimedia, digital animation, web design

## JILL M. LEAFSTEDT

Assistant Professor of Special Education
Ph.D., Education/Emphasis in Special Education Disabilities and Risk, 2002, University of California, Santa Barbara
B.A., Psychology, University of California, Santa Barbara


Areas of Specialization: learning disabilities, early reading, early intervention, bilingual education/special education

## LOUISE H. LUTZE-MANN Associate Professor of Biology

Ph.D., Biochemistry, 1983, The University of New South Wales, Sydney, Australia
B.Sc., Biology, The University of New South Wales

Areas of Specialization:

molecular and cellular biology, cancer biology

NANCY MOZINGO
Assistant Professor of Biology
Ph.D., Zoology, 1993, Arizona State University
B.S., Zoology, Arizona State University

Areas of Specialization:
 cellular and developmental biology

## DENNIS D. MURAOKA Professor of Economics

Ph.D., Economics, 1981, University of California Santa Barbara
M.A., Economics, University of California Santa Barbara
B.A., Economics and Mathematics, University of California Santa Barbara


Areas of Specialization: natural resource and environmental economics

## JOAN K. PETERS Assistant Professor of English

Ph.D., Comparative Literature, 1974, University of Chicago
M.A., English, University of Chicago
B.A., English, University of Chicago


Areas of Specialization: 17th-century English and european literature; modern and contemporary Fiction, fiction writing; women's studies

## JACK REILLY Professor of Art and Chair, Art Program

M.F.A., Studio Art, 1978, Florida State University
B.F.A., Creative Art, Florida State University
Specialized Studies in Art: Paris American Academy


Areas of Specialization: painting media and theory, digital art, video, film, surfing

## PAUL A. RIVERA <br> Assistant Professor of Economics

Ph.D., Economics, 2002, University of Southern California
M.A., Economics, California State University Long Beach B.A., Economics, Texas A\&M University


Areas of Specialization: development economics, international migration, rural household economics, and culture and economics

## DONALD A. RODRIGUEZ

Assistant Professor of Environmental Science and Resource Management
Ph.D., Human Dimensions of
Natural Resource
Management, 1996,
Colorado State University
M.S., Environmental Education, California State University
 Hayward
B.S. Wildlife Zoology, San Jose State University

Areas of Specialization: human dimensions of natural resource management, parks and protected areas management, management of wildland-urban interface, watershed management and land use conflicts

## PETER SMITH

## Professor of

 Computer SciencePh.D., Computer Studies, 1975, Lancaster University
B.A., Computer Studies, Lancaster University

Areas of Specialization: file and data structures, text
 processing

## STEPHEN STRATTON

Associate Professor Head of Collections and Technical Services, Library
M.S., Library Science, 1992, Wayne State University
M.A., Counseling, Eastern Michigan University
A.B., Communications, University of Michigan


Areas of Specialization: HIV/AIDS information, information provision to GLBT populations

## ASHISH VAIDYA

Professor of Economics
Ph.D., Economics, 1990, University of California, Davis
M.A., Economics, University of Bombay, India
B.A., Economics, St. Xavier's

College, Bombay, India


Areas of Specialization: international trade, applied microeconomics, international business strategy

## LILLIAN VEGACASTANEDA Professor of Language, Culture \& Literacy

Ed.D., Teaching, Curriculum and Learning Environments, 1989, Specialization in Sociolinguistics, Harvard University
M.A., Bilingual/Multicultural
 Education, California State
University Los Angeles
B.A., History, University of California, Irvine

Areas of Specialization: multicultural/multilingual education, language, literacy and culture in diverse contexts, narrative, social justice and equity issues in curriculum and instruction

## KEVIN VOLKAN Professor of Psychology and Chair, Psychology Program

M.P.H., Public Health, 1998,

Harvard University
Ph.D., Clinical Psychology, 1991, Center for Psychological Studies
Ed.D., Educational Psychology, Northern Illinois University

M.A., Psychology, Sonoma State University
B.A., Biology, University of California, Santa Cruz

Areas of Specialization: quantitative assessment of physician performance; Asian philosophy and religion, psychoanalysis and depth psychology

## AMY WALLACE

Associate Librarian
M.L.I.S., Library and Information Science, 1996, San Jose State University
M.A., History, San Diego State University
B.A., History, San Diego State University


Areas of Specialization: reference, instruction, and outreach

CHING-HUA WANG Professor of Immunology and Microbiology and Chair, Biology Program
Ph.D., Immunology, 1986, Cornell University
M.D., Beijing Medical College, China
M.S., Immunology, Beijing Medical University, China


Areas of Specialization: infection and immunity, cellular and molecular immunology, microbiology

## WILLIAM J. WOLFE <br> Associate Professor of Computer Science and Chair, Computer Science Program

Ph.D., Mathematics, 1976, City University of New York
B.A., Mathematics, Queens College, CUNY


Areas of Specialization: artificial intelligence, neural networks, scheduling systems, database-driven web sites

MARK ZACHARIAS
Assistant Professor of Environmental Science and Resource Management Ph.D., Zoology, 2000,

University of Guelph,
Ontario, Canada
M.Sc., Geography / Biology,

University of Victoria
B.Sc., Geography, University of


Victoria
Areas of Specialization: marine conservation and management, marine ecology and biogeography, land use planning, conservation biology


Admissions

## and Records




# ADMISSIONS AND RECORDS 

Location: Enrollment Center
Professional Building, 1st Floor
(805) 437-8500

Fax: (805) 437-8509

## ADMISSION PROCEDURES AND POLICIES

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 CSU campus admission office.

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.

Applications may be obtained online or at any California high school or community college or from the Office of Admission at any of the campuses of the California State University.

## Importance of Filing Complete, Accurate, and Authentic Application Documents

CSU Channel Islands 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 fulltime undergraduate programs of study in day or evening classes must file a complete undergraduate application. The $\$ 55$ nonrefundable application fee should be in the form of a check or money order payable to "The California State University" or by credit card if submitting the online application, 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 initial filing period (October and November for fall terms, June for winter terms, August for spring terms, February for summer terms) 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 during the fall filing period those programs that 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, and available online at
http://www.calstate.edu/AR/csureview/. Information about the supplementary criteria also is sent to program applicants. Detailed impaction information is also available at
http://www.calstate.edu/AR/impactioninfo.shtml.
You must file your application for admission to an impacted program during the initial filing period. If you wish to be considered in impacted programs at more than one campus, 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 campusdeveloped criteria. If you are required to submit scores on either the SAT I or the ACT and are applying for fall admission, you should take the test as early as possible and no later than October of the preceding year 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.

| Terms in 2004-05 | Applications First Accepted | Initial Filing Period | Filing Period Duration |
| :---: | :---: | :---: | :---: |
| Summer Semester | February 1, 2004 or Quarter 2004 | February 1-28, 2004 | 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 office for current information. |
| Fall Semester or Quarter2004 | October 1, 2003 | October 1-November 30, 2003 |  |
| Winter Quarter 2005 | June 1,2004 | June 1-30, 2004 |  |
| Spring Semester or Quarter 2005 | August 1,2004 | August 1-31, 2004 |  |

## 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 may also include a request that you submit additional 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. An offer of admission 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 Admissions Offices regarding specific policies governing hardship admission.

## UNDERGRADUATE ADMISSION REQUIREMENTS

## Freshman Requirements

Generally, first-time freshman applicants will qualify for regular admission if they

1. graduated high school,
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. Beginning with admission for Fall 2004, your grade point average is based on grades earned in courses taken during your final three years of high school that all college preparatory " $\mathrm{a}-\mathrm{g}$ " subject requirements, and bonus points for approved honors courses (excluding physical education and military science).

Up to eight semesters of honors courses taken in the last two years of high school, including up to two approved courses taken in the tenth grade can be accepted. Each unit of A in an honors course will receive a total of 5 points; $\mathrm{B}, 4$ points; and $\mathrm{C}, 3$ points.

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT I. 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). Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section.

If your grade point average is 3.00 or above ( 3.61 for nonresidents), you are not required to submit test scores. However, you are urged to take the SAT I or ACT because campuses use these test results for advising and placement purposes and may require them for admission to impacted majors or programs.

You will qualify for regular admission when the university verifies that you have graduated from high school, have a qualifiable eligibility index, have completed the comprehensive pattern of college preparatory "a-g" subjects, and, if applying to an impacted program, have met all supplementary criteria.

## Provisional Admission

CSU Channel Islands may provisionally admit firsttime freshman applicants based on their academic preparation through the junior year of high school and planned for the senior year. The campus will monitor the senior year of study to ensure that those so admitted complete their senior year of studies satisfactorily, including the required college preparatory subjects, and graduate from high school. Students are required to submit an official transcript after graduation to certify that all course work has been satisfactorily completed. A campus may rescind admission decisions for students who are found not to be eligible after the final transcript has been evaluated.

## ELIGIBILITY INDEX TABLE FOR CALIFORNIA HIGH SCHOOL GRADUATES OR RESIDENTS OF CALIFORNIA

| CPA | $\begin{aligned} & \text { ACT } \\ & \text { Score } \end{aligned}$ | SAT I <br> Score | CPA | $\begin{aligned} & \text { ACT } \\ & \text { Score } \end{aligned}$ | SAT I <br> Score | CPA | $\begin{aligned} & \text { ACT } \\ & \text { Score } \end{aligned}$ | SATI <br> Score | CPA | $\begin{aligned} & \text { ACT } \\ & \text { Score } \end{aligned}$ | SATI <br> Score | CPA | $\begin{aligned} & \text { ACT } \\ & \text { Score } \end{aligned}$ | SAT I <br> 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 do |  |
| 2.82 | 13 | 650 | 2.61 | 18 | 820 | 2.40 | 22 | 980 | 2.19 | 26 | 1150 | not q regul | alify for admis |  |

Subject requirements - The California State University requires that 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.

2 years of social science, including 1 year of U.S. history, or U.S. history and government.

## 4 years of English

3 years of math (algebra, geometry and intermediate algebra).

2 years of laboratory science ( 1 biological and 1 physical, both with labs). Attachment XIII-6

2 years in the same language foreign language (subject to waiver for applicants demonstrating equivalent competence).

1 year of visual and performing arts: art, dance, drama/theater, or music.

1 year of electives: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, and visual and performing arts.

## High School Students

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high
school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment.

## Transfer Requirements

Students who have completed fewer than 60 transferable semester college units (fewer than 90 quarter units) are considered lower division transfer students. Student who have completed 60 or more transferable semester college units ( 90 or more quarter units) are considered upper division transfer students. Students who complete college units during high school or through the summer immediately following high school graduation 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

Generally, applicants will qualify for admission as a lower division transfer student if they have a grade point average of at least 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. Will meet the freshman admission requirements (grade point average and subject requirements) in effect for the term to which they are applying (see "Freshman Requirements" section); or
2. 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.

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

## 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.

## Upper Division Transfer Requirements

Generally, applicants will qualify for admission as an upper division transfer student if:

1. They have a grade point average of at least 2.0 (C or better) in all transferable units attempted; and
2. They are in good standing at the last college or university attended; and they 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.

## 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. All accepted applicants are required to submit an official transcript of all college level work completed. Campuses will rescind admission for all
students who are found not to be eligible after the final transcript has been evaluated.

## Test Requirements

Freshman and transfer applicants who have fewer that 60 semester or 90 quarter units of transferable college credit must submit scores, unless exempt (see "Eligibility Index" on page 53), 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 October or November. Test scores also are 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 students may write to or call:

| The College Board (SAT I) | ACT Registration Unit |
| :--- | :--- |
| Registration Unit, Box 6200 | P.O. Box 414 |
| Princeton, New Jersey 08541-6200 | Iowa City, Iowa 52240 |
| (609) 771-7588 | (319) 337-1270 |
| www.collegeboard.org | www.act.org |

## TOEFL REQUIREMENT

TOEFL Requirement - All undergraduate applicants whose native language is not English and 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 majors may 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 majors may require a higher score.

## SYSTEMWIDE PLACEMENT TEST REQUIREMENTS

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) 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. Undergraduate students who do not demonstrate college-level skills both in English and in mathematics will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.

Students register for the EPT and/or ELM at their local CSU campus. Questions about test dates and registration materials may be addressed to the Office of C.H.A.P.s located on the 1st floor, Bell Tower Building, (805) 437-8510.

## English Placement Test (EPT)

The CSU English Placement Test (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 "Exempt" on the augmented English CST taken in grade 11.
- 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 the 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.


## Directed Self Placement (DSP)

Directed Self Placement will be the only method used on the Channel Islands campus to place students into freshman composition courses. EPT scores will not be used. Students will be given guidance in Directed Self Placement during Orientation, and will select either English 105, Composition and Rhetoric, or the English 102, 103 Stretch Composition sequence. Completion of either English 105 or English 102 plus English 103 satisfies the freshman writing requirement.

## Entry Level Mathematics (ELM) Placement Examination

The Entry Level Mathematics (ELM) Placement 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 "Exempt" on the augmented mathematics CST taken in grade 11.
- 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 ) or 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.


## 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 formally admitted 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.

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

Entering CSU students are required to present proof of the following immunizations to the CSU campus they will be attending before the beginning of their first term of enrollment. Measles and Rubella: All new and readmitted students born after January 1, 1957 must provide proof of full immunization against
measles and rubella prior to enrollment. Hepatitis B: All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. Full immunization against Hepatitis B consists of three timed doses of vaccine over a minimum 4 to 6 months period. If you need further details or have special circumstances, please consult the University's Student Health Center located on San Luis Avenue, (805) 4378828. Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about meningococcal disease and the availability of the vaccine to prevent one from contracting the disease and whether or not he or she has chosen to receive the vaccination. These are not admission requirements, but shall be required of students as conditions of enrollment in the CSU.

## RESERVATION

The University reserves the right to select its students and deny admission to the University or any of its programs as the University, in its sole discretion, determines appropriate based on an applicant's suitability and the best interests of the University.

## 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.

## INTERNATIONAL (FOREIGN) STUDENT ADMISSION REQUIREMENTS

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 [insert campus deadline for document submission] 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 majors or programs with limited openings.

## GRADUATE AND POSTBACCALAUREATE APPLICATION PROCEDURES

All graduate and postbaccalaureate applicants (e.g., joint PhD and EdD applicants, 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 seeking a second bachelor's degree should submit the undergraduate application for admission. 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/.

## GRADUATE AND POSTBACCALAUREATE ADMISSION REQUIREMENTS

Graduate and postbaccalaureate applicants may apply for a degree objective, a credential or certificate objective, or may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows:

- General Requirements - The minimum requirements for admission to graduate and postbaccalaureate studies at a California State University campus are in accordance with university regulations as well as Title 5, Chapter 1, Subchapter 3 of the California Code of Regulations. Specifically, a student shall: (1) have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or shall have completed equivalent academic preparation as determined by appropriate
campus authorities; (2) be in good academic standing at the last college or university attended; (3) have attained a grade point average of at least $2.5(\mathrm{~A}=4.0)$ in the last 60 semester ( 90 quarter) units attempted; and (4) satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe. In unusual circumstances, a campus may make exceptions to these criteria.

If you meet the minimum requirements for graduate and postbaccalaureate studies, you will be considered for admission in one of the four following categories:

- Postbaccalaureate Unclassified - To enroll in graduate courses for professional or personal growth, you must be admitted as a postbaccalaureate unclassified student. By meeting the general requirements, you are eligible for admission as a postbaccalaureate unclassified student. Some departments may restrict enrollment of unclassified students because of heavy enrollment pressure. Admission in this status does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program; or
- Postbaccalaureate Classified - If you wish to enroll in a credential or certificate program, you will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or
- Graduate Conditionally Classified - You may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, you can remedy deficiencies by additional preparation; or
- Graduate Classified - To pursue a graduate degree, you will be required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus.


## Graduate-Postbaccalaureate TOEFL Requirement

All graduate and postbaccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score of 550 on the Test of English as a Foreign Language (TOEFL). Some programs require a higher score. Applicants taking the Computer-Based Test of English as a Foreign Language must present a score of 213 or above. Some programs may require a higher score.

## 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 students' privacy in their records maintained by the campus. The statute and regulations govern access to student records maintained by the campus and the release of such records. The law provides that the campus must give students access to records directly related to the student, and must also provide opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The law generally requires the institution to receive a student's written consent before releasing personally identifiable data about the student. The institution has adopted a set of policies and procedures governing implementation of the statute and the regulations. Copies of these policies and procedures may be obtained at the Office of Admissions and Records. Among the types of information included in the campus statement of policies and procedures are: (1) the types of student records maintained and the information they contain; (2) the official responsible for maintaining each type of record; (3) the location of access lists indicating persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) student access rights to their records; (6) the procedures for challenging the content of student records; (7) the cost to be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office 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, grade level, enrollment status, degrees, honors, 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 be released. Written objections should be sent to the Office of Admissions and Records.

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 have responsibilities in the campus's academic, administrative or service functions and have reason for using student records associated with their campus or other related academic responsibilities. Student records may also be disclosed 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; or to other institutions to which the student is transferring).

## CANCELLATION OF REGISTRATION OR WITHDRAWAL FROM THE INSTITUTION

Students who find it necessary to cancel their registration or to withdraw from all classes after enrolling for any academic term are required to follow the university's official withdrawal procedures. Failure to follow formal university procedures may result in an obligation to pay fees as well as 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 canceling registration and withdrawal procedures is available from the Office of Admissions and Records.

Students who receive financial aid funds must consult with Financial Aid Office prior to withdrawing from the University regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. If a recipient of student financial aid funds withdraws from the institution during an academic term or a payment period, the amount of grant or loan assistance received may be subject to return and/or repayment provisions.



## Financial Matters




## SCHEDULE OF FEES

Legal residents of California are not charged tuition. The following reflects applicable systemwide fees and nonresident tuition for both the quarter and the semester. (Fees are subject to change without notice.)

## All Students

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

State University Fee for all campuses except California State University, Stanislaus:

| Units | Per <br> Semester | Per <br> Quarter | Per <br> Academic <br> Year |
| :---: | :---: | :---: | :---: |
| Undergraduate |  |  |  |
| 0.1 to 6.0 | $\$ 594$ | $\$ 304$ | $\$ 1,188$ |
| 6.1 or more | $\$ 1,023$ | $\$ 682$ | $\$ 2,046$ |
|  |  |  |  |
| Graduate |  | $\$ 654$ | $\$ 436$ |
| 0.1 to 6.0 | $\$ 1,308$ |  |  |
| 6.1 or more | $\$ 1,128$ | $\$ 752$ | $\$ 2,256$ |

California State University, Stanislaus:

| Units | Per Semester | Winter Term | Per Academic Year |
| :---: | :---: | :---: | :---: |
| Undergraduate |  |  |  |
| 0.1 to 6.0 | \$502 | \$184 | \$1,188 |
| 6.1 or more | \$931 | \$184 | \$2,046 |
| Graduate |  |  |  |
| 0.1 to 6.0 | \$553 | \$202 | \$1,308 |
| 6.1 or more | \$1,027 | \$202 | \$2,256 |

## Nonresident Students (U.S. and Foreign)

Nonresident tuition (in addition to other fees charged all students) for all campuses:

|  | Quarter | Semester |
| :---: | :---: | :---: |
| Charge Per Unit | $\$ 188$ | $\$ 282$ |

The nonresident fee for California State University, Stanislaus, is the same as the semester unit charge, \$282.

The total nonresident tuition paid per term will be determined by the number of units taken. The maximum nonresident tuition per academic year (as of 2003-04) is $\$ 8,460$.

Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on fee waivers).

## Credit Cards

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

## REFUND OF FEES INCLUDING NONRESIDENT TUITION

Regulations governing the refund of mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in Section 41802 of Title 5, California Code of Regulations. For purposes of the refund policy, mandatory fees are defined as those systemwide fees and campus fees that are required to be paid in order to enroll in statesupported academic programs at the California State University. Refunds of fees and tuition charges for self-support programs at the California State University (courses offered through extended education) are governed by a separate policy established by the University.

In order to receive a full refund of mandatory fees, including nonresident tuition, a student must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available in the Schedule of Classes.

For state-supported semesters, quarters, and nonstandard terms or courses of four (4) weeks or more, a student who withdraws during the term in accordance with the university's established procedures will receive a refund of mandatory fees, including nonresident tuition, based on the portion of the term during which the student was enrolled. No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

For state-supported semesters, quarters, and nonstandard terms or courses of less than four (4) weeks, no refunds of mandatory fees and nonresident tuition will be made unless a student cancels registration or drops all classes prior to the first day in accordance with the university's established procedures and deadlines.

Students will also receive a refund of mandatory fees, including nonresident tuition, under the following circumstances:

- The tuition and mandatory fees were assessed or collected in error;
- The course for which the tuition and mandatory fees were assessed or collected was cancelled by the university;
- The university makes a delayed decision that the student was not eligible to enroll in the term for which mandatory fees were assessed and collected and the delayed decision was not due to incomplete or inaccurate information provided by the student; or
- The student was activated for compulsory military service.

Students who are not entitled to a refund as described above may petition the university for a refund demonstrating exceptional circumstances and the chief financial officer of the university or designee may
authorize a refund if he or she determines that the fees and tuition were not earned by the university.

Information concerning any aspect of the refund of fees may be obtained from the Enrollment Center.

## FEES AND DEBTS OWED TO THE INSTITUTION

Should a student or former student fail to pay a fee or a debt owed to the institution, the institution may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381).

Prospective students who register for courses offered by the university are obligated for the payment of fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees including any tuition for the reservation of space in the course.

The institution may withhold permission to register or receive official transcripts of grades or other services offered by the institution from anyone owing fees or another debt to the institution. If a person believes he or she does not owe all or part of an asserted unpaid obligation that person may contact the business office. The business office, or another office on campus to which the business office may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions.

## FEE WAIVERS

The California Education Code includes provisions for the waiver of mandatory systemwide fees as follows: 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 (referred to as Alan Pattee Scholarships);

Section 66025.3 - Qualifying children, spouses, or unmarried surviving spouses of a war period veteran of the U.S. military who is totally service-connected disabled or who died as a result of service-related causes; children of any veteran of the U.S. military who has a service-connected disability, was killed in action, or died of a service-connected disability and meets specified income provisions; qualifying dependents of a member of the California National Guard who in the line of duty and in active service of the state was killed or became permanently disabled or died of a disability as a result of an event while in active service of the state; and undergraduate students who are the recipient of or the child of a recipient of a Congressional Medal of Honor and meet age and income restrictions; and

Section 68121 - Student enrolled in an undergraduate program who are the surviving dependent of any individual killed in the September 11, 2001, terrorist attacks on the World Trade Center in New York City, the Pentagon building in Washington, D.C., or the crash of United Airlines Flight 93 in southwestern Pennsylvania, if the student meets the financial need requirements set forth in Section 69432.7 for the Cal Grant A Program and either the surviving dependent or the individual killed in the attacks must have been a resident of California on September 11, 2001.

Students who may qualify for these benefits should contact the Office of Admissions \& Records for further information and/or an eligibility determination.

## DETERMINATION OF RESIDENCE FOR NONRESIDENT TUITION PURPOSES

The law governing residence for tuition purposes at the California State University is California Education Code sections 68000-68090, 68120-68134, and 89705-89707.5, and California Code of Regulations, Title 5, sections 41900-41916. This material can be viewed on the Internet by accessing the California State University's website at
www.calstate.edu/GC/resources.shtml.
Each campus's Admissions Office is responsible for determining the residence status of all new and returning students based on the Application for Admission, Residency Questionnaire, Reclassification Request Form, and, as necessary, other evidence furnished by the student. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.

Generally, establishing California residence for tuition purposes requires a combination of physical presence and intent to remain indefinitely. An adult who, at least one full year prior to the residence determination date for the term in which enrollment is contemplated, can demonstrate both physical presence in the state combined with evidence of intent to remain in California indefinitely may establish California residence for tuition purposes. A minor normally derives residence from the parent(s) they reside with or most recently resided with.

Evidence demonstrating intent may vary from case to case but will include, and is not limited to, the absence of residential ties to any other state, California voter registration and voting in California elections, maintaining California registration and driver's license, maintaining active California bank accounts, filing California income tax returns and listing a California address on federal tax returns, owning residential property or occupying or renting an apartment where permanent belongings are kept, maintaining active memberships in California professional or social organizations, and maintaining a permanent military address and home of record in California.

Adult noncitizens establish residence in the same manner as citizens, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. Unmarried minor noncitizens derive their residence in the same manner as unmarried minor citizens except that both parent and minor must have an immigration status consistent with establishing domicile in the United States.

Exceptions to the general residence requirements are contained in California Education Code sections 68070-68084 and Title 5 of the California Code of Regulations, sections 41900-41916, and include, but are not limited to, members of the military and their dependents, certain credentialed employees of school districts and most students who have attended high school in California and graduated or attained the equivalent. Whether an exception applies to a particular student cannot be determined before the submission of an application for admission and, as necessary, additional supporting documentation. Because neither campus nor Chancellor's Office staff may give advice on the application of these laws, applicants are strongly urged to review the material for themselves and consult with a legal advisor.

Nonresident students seeking reclassification are required to complete a supplemental questionnaire including questions concerning their financial dependence, which will be considered along with physical presence and intent in determining reclassification.

Residence determination dates are set each term. They are:

| Quarter Term Campuses |  | Semester Term Campuses |  |
| :--- | :--- | :--- | :--- | :--- |
| Fall | September 20 | Fall | September 20 |
| Winter | January 5 | Winter* | January 5 |
| Spring | April 1 | Spring | January 25 |
| Summer | July 1 | Summer | June 1 |

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

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

Stage 1 September 20
Stage 2 January 5
Stage 3 June 1
Stage 4 September 20
Students classified as non-residents may appeal a final campus decision within 120 days of notification by the campus. A campus residence classification appeal must be in writing and submitted to:

The California State University Office of General Counsel
401 Golden Shore, 4th Floor
Long Beach, California 90802-4210

The Office of General Counsel can either decide the appeal or send the matter back to the campus for further review.

Students incorrectly classified 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 or who no longer meet the criteria for an exception must immediately notify the Admissions Office.

Changes may have been made in the rate of nonresident tuition and in the statutes and regulations governing residence for tuition purposes in California between the time this information is published and the relevant residence determination date. Students are urged to review the statutes and regulations stated above.

## 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 by funding provided by the taxpayers of California and student fee revenue. The systemwide cost of education is defined as total support expenditures (State University Fee revenue and General Fund support appropriations) divided by the number of full-time equivalent students. The total 2003/04 state General Fund appropriation to the CSU (not including capital outlay funding in the amount of $\$ 481,170,000$ ) is $\$ 2,492,021,000$ and campus budgeted State University Fee Revenue is $\$ 802,787,000$ for a total of $\$ 3,294,808,000$. The total cost of education for CSU must provide support for a projected 334,914 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 2003/04 systemwide cost of education per fulltime equivalent student is $\$ 9,838$. Of this amount, the average student fee support per FTE is $\$ 2,572$. (The State University Fee and campus fees that must be paid to apply to, enroll in, or attend the university are included in the average costs paid by the students. Individual students may pay less or more than $\$ 2,572$, depending on the campus and whether student is
attending part-time/full-time, or is resident/nonresident student. Also, other campus fees may be charged that are not required of all enrolled students, which include user and penalty/deposit fee types).

| 2003/04 | Amount | Average Cost <br> per FFE Student | \% |
| :--- | :--- | :--- | :--- | :--- |
| Total Cost of Education | $\$ 3,294,808,000$ | $\$ 9,838$ | 100 |
| - State Appropriation | $2,492,021,000$ | 7,441 | 76 |
| - Student Fee Support | $621,787,000$ | 2,397 | 24 |

## 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 twothirds 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 twothirds favorable vote the establishment of the fee (Education Code, Section 89304). The student body fee was established at CSU Channel Islands by student referendum in 2003. 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 percent 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 association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs.

The process to establish and adjust other campusbased mandatory fees requires consideration by the campus fee advisory committee and sometimes a student referendum. 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 also 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.

## SCHOLARSHIPS

## Bernard and Barbara Bobitch Scholarships in the Health Sciences

Awarded to students in biology, chemistry, or related fields that enable students to prepare for careers in a health profession. Students must be legal citizens of the U.S. with a minimum GPA of 3.0 from high school or community college. The scholarship may be used for purposes other than fees, such as books, computers, childcare, or living expenses. Renewable up to four years for a freshman and two years for a community college transferee.

## Bostwick Endowed Scholarship

Awarded to students with a 3.0 minimum GPA and demonstrable leadership and community service. Financial need may be considered.

## Citizens for Youth in Ventura County Endowed Scholarship Fund

Awarded to a Ventura County high school graduate with a minimum GPA of 2.0 from high school or community college. Voluntary school or community service and financial need will be considered. Renewable up to four years for a freshman, two years for a community college transferee, and two years for a graduate student.

## California Strawberry Festival Endowed Scholarship

Awarded to students who are Ventura County residents and whose parent(s) have been employed by the local strawberry industry for at least one season. Students must have a 3.0 minimum GPA and demonstrate financial need. Renewable for up to 4 years for freshmen, 2 years for transfer or graduate students.

## Hammer Family Trust Endowed Scholarship

Awarded to students preparing for careers in engineering, mathematics, or teaching. Students must have a 3.0 minimum GPA and demonstrate leadership and community involvement.

## General Scholarships

The CSUCI Foundation provides funds for general scholarships for qualified students. Minimum GPA is 3.0 .

Please contact the Financial Aid Office for further information on the above scholarships. Scholarship information is also available on the CSUCI website. Visit www.csuci.edu and see the scholarships page under Financial Aid.

Additional scholarships are available through the Ventura County Community Foundation. Please visit www.vccf.org for a list of Ventura County scholarships or contact them directly at (805) 9880196.


## Student Affairs




## DIVISION OF STUDENT AFFAIRS

## MISSION

Placing students at the center of their educational experience, the Division of Student Affairs supports and enhances learning and the University community through quality activities, facilities, programs, and services.

## VICE PRESIDENT FOR STUDENT AFFAIRS

Location: Bell Tower Building
(805) 437-8536

Fax: (805) 437-8549
The mission of the Office of the Vice President is to recommend policies and procedures that will ensure a coordinated delivery and assessment system of student services through all departments within the Division of Student Affairs (DSA). This includes tracking and reporting expenditures, implementing selected special events or projects, and producing and distributing internal and external communication to pertinent constituencies throughout the University and surrounding communities. The Office of the Vice President also coordinates all personnel, budget, training, development, and communication for the Division of Student Affairs.

## ADMISSIONS AND RECORDS

Location: Enrollment Center
Professional Building, 1st Floor
Admissions and Records: (805) 437-8500
Admissions Fax: (805) 437-8509
Recruitment: (805) 437-CSCI (2724)
Recruitment Fax: (805) 437-8519
Admissions and Records supports the mission and goals of the Division of Student Affairs by maintaining timely and accurate records on admissions, enrollment, and the academic progress and accomplishments of its students, while maintaining the privacy and security of those records. This office provides "one stop" services through the Enrollment Center for students wishing to apply, register, or pay fees.

## Recruitment

The Recruitment office aims to develop and maintain positive relationships to recruit, enroll, and retain a qualified and diversified undergraduate and graduate student body through college fairs, visits, and presentations to local high schools, community colleges, and community organizations.

Admission counselors are available to assist prospective students in becoming aware of the requirements necessary to obtain admission to CSU Channel Islands. We offer the following services:

- Pre-admissions counseling appointments are available for students who have yet to apply to the

University. These are individual meetings at which one of our admission counselors will guide prospective students through general education questions and specific major requirements.

- Campus tours are offered Monday through Friday at 11 am and 2 pm . A visit to our campus provides an opportunity for prospective students to view the campus and familiarize themselves with the various resources the University has to offer. Each tour is led by a Cal State Channel Islands student.
- A group campus visit is designed to provide high school and college students the opportunity to tour the campus and view a presentation given by an admission counselor. Group campus visits are available by appointment to a maximum of 60 students.
- Information about CSU Channel Islands is available upon request.

If you would like additional information regarding any of these services or would like to speak to one of our admission counselors, please contact the
University at (805) 437-CSCI or toll free at 1-888-44CSUCI or via email at prospective.student@csuci.edu.

## Veterans Affairs

Students who are eligible for veterans, dependents, or reservists V.A. education benefits should contact The Office of Admissions and Records in person or by telephone at (805) 437-8500. Services available include assistance in applying for educational benefits and education certification. Students planning to attend CSU Channel Islands should contact their local Veterans Services office or the regional Veterans Affairs office at www.gibill.va.gov. Once approved by the local or regional V.A. office, students who are registered in classes at CSU Channel Islands must make an appointment to complete certification paperwork. This paperwork must be completed each semester. For additional information, please contact the Office of Admissions and Records.

## C.H.A.P.s <br> (CAREER, HEALTH, ACCOMMODATION, AND PERSONAL COUNSELING)

Location: Bell Tower Building
(805) 437-8510

Fax: (805) 437-8529
TDD: (805) 437-8510
The mission of C.H.A.P.s is to prepare students to meet the challenges of the real world that exist inside and outside the classroom. C.H.A.P.s focuses on the development of the whole student in mind, body, and spirit, and provides service and learning opportunities that advance the student's overall development.

The C.H.A.P.s team understands the many stressors that accompany each college level, and through C.H.A.P.s programs, students have access to professional guidance and support at every stage of
their college careers. Students are offered an array of services designed to help them respond to any life issue that might arise in their college experience.

## Career Development Services

Location: Bell Tower Building
(805) 437-8510

Fax: (805) 437-8529
The mission of Career Development Services is to assist students in reaching their educational, career, and employment goals. Students are strongly encouraged to begin developing their unique Career Profile, as well as to start building their Co-Curricular Transcript during their freshman year. However, students at any stage of career development can receive assistance in taking the next step towards a satisfying and rewarding career. Career exploration, planning, and job preparation resources include:

- Computer Assisted Career Guidance/Research: EUREKA, Career Cruising, SigiPlus, and MonsterTrak
- One-on-One Career Counseling
- Co-Curricular Transcript Development
- Career Resource Library
- Career Development Workshops (e.g. Resume Writing, Interview Strategies, Dress for Success)
- Internship Opportunities
- Resume Development
- Career Fair
- Job Shadowing
- Volunteer Opportunities
- Student Employment
- Graduate Leadership Opportunities


## Student Health Services

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

Fax: (805) 437-8829
The mission of Student Health Services is to promote 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, available on campus and at community clinics, 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
- Health Education Program
- Student Health Advisory Board


## Community Medical Clinics

Students are able to access the health care services listed above at no cost through one of the seven Ventura County Medical Clinics listed below. Students must present their student identification card to receive service at the clinics.

Conejo Valley Family Care Center
223 E. Thousand Oaks Blvd., \#102
Thousand Oaks (805) 371-8355
Las Islas Family Medical Group
325 W. Channel Islands Blvd.
Oxnard (805) 385-8662
Magnolia Family Medical Center
2240 E. Gonzales Road
Oxnard (805) 981-5151

## Moorpark Family Care Center

35 West Los Angeles Ave.
Moorpark (805) 529-4624
Santa Paula Medical Clinic
1334 East Main Street
Santa Paula (805) 933-1122
Sierra Vista Family Care Center
4531 Alamo Street
Simi Valley (805) 584-4885
West Ventura Medical Clinic
133 West Santa Clara Street
Ventura (805) 641-5600

## Student Health Insurance

Information regarding available student health insurance may be obtained from the Student Health Center.

## Immunization Requirements

Entering CSU students are required to present proof of the following immunizations to the CSU campus they will be attending before the beginning of their first term of enrollment:

Measles and Rubella: All new and readmitted students born after January 1, 1957 must provide proof of immunization against measles and rubella prior to enrollment. Submit medical documentation to the Student Health Center to verify both vaccinations were received since age one or obtain the vaccination at no charge through Student Health Center.

Hepatitis B: All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. Full immunization against Hepatitis B consists of three
timed doses of vaccine over a minimum four to six months period. If you need further details or have special circumstances, please consult the Student Health Center at (805) 437-8828 in the Health Center Building located on San Luis Avenue. (Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that he or she has received information about meningococcal disease and the availability of the vaccine to prevent one from contracting the disease and whether or not he or she has chosen to receive the vaccination.) These are not admission requirements, but shall be required of students as conditions of enrollment in CSU. The form is available at the Student Health Center or through the Student Housing office

Submit medical documentation to the Student Health Center to verify vaccination or obtain the vaccination at an additional charge through the Student Health Center.

## Disability Accommodation Services

Location: Bell Tower Building
(805) 437-8510 (V/TTY)

Fax: (805) 437-8529
CSU Channel Islands and Disability Accommodation Services (DAS) are dedicated to providing a broad range of quality support services to meet the needs of students with all types of physical, psychological, and learning disabilities. We strive to ensure access to all aspects of University life. Services are available to any student who finds his or her disability to be a barrier to achieving educational goals. However, only those students who identify themselves to the University and present appropriate written documentation of a disability are eligible for accommodation. Students with disabilities should contact the DAS office as soon as possible, even if they are not yet enrolled.
To be eligible to receive services, students must meet with the DAS coordinator for intake and disability verification. Types of acceptable disability verification documentation can be found by contacting Disability Accommodation Services, or within the C.H.A.P.s section of the CSUCI Student Guidebook available in print and online through the CSUCI Web site.

## Services may include (but are not limited to):

- Liaison to campus programs and departments
- Disability management counseling
- Computer lab with assistive software
- Test proctoring in quiet rooms with extended time
- Scribes for examinations
- Alternate format services
- Note-takers or taped lectures
- Readers
- Sign language interpreters
- Computer Aided Real-time Translation (CART)

Academic accommodations are provided, including alternative testing arrangements, based on disabilityrelated needs under section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 .

## Continuation of Services

It is the responsibility of the student with a disability to contact the office each semester for which they require accommodations, even if the same service was provided the previous semester. Students should make their accommodation requests to the Coordinator of Disability Accommodation Services prior to classes, if at all possible, or immediately after the start of the semester. Delays in requesting services may cause a delay in service delivery.

## Personal Counseling Services

Location: Bell Tower Building
(805) 437-8510

V/TTY: (805) 437-8510
Fax: (805) 437-8529
Counseling and Psychological Services provides high quality, confidential, short-term counseling free of charge to students. The counseling staff is committed to helping students develop their maximum potential while pursuing their educational and personal goals.

## FINANCIAL AID OFFICE

Location: Professional Building, 1st Floor Enrollment Center (805) 437-8530

Fax: (805) 437-8509
The mission of the Financial Aid Office is to assist students in obtaining financial aid resources to meet their educational costs. Students must complete a Free Application for Federal Student Aid (FAFSA), which can be obtained at the Enrollment Center located on the first floor of the Professional Building. The FAFSA can also be completed online at www.fafsa.ed.gov. A variety of financial aid resources are available to students, including grants, loans, and scholarships. After students have completed and submitted the FAFSA, they may be considered for the following:

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

- Federal Pell Grants are awarded to eligible students who have not already earned a bachelor's degree or are working toward a teaching credential.
- Cal Grants are awarded to California residents who have financial need and meet the California Student Aid Commission scholastic requirements.
- State University Grants are awarded to California residents who have financial need.

Loans: Federally guaranteed student loans with low interest rates.

Federal Stafford Loans include the subsidized and unsubsidized loan programs, which provide low interest long-term loans to eligible students through selected lenders. Federal Subsidized Stafford loans are available to students based on financial need. Interest is paid by the federal government (subsidized) while students are enrolled at least half-time and during their six-month grace period after leaving school. Unsubsidized Federal Stafford Loans are available to all students without regard to income. Interest is paid by the student or added to the loan amount that will be repaid later.

Scholarships: The University, in participation with the community, has an endowment that provides scholarships, which are based on academic excellence, financial need and community service (please refer to page 64).

## HOUSING \& RESIDENCE LIFE

Location: Bell Tower Building
(805) 437-2733

Fax: (805) 437-8549
CSU Channel Islands is excited to offer on-campus housing for the 2004-2005 academic year. Unlike traditional housing, the University has constructed apartment-style living arrangements that are tailored for the academic-minded student who wants quality on-campus housing at a reasonable price. The apartments offer an array of amenities that are targeted toward enhancing the student's University experience.

The residence halls are not merely a place to eat and sleep. It is a community made up of students from a variety of ethnic, cultural, and socio-economic backgrounds. The on-campus living experience at CSU Channel Islands will be an integral part of the learning and educational process of students. In fact, the residence halls may provide one of the most rewarding and developmental experiences that students have at CSU Channel Islands.

Student residential living at CSUCI is unique in concept and design. To maintain the architectural integrity of the campus, each residential complex has been designed to reflect the Spanish-style architecture of the original buildings on campus that date back to the 1930s.

Students who are interested in learning more about the apartment-style residence halls of CSUCI and their amenities should contact Housing and Residence Life at (805) 437-2733 or via e-mail at student.housing@csuci.edu.

A resource binder listing off-campus housing is available to students for viewing in the Office of Student Development. Please call (805) 437-8998 for further information.

## STUDENT DEVELOPMENT

Location: Bell Tower Building- East Wing (805) 437-8998

Fax: (805) 437-8904
The mission of Student Development is to provide programs and services that enhance the educational mission of the University and the Division of Student Affairs. This is accomplished by fostering a learning environment that promotes and embraces mentoring, diversity, leadership development, problem solving, and decision-making. Student Development assists students in developing a well-balanced lifestyle that promotes awareness and improves the quality of life for all members of the CSU Channel Islands campus. Student Development encourages participative and cooperative teamwork, spiritual awareness, intellectual stimulation, character development, cultural diversity, physical health, and experiential leadership.

## Associated Students Incorporated

All registered students are members of Associated Students Incorporated (ASI) and pay both an associated student fee and a student body center fee as part of their registration. ASI is the umbrella organization for Student Government, The Student Programming Board, and the student newspaper, the Channel Islands View.

Student Government (SG) is comprised of elected student leaders including a president, vice president, senate members, and ASI board members. The student government sets policy, provides student service programs, contributes input on University policies, and recommends students to serve on University advisory boards.

The Student Programming Board (SPB) is a select group of students who assist in the creation of activities and events on the CSUCI campus. This board is comprised of seven areas that entertain, educate, and enlighten CSUCI students through sponsored activities. Program areas include: cinema, concerts, cultural arts, promotions, special events, speakers, video productions, and comedy.

The Channel Islands View student newspaper is written by and for students and is a forum for discussion of current topics as well as campus issues and events.

## Judicial Affairs

The mission of Judicial Affairs is to develop, disseminate, interpret, and enforce campus regulations; to protect the relevant legal rights of students; to address student behavioral problems in an
effective and educational manner; to facilitate and encourage respect for campus governance; and to provide learning experiences for students who participate in the operations of the judicial system.

## New Student Orientation

New Student Orientation programs assist new students with their successful transition to CSUCI. Orientations are offered to incoming freshmen and transfer students prior to the start of the fall and spring semesters. These programs inform students about services and opportunities at CSUCI while assisting them with the initial advising and registration process. Transfer students are strongly encouraged to attend New Student Orientation. Attendance for freshmen is mandatory.

## University Outreach Program

The University Outreach Program is an early academic outreach program aimed at preparing and motivating low income and educationally disadvantaged elementary and middle school students to pursue and successfully complete a post secondary education. The goal of the program is to offer positive reinforcement to develop a commitment to higher education, the resources and awareness of educational options, and encouragement for students to plan and prepare academically and financially for college.

## Educational Opportunity Program

The Educational Opportunity Program (EOP) is designed to improve access and retention of low income and educationally disadvantaged students by providing active and targeted support aimed at increasing academic accomplishment and individual empowerment. The ultimate goal is to provide incoming students from disadvantaged backgrounds with the tools that will help them succeed in college and ultimately graduate from California State University Channel Islands.

Student preparation and retention programs such as University Outreach and the Educational Opportunity Program provide the information necessary for students to learn about higher educational opportunities and assist them in qualifying for and gaining access to the program that meets their educational, vocational and social goals. Programs that provide retention services complement Outreach services by ensuring student support services will be available to students as they progress in their baccalaureate studies.

## Recreation and Leisure Services

Recreation and Leisure Services provides programming and activities in seven categories including: informal recreation, intramural sports, sports clubs, health and fitness, outdoor adventures, instructional programs and special events. The programming is structured to provide a variety of recreational opportunities for a diverse student population.

## Student Activities, Clubs, and Organizations

Under the direction of Student Development, Student Activities provides educational and multi-cultural programs as well as leadership programs and initiatives for students. In addition to increasing the vitality and culture of the campus, student organizations provide leadership opportunities and community service. Student organizations foster interest in and education in a variety of areas, ranging from sports to politics. For additional information about current organizations or how to start a club, please contact Lisa La Frenz at (805) 437-8998.

## The University HUB

The University HUB is located on the northwest corner of campus. The HUB is a great place to meet and chat with other students, and enjoy recreational activities such as billiards and chess. It is equipped with a big screen TV, a game room, computers with Internet access, a cozy place to read, and snack area.




## General Education Requirements




## GENERAL EDUCATION REQUIREMENTS

## 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 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 backgrounds, with human behavior and the principles of social interaction, and
- to integrate their knowledge by forming an interdisciplinary and insightful approach to learning.


## Requirements

As a graduation requirement, all CSUCI students must complete 48 units of General Education distributed across categories A-E. Nine of the 48 units of General Education are required to be resident upper division, interdisciplinary courses numbered in the 330-349 or 430-449 ranges.

Transfer students who enter CSUCI as GE certified will need to complete 9 units of upper division, interdisciplinary general education coursework to meet the 48 unit requirement.

In planning to fulfill the General Education requirements, students are encouraged to consult an academic advisor and the General Education Informational Brochure.

Category A: Communication in the English Language and Critical Thinking (9 units)
Category B: Mathematics, Sciences, and Technology (12 units)

Category C: Art, Literature, Languages and Cultures (12units)
Category D: Social Perspectives (12 units)
Category E: Human Psychological and Physiological Perspectives (3 units)

## Upper Division Interdisciplinary General Education Courses

Nine of the 48 units of General Education have been designated as upper division, interdisciplinary courses. These courses integrate significant content, ideas, and ways of knowing from more than one discipline. Each of these courses will involve the student in collaborative work, critical thinking, and integration of ideas. By taking nine units of these courses in categories A-E, students will extend their experience across the curriculum and gain more breadth of educational experience. In addition, they will begin to make connections between their majors and a variety of other fields and ways of knowing, increasing both their knowledge and their ability to communicate with people across the disciplinary spectrum.

- The nine units of resident upper division General Education required of all students must be selected from the listing of upper division interdisciplinary courses. Courses may be cross-listed in two or more disciplines.
- A minimum of three semester units must come from a discipline outside the student's major and not cross-listed with the student's major discipline.
- All upper division, interdisciplinary courses will include substantive written work consisting of inclass writing as well as outside-class writing of revised prose.
- Courses numbered 330-349 do not have prerequisites.
- Courses numbered 430-449 may have prerequisites.
- Students must have junior standing or permission from the instructor to enroll in these 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 GE 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.

## GENERAL EDUCATION CATEGORIES AND COURSES

## Category A: Communication in the English Language and Critical Thinking (9 units)

Courses in Category A approach communication as symbolic interaction, examining the formulation and complexities of those interactions. Students learn how to discover, evaluate, and report information, how to reason inductively and deductively, how to distinguish fact from judgment or opinion. Courses in Categories A1 and A2 emphasize the content and form of both oral and written English. They explore the psychological basis and the social significance of communication, as well as the ways language works in diverse situations. Through active participation in written and oral communication, students develop the skills necessary for effective speaking, comprehension, writing, and reasoning. Modes of argument, rhetorical perspectives, and the relationship of language to logic are stressed in all Category A courses.

Students must take a minimum of one course in each of the three subcategories.

A-1 Oral Communication

| COMM | 101 | Public Speaking |
| :--- | :--- | :--- |
| COMM | 210 | Interpersonal Communications |
| COMM | 220 | Group Communication |
| COMM/ | 345 | Media Literacy and Youth Culture |
| EDUC |  |  |
| ENGL | 107 | Advanced Composition and <br> Rhetoric |
| ENGL | 330 | Writing in the Disciplines |

A-2 English Writing
ENGL 103 Stretch Composition II
ENGL 105 Composition and Rhetoric
ENGL 106 Composition and Rhetoric II-
Service Learning/Internship
ENGL 107 Advanced Composition and Rhetoric
ENGL 330 Writing in the Disciplines

## A-3 Critical Thinking

$\begin{array}{lll}\text { MATH } & 230 & \begin{array}{l}\text { Logic and Mathematical } \\ \text { Reasoning }\end{array}\end{array}$
UNIV 110 Critical Thinking in an Interdisciplinary Context

## Category B: Mathematics, Sciences, and Technology (12 units)

Courses in this area explore the scope and major concepts of mathematics and/or scientific disciplines. In the sciences, the intent is to present the principles and concepts which form the foundations of living or non-living systems. The focus of all courses in Category B is on the presentation and evaluation of evidence and argument, the appreciation of use/misuse of data, and the organization of information in quantitative, technological, or other formal systems. Students are introduced to the principles and practices that underscore mathematical and scientific inquiry (logic, precision, hypothesis generation and evaluation, experimentation, and objectivity) and gain an understanding of the process by which new knowledge is created, organized, accessed, and synthesized. Students improve their reasoning skills (critical thinking, problem-solving, decision making, analysis, and synthesis), and apply information and technology to the understanding of complex and diverse problems in mathematics and the sciences. They become aware of the influence and significance of mathematics and the sciences in world civilization.

Students must take a minimum of one course in each of the subcategories. At least one course must include a laboratory component.

B-1 Physical Sciences-Chemistry, Physics, Geology, and Earth Sciences
ART/PHYS 208 The Physics of Art and Visual Perception
BIOL 433 Ecology and the Environment
CHEM 100 Chemistry and Society
CHEM 105 Introduction to Chemistry
CHEM 121 General Chemistry I and Laboratory
CHEM 122 General Chemistry II and Laboratory
CHEM 343 Forensic Science
CHEM/BUS/ 341 Drug Discovery and Development
ECON
CHEM/PHYS 344 Energy and Society
ENGL/PHYS 338 Science and Conscience
GEOL 121 Physical Geology
GEOL 122 Historical Geology
GEOL 321 Environmental Geology
PHSC 170 Foundations in Physical Science
PHYS 100/100L Introduction to Physics I
PHYS 101/101L Introduction to Physics II
PHYS/ASTR 105 Introduction to the Solar System
PHYS 200/L General Physics I
PHYS 201/L General Physics II
PHYS/MATH/345 Digital Image Processing
COMP
PHYS/BIOL/ 434 Introduction to Biomedical Imaging
HLTH
PHYS/COMP/445 Image Analysis and Pattern
MATH Recognition
PHYS/MUS 335 The Physics of Music

| B-2 Life Sciences-Biology |  |  |
| :---: | :---: | :---: |
| ANTH | 345 | Human Evolution and Diversity |
| BIOL | 100 | Exploring the Living World |
| BIOL | 170 | Foundations of Life Science |
| BIOL | 200 | Principles of Organismal and Population Biology |
| BIOL | 201 | Principles of Cell and Molecular Biology |
| BIOL/PSY | 212 | Neurobiology and Cognitive Science |
| BIOL | 213 | Sex, Germs and Diseases |
| BIOL | 214 | From Egg to Organism |
| BIOL | 215 | Animal Diversity |
| BIOL | 331 | Biotechnology in the Twenty-First Century |
| BIOL | 332 | Cancer and Society |
| BIOL | 333 | Emerging Public Health Issues |
| BIOL | 334 | Natural History of Ventura County |
| BIOL | 335 | Biosphere |
| BIOL | 431 | Bioinformatics |
| BIOL | 432 | Principles of Epidemiology and Environmental Health |
| BIOL | 433 | Ecology and the Environment |
| ESRM | 100 | Introduction to Environmental Science and Resource Management |
| B-3 Mathematics - Mathematics and Applications |  |  |
| BIOL/MATH | 202 | Biostatistics |
| PSY |  |  |
| MATH | 108 | Mathematical Thinking |
| MATH | 140 | Calculus for Business Applications |
| MATH | 150 | Calculus I |
| MATH | 201 | Elementary Statistics |
| MATH | 208 | Modern Math for Elementary Teaching I-Numbers and ProblemSolving |
| MATH | 230 | Logic and Mathematical Reasoning |
| MATH | 320 | Mathematics and Fine Arts |
| MATH | 329 | Statistics for Business and Economics |
| MATH | 331 | History of Mathematics |
| MATH | 430 | Research Design and Data Analysis |
| MATH | 448 | Scientific Computing |
| B-4 Computers and Information Technology |  |  |
| BIOL | 431 | Bioinformatics |
| CHEM | 305 | Computer Applications in Chemistry |
| COMP | 100 | Computers: Their Impact and Use |
| COMP | 101 | Computer Literacy |
| COMP | 102 | Web Development |
| COMP | 105 | Computer Programming Introduction |
| COMP | 150 | Object-Oriented Programming |
| COMP | 447 | Societal Issues in Computing |
| COMP/PSY | 449 | Human-Computer Interaction |
| MATH | 448 | Scientific Computing |
| PHYS/MATH/345 |  | Digital Image Processing |
| COMP |  |  |
| PHYS/COMP/445 |  | Image Analysis and Pattern |
| MATH |  | Recognition |

## Category C: Art, Literature, Languages and Cultures (12 units)

The courses in this category 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 art, literature, languages, and cultures cultivates the student's ability to express intellectual and emotional responses and make 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 inquiries into the cultural diversity prevalent in the visual, literary, audible, kinetic, and oral traditions of human expression.

Students must take one course in each subcategory.

## C-1 Art

ART 100 Understanding Fine Arts Processes
ART $\quad 102$ Multicultural Children's Art
ART $\quad 110 \quad$ Prehistoric Art to the Middle Ages
ART 111 Renaissance Art to Modern
ART $\quad 112$ Art of the Eastern World
ART $\quad 330$ Critical Thinking in a Visual World
ART 331 Art and Mass Media
ART $\quad 332$ Multicultural Art Movements
ART $\quad 337$ Art on Film and Film as Art
ART 433 Women in the Arts
ART $\quad 435$ Postmodern Visual Culture
ART/BUS 334 The Business of Art
ART/BUS/ 434 The Museum: Culture, Business
EDUC
ART/ENGL 431 European Renaissance Literature and Art
ART/ENGL/ 432 Arts of the Harlem Renaissance
MUS
ART/MUS 336 Art and Music: Dissonance, Diversity and Continuity
ART/PHYS 208 The Physics of Art and Visual Perception
ART/PSY 338 Psychology of Art and Artists
$\begin{array}{lll}\text { MUS } & 100 & \text { Music Appreciation }\end{array}$
MUS $\quad 307$ University Chorus
MUS 308 University Orchestra
MUS $\quad 330$ Jazz in America
MUS 333 The Varieties of Musical Experience
MUS 343 Teaching Music to Children
PHYS/MUS 335 The Physics of Music

## C-2 Literature Courses <br> ART/ENGL/ 335 Ethnic Images in Novels, Film and HIST Art <br> ART/ENGL 431 European Renaissance Literature and Art <br> ART/ENGL/ 432 Arts of the Harlem Renaissance MUS

|  | ENGL | 120 | American Literature | the social, political, historical, economic, educational |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ENGL | 150 | British and European Literature I | or behavioral |  | of world cultures and systems, |
|  | ENGL | 220 | American Literature II | including the ways in which these interact and influence each other. |  |  |
|  | ENGL | 250 | British and European Literature II |  |  |  |
|  | ENGL | 337 | Literature of the Environment |  |  |  |
|  | ENGL | 449 | Perspectives on Multicultural Literature | Students must select a minimum of three courses (12 units), each course in a different social science |  |  |
|  | ENGL/BUS/ | 340 | Business and Money in American | discipline. |  |  |
|  | ECON |  | Literature | $\begin{aligned} & \text { ANTH } \\ & \text { ANTH } \end{aligned}$ |  | Cultural Anthropology <br> Human Beginnings: Biological and Cultural Evolution |
|  | ENGL/GEND | 433 | Gay/Lesbian/Bisexual/Transgender Studies |  |  |  |
|  | ENGL/HIST | 334 | Narratives of Southern California | ANTH | 310 | Civilization of an Ancient Landscape: World Archaeology Native Americans of California to the 1850's |
|  | ENGL/PHYS | 338 | Science and Conscience |  |  |  |
|  | ENGL/PSY | 339 | Psychology and Literature | ANTH | 323 |  |
|  | ENGL/TH | 333 | Multicultural Drama in Performance/Production | ANTH | 323 443 |  |
| 4 | C-3a Language |  |  |  |  | Cultural Perspectives on Health and |
|  | ASL | 101 | American Sign Language I |  |  | Healing |
|  | ASL | 102 | American Sign Language II | ANTH/ESRM 332 |  | Human Ecology |
| ) | SPAN | 101 | Elementary Spanish I | ART 331 |  | Art and Mass Media |
|  | SPAN | 102 | Elementary Spanish II | ART 337 |  | Art on Film and Film as Art Women in the Arts |
|  | SPAN | 201 | Intermediate Spanish I | ART 433 |  |  |
|  | SPAN | 202 | Intermediate Spanish II | ART/BUS | 334 | Women in the Arts <br> The Business of Art |
|  | SPAN | 211 | Spanish for Heritage Speakers I | ART/BUS/ 434 |  | The Business of Art <br> The Museum: Culture, Business |
|  | SPAN | 212 | Spanish for Heritage Speakers II | EDUC | 33 | and Education |
| ) | C-3b Multicultural |  |  |  |  | History of Southern California Chicano/a Art |
|  | ART/ENGL/ | 335 | Ethnic Images in Novels, Film and |  | 336 | Art and Music: Dissonance, |
| - | HIST |  | Art |  |  | Diversity and Continuity |
| O | ANTH | 102 | Cultural Anthropology | BIOL | 331 | Biotechnology in the Twenty-First Century |
| $\cdots$ | ANTH | 323 | Native Americans of California to the 1850's |  |  |  |
|  | ART | 102 | Multicultural Children's Art | BIOL/BUS/ | 342 | The Zoo: Conservation, Education |
|  | ART | 112 | Art of the Eastern World | ECON/EDUC |  | and Recreation |
| 0 | ART | 332 | Multicultural Art Movements | BIOL | 432 | Principles of Epidemiology and Environmental Health |
| 1 | ART | 435 | Postmodern Visual Culture |  |  |  |
|  | ART/HIST | 333 | History of Southern California | BUS <br> BUS/HIST/ | 424 | Business, Government and Society History of Business and Economics |
|  |  |  | Chicano/a Art |  |  |  |
|  | EDUC | 512 | Equity, Diversity And Foundations | ECON |  | in North America Drug Discovery and Development |
|  |  |  | Of Schooling | CHEM/BUS/ 341 |  |  |
|  | ENGL | 449 | Perspectives on Multicultural | ECON |  |  |
|  |  |  | Literature | COMM/EDUC |  | 345 Media Literacy and Youth Culture |
|  | ENGL/TH | 333 | Multicultural Drama in |  |  |  |  |
|  |  |  | Performance/Production | COMP | 447 | Societal Issues in Computing |
|  | MUS | 330 | Jazz in America | ECON | 110 | Principles of Microeconomics |
|  | PSY | 344 | Psychology and Traditional Asian | ECON | 111 | Principles of Macroeconomics Fundamentals of Economics |
|  |  |  | Thought |  | 300 |  |
|  | SPAN | 201 | Intermediate Spanish I | ECON ECON/FIN | 343 | Fundamentals of Economics Capital Theory |
|  | SPAN | 202 | Intermediate Spanish II | ECON/FIN EDUC | 101 | Introduction to Education |
|  | SPAN | 211 | Spanish for Heritage Speakers I | EDUC | 320 | Education in Modern Society |
|  | SPAN | 212 | Spanish for Heritage Speakers II | EDUC EDUC | 330 | Introduction to Secondary Schooling |
|  | UNIV | 392 | International Experience | EDUC |  |  |
|  | Category D: Social Perspectives (12 units) |  |  | ENGL | 337 | Literature of the Environment |
|  |  |  |  | ENGL/BUS/ 340 |  | Business and Money in American Literature |
|  | The courses in this category enhance student |  |  | ECON |  |  |
|  | world in which people live. Each course examines relationships between various cultures and institutions that shape our social, economic, psychological, and political realities. Using the lenses of the social sciences, students gain insight and understanding of |  |  | ENGL/GEND 433 |  | Gay/Lesbian/Bisexual/Transgender Studies |
|  |  |  |  | ENGL/HIST 334 Narratives of Southern California <br> ENGL/PSY 339 Psychology and Literature <br> ESRM 100 Introduction to Environmental <br>   Science and Resource Management |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |


| HIST | 211 | World Civilizations: Origins to 1500 |
| :---: | :---: | :---: |
| HIST | 212 | World Civilizations: Since 1500 |
| HIST | 280 | The Historian's Craft |
| HIST | 365 | Themes in World History |
| HIST | 402 | Southern California Chicano/a History and Culture |
| HIST | 412 | Law and Society |
| HIST | 413 | World Religions and Classical Philosophies |
| HIST/ANTH | 442 | The African Diaspora |
| MATH | 331 | History of Mathematics |
| MGT/BIOL/ <br> CHEM | 326 | Scientific and Professional Ethics |
| POLS | 102 | Comparative Government |
| POLS | 103 | Introduction to International Politics |
| PSY | 100 | Introduction to Psychology |
| PSY | 213 | Developmental Psychology |
| PSY | 333 | Measurement and Testing of Groups and Individuals |
| PSY | 337 | Psychological Ethics and Moral Philosophy |
| PSY/HIST | 340 | History and Psychology of Nazi Germany |
| PSY/HIST | 436 | Psychology and History of Traditional East Asian Warrior Cultures |
| PSY | 441 | The Psychology of Space |
| PSY | 445 | Adolescent Psychology |
| SPED/PSY | 345 | Individuals with Disabilities in Society |

## Category E: Human Psychological and Physiological Perspectives (3 units)

The courses in this category enhance students' awareness and understanding of themselves as both psychological and physiological beings. These courses promote this awareness by focusing on issues such as human development, human sexuality, human behavior and psychology, health, nutrition, physical activity, and death and dying. The perspective is that humans, as physiological and psychological beings, must relate to others in a physical and social environment.

Students must complete at least one course to satisfy Category E. Courses that are primarily physical activity courses may satisfy no more than 1 unit of the 3 -unit requirement.

| ART/PSY | 338 | Psychology of Art and Artists |
| :--- | :--- | :--- |
| BIOL/PSY | 212 | Neurobiology and Cognitive <br> Science <br> Sex, Germs and Diseases |
| BIOL | 213 | Emerging Public Health Issues <br> BIOL |
| COMP/PSY | 433 | Human-Computer Interaction |
| HLTH | 322 | Health Issues in Education |
| PHED | 102 | Seminar in Traditional Martial Arts: <br> Tai Ji <br> PHED |
| 105 | Zen of Surfing |  |


| PHED | 110 | Wellness |
| :---: | :---: | :---: |
| PHED | 208 | Introduction to Kinesiology |
| PHED | 302 | Motor Learning, Fitness and Development in Children |
| PHED | 310 | Adapted Physical Education |
| PHYS/BIOL/ | 434 | Introduction to Biomedical Imaging |
| PSY | 100 | Introduction to Psychology |
| PSY | 210 | Learning, Cognition and Development |
| PSY | 213 | Developmental Psychology |
| PSY | 220 | Human Sexual Behavior |
| PSY/HIST | 340 | History and Psychology of Nazi Germany |
| PSY | 344 | Psychology and Traditional Asian Thought |
| PSY | 346 | Human Motivation |
| PSY/HIST | 436 | Psychology and History of Traditional East Asian Warrior Cultures |
| PSY | 441 | The Psychology of Space |
| PSY | 445 | Adolescent Psychology |
| SPED/PSY | 345 | Individuals with Disabilities in Society |
| Upper Divisi Education C Courses in the general educa counted towa category. If a GE category category the | on In ours e foll tion rd th cour the st cours | erdisciplinary General <br> wing list meet the upper division equirement and may also be designated General Education is designated in more than one dent must choose which GE is fulfilling. |


| ART/ENGL/ | 335 | Ethnic Images in Novels, Film, |
| :--- | ---: | :--- |
| and HIST |  | Art |
| ANTH | 345 | Human Evolution and Diversity |
| ANTH | 443 | Medical Anthropology: Cross- <br> Cultural Perspectives on Health <br> and Healing |
|  |  | 330 | | Critical Thinking in a Visual |
| :--- |
| ANTH/ESRM 332 |
| ART |




## Graduation Requirements




## GRADUATION REQUIREMENTS <br> 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 another two-year college may be applied to this total, excluding military credit and credit by examination. A quarter unit is equivalent to two-thirds of a semester 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 requirements can be found in the General Education section of the catalog. A minimum of nine upper division, interdisciplinary courses must be completed in residence at CSU Channel Islands.

## Residence

At least 30 of the total units must be taken at CSU Channel Islands excluding Open University and Extension units. At least 24 of these 30 units must be upper division coursework, and 12 of the 30 units must be in the major. At least 9 units of upper division interdisciplinary General Education courses (numbered in the 330-349 or 430-449 ranges) of the required 48 General Education units must be completed in residence at CSU Channel Islands.

## Grade Point Average (GPA)

An overall GPA of 2.0 is required in:

1. Total courses attempted
2. CSU Channel Islands courses attempted; and
3. Courses in the major

## Title V: Graduation Requirements in United States History, Constitution and American Ideals

Students are required to demonstrate competencies in U.S. History, U.S. Constitution and California state and local government for graduation. Competencies can be met by enrollment in six units as follows:

1) POLS 150 American Political Institutions (3)
2) Choose from one of the following:

HIST 270 The United States to 1877 (3)
HIST 271 The United States since 1877 (3)
HIST 272 Constitutional History of the U.S. (3)
HIST 275 The United States to 1900 (3)

## Language and Multicultural Requirement

1. One semester of a language other than English (e.g., foreign language, computer language, American Sign Language) with a grade of "C" or better.
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). Their non-English language will be evaluated using a valid and reliable instrument. Students will also be required to complete a multicultural experience.

2a. The multicultural experience will be completed as an approved GE course in Category C3b.

## Graduation Writing Assessment Requirement

The Graduate Writing Assessment Requirement will be satisfied through the completion of 9 units of Upper-Division Interdisciplinary General Education courses, which are writing intensive.
(SP 14-03)


## GRADUATION

## Graduation Information and Application Process for the Bachelor's Degree

To qualify for graduation students must complete all requirements for the Bachelor's Degree by the official graduation date listed in the schedule of classes. Graduation is not automatic upon the completion of requirements. Students who intend to graduate must take the initiative and should follow the key steps listed below. While students are ultimately responsible for completing all degree requirements, assistance is available through faculty advisement, the Advising Center and Graduation Evaluations. It is important that students meet regularly with an advisor to avoid graduation problems and delays.

## Application for Graduation

The application for Bachelor's Degree and Diploma and filing fee entitles students to an official graduation evaluation of progress toward meeting baccalaureate degree requirements. Students qualifying for graduation by the designated graduation date may participate in the annual commencement ceremony. Students may only participate in commencement if they have 10 or fewer units remaining at the time of the ceremony. The application for degree is available at the Advising Center in the Bell Tower and at the Enrollment Center in the Professional Building.
Key Steps to Graduation:

1. Request a preliminary graduation evaluation from the Advising Center approximately two semesters prior to the anticipated graduation date. Students begin the process by meeting with a professional advisor in the Advising Center. The advisor will complete a preliminary check of all graduation requirements. Included in this check will be a major evaluation that may be signed by either a professional advisor or major program advisor.
2. After the initial check with the Advising Center advisor, complete the application for Bachelor's Degree, attach the preliminary graduation evaluation completed by the Advising Center advisor, along with any approved course substitutions.
3. Submit the completed preliminary evaluation, application for Bachelor's Degree and any approved course substitutions to the Enrollment Center Cashier and pay the appropriate fees for graduation application. The graduation fee covers the cost of the graduation check, the diploma, and participation in the annual commencement ceremony. (The fee does not include cap and gown rental, which is handled separately by the Student Bookstore.) The Cashier's Office sends the "application for degree, preliminary graduation evaluation and certification of payment" to Graduation Evaluations.
4. If applications for degree are completed by the published deadline (see current semester schedule for filing dates and deadlines), a completed degree evaluation will be mailed prior to enrollment in a student's last semester. The graduation evaluation confirms remaining requirements for graduation and is a formal statement on the expected semester of
graduation. The actual date of graduation will be the end of the semester in which all requirements have been met.
5. Participate in the commencement ceremony held at the end of the spring semester if eligible (participation is optional).
6. Students not completing the requirements by expected date of graduation must reapply for graduation.
7. After all degree requirements have been completed and Graduation Evaluations can verify their completion, a diploma is normally available within four months of final clearance. If proof of completion of degree is needed prior to receiving a diploma, verification of graduation or transcript may be requested from Admissions and Records.

## Commencement and Honors Convocation

Commencement and Honors Convocation are held each year in the spring, bringing together local community members to celebrate the accomplishment of our students.

## University Honors

To receive honors at graduation at CSU Channel Islands, a student must:

1. Complete a minimum 30 units of courses taken at CSUCI for a letter grade.
2. Earn a grade point average of 3.50 or above in all work taken at CSUCI.
3. Earn the following cumulative grade point average in all undergraduate courses, including transfer work:

Summa Cum Laude - this honor is awarded to all students who earn a grade point average of 3.90-4.0.

Magna Cum Laude - this honor is awarded to all students who earn a grade point average of 3.75-3.89

Cum Laude - this honor is awarded to all students who earn a grade point average of 3.50-3.74. (SP 01-41)

Participating in Commencement Ceremonies
Students may participate in commencement ceremonies if they have no more than 10 units pending toward completion of their degrees. (SP02-05)


Programs and Degrees



## ANTHROPOLOGY

## PROGRAM OFFERED

- Minor in Anthropology

Anthropologists stress the holistic relationship between humans and their environment using culture as the organizing theme. As such anthropologists study human biological origins and adaptations, as well as cultural adaptations. Although anthropology had its roots in studying hunting and gathering societies and agrarian ones, today anthropologists study modern industrial societies. Because of the ecological, holistic approaches anthropology provides a solid basis to understand the difficult choices facing modern humans, like overpopulation, dwindling resources, and environmental degradation and pollution. By using the knowledge and perspectives gained from many cultures, anthropology is in a position to offer great insight into solutions for the future. Anthropology is a key discipline contributing to multiculturalism, environmental studies, and globalization.
CAREERS: The anthropology program prepares students for graduate school in anthropology, careers in government service, consulting, international relations, the professions (law, medicine), and teaching social sciences

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## REQUIREMENTS FOR THE MINOR IN ANTHROPOLOGY (24 units)

ANTH 102 Cultural Anthropology (3)
ANTH 103 Human Beginnings: Biological and Cultural Evolution (3)
ENGL 315 Introduction to Linguistics (3)
ANTH 332 Human Ecology (3)
ANTH 333 Civilizations of an Ancient Landscape: World Archaeology (3)
ANTH 345 Human Evolution and Diversity (3)
Choose two electives from the following courses:
ANTH 323 Native Americans of California to the 1850s (3)
ANTH 332 Human Ecology (3)
ANTH 345 Human Evolution and Diversity (3)
ANTH 443 Medical Anthropology: Cross-Cultural Perspectives on Health and Healing (3)
ANTH 452 Applied Anthropology (3)
ANTH 490 Seminar in Anthropology (3)
ANTH 492 Service Learning/Internship (1-3)
(Consent of Instructor)
ANTH 494 Independent Study (1-3)
(Consent of Instructor)
ANTH 499 Capstone Project (3)


## APPLIED PHYSICS

## PROGRAM OFFERED

- Minor in Applied Physics

Physics is the fundamental science from which many fields of science and engineering developed. It is essentially an inter-disciplinary undertaking, interacting with the life sciences, medicine, computer science, mathematics, chemistry and other disciplines. Its emphasis on fundamental concepts, thorough analytic training and a combination of logic and intuition, enables students with a background in physics to apply their understanding both to these other disciplines and to the new scientific and technological frontiers that are developing rapidly at the interface between more traditional disciplines, e.g. biophysics, biomedical engineering, bioinformatics and medical imaging.

The Applied Physics Minor will equip you with the solid cross-disciplinary background that is highly valued by industry and academia. It provides a strong background in fundamental science, together with the transferable skills (such as analytical thinking, communication skills, computer literacy and cooperative learning) relevant to a rapidly changing working environment.

CAREERS: The program gives you the opportunity to explore selected area(s) in greater depth, thus providing you with the depth and flexibility to explore a wide variety of career opportunities, including graduate study, medical school, teaching, environmental planning, investments and technical management.

## FACULTY

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## REQUIREMENTS FOR THE MINOR IN APPLIED PHYSICS

Lower Division Requirements (12 units):
MATH $150 \quad$ Calculus I (4)
PHYS $200 \quad$ General Physics I (4)
PHYS 201 General Physics II (4)
Upper Division Requirements (13 units):

1. Applied Physics (9-10 units)

PHYS/COMP/345 Digital Image Processing (3)
MATH
PHYS/BIOL/ 434 Introduction to Biomedical
HLTH Imaging (4)

Either
PHYS/COMP 445
Image Analysis and Pattern Recognition (3)
Or
PHYS/BIOL 464 Medical Instrumentation (4)
2. Applied Physics Electives (3-4 units)

Choose from:
PHYS $490 \quad$ Topics in Physics (3)
PHYS 492 Internship (3)
PHYS 494 Independent Research (3)
PHYS 497 Directed Studies (3)
PHYS 499 Senior Colloquium (1)


## ART

## DEGREE AND PROGRAMS OFFERED

- Bachelor of Arts Degree in Art

Option in Studio Art
Option in Art History

- Minor in Art

The California State University Channel Islands Art Major focuses on interdisciplinary studies in fine art, digital art technology, graphic 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. The studio art option provides in-depth study in the areas of twodimensional art, three-dimensional art, digital media art, and communication design technology. The art history option provides in-depth study in the history of art and interdisciplinary topics.
The CSUCI Art program is designed for students who wish to pursue:

- A Bachelor of Arts Degree in Art
- A Minor in Art
- A Liberal Studies Concentration in Art
- Preparation for graduate study
- Preparation for professional and academic fields in the Arts

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, computer animation, digital photography, video art, digital filmmaking, visual effects, galleries, museums, teaching and numerous other professions in the arts.

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## FACULTY

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## REQUIREMENT FOR THE BACHELOR OF ARTS IN ART (120 units)

## Lower Division Requirements (24 units):

Art majors are required to complete a minimum of twenty-four units of lower division Art courses in preparation for upper division studies in the 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:  <br> ART 110 Prehistoric Art to the Middle Ages (3) <br> ART 111 Renaissance to Modern Art (3) <br> ART 112 Arts of the Eastern World (3) |  |

Studio Electives (6 units):
In selecting lower division studio elective courses, students are encouraged to enroll in courses that satisfy prerequisites for upper division study in specific areas. Transfer students may substitute additional CSU transferable courses, provided they meet CSUCI requirements for lower division articulation in the major. Students interested in pursuing a teaching credential should consult an advisor before selecting courses.
Select a minimum of two courses from the following:
ART $201 \quad$ Painting (3)
ART 202 Sculpture (3)
ART 203 Illustration (3)
ART 204 Graphic Design (3)
ART 205 Multimedia (3)
ART 206 Animation (3)
ART 207 Ceramics (3)
ART 208 Physics of Art and Visual Perception (3)

## Upper Division Requirements (33 units):

 Upper division Art majors are required to select an option within the major and complete a minimum of thirty-three units of upper division Art courses.
## REQUIREMENTS FOR THE OPTION IN STUDIO ART

Lower Division Art Courses (24 units)
Upper Division Art Studio Courses (18 units)
Upper Division Art History \& Interdisciplinary Art Courses (6 units)
Professional Preparation Courses (9 units)

## REQUIREMENTS FOR THE OPTION IN ART HISTORY

Lower Division Art Courses (24 units)
Upper Division Art History \& Interdisciplinary Art Courses (18 units)
Upper Division Art Studio Courses (6 units)
Professional Preparation Courses (9 units)

## Studio Art Courses:

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 that lead toward development of artistic skills and computer literacy that result in the creation of individual art projects.

Select a minimum of two courses from ART 310-314:
ART 310 Two-Dimensional Art: Painting Media and Techniques (3)
ART 311 Three-Dimensional Art: Sculpture Media and Techniques (3)
ART 312 Digital Media Art: Time-Based Imaging and Compositing (3)
ART 313 Communication Design Technology: Graphic Design for Print Media (3)
ART 314 Digital Media Art: Digital Photography (3)

Upon completion of prerequisites, select additional studio art courses that focus on the development of artistic concepts, visual continuity and increased competency with media and applied techniques. (3 units, repeatable one time for additional credit).
ART 320 Two Dimensional Art: Painting Theory and Process (3)
ART 321 Three-Dimensional Art: Sculpture Theory and Process (3)
ART 322 Digital Media Art: Time-Based Graphics and Visual Effects (3)
ART 323 Communication Design Technology: Packaging and Pre-Press (3)
ART 324 Communication Design Technology: Web Design (3)
ART 325 Digital Media Art: Digital Filmmaking (3)

ART 326 Digital Media Art: 3D Computer Animation: (3)
ART 327 Communication Design Technology: Multimedia Theory And Process (3)
ART 328 Digital Media Art: Photographic Theory And Process (3)
ART 329 Three-Dimensional Art: Ceramics
Theory And Process (3)
Advanced artistic problems courses provide in-depth studio art explorations leading to the development of a congruent body of work. (3 units, repeatable one time for additional credit).
ART 420 Advanced Artistic Problems: TwoDimensional Art (3)
ART 421 Advanced Artistic Problems: ThreeDimensional Art (3)
ART 422 Advanced Artistic Problems: Digital Media Art (3)
ART 423
Advanced Artistic Problems:
Communication Design Technology (3)

## Art History \& Interdisciplinary Art Courses:

Upper division Art History \& Interdisciplinary courses integrate the academic study of Art with subject matter from related disciplines. (Interdisciplinary Art courses used to satisfy CSUCI General Education requirements may be also counted towards Art major requirements).

Select a minimum of two courses from the following:
ART $330 \quad$ 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 336 Art and Music: Dissonance, Diversity and Continuity (3)
ART 337 Art on Film and Film on Art (3)
ART $338 \quad$ Psychology of Art and Artists (3)
ART 431 European Renaissance Literature and Art (3)
ART 432 Arts of the Harlem Renaissance (3)
ART 433 Women in the Arts (3)
ART 434 The Museum: Culture, Business, Education (3)
ART 435 Postmodern Visual Culture (3)
ART 450 Modern and Contemporary Art (3)
Professional Preparation Courses (9 units):
Upper division Professional Preparation courses provide students with an understanding of current issues in the arts, application of specialized studio work, field activities and service learning.

ART 489 Arts Seminar (3)
ART $490 \quad$ Special Topics in Art (3)
ART 499 Arts Capstone Project (3)

## Art Electives:

Upper Division Art elective courses may fulfill up to three units of upper division Studio Art or Art History requirements. Portfolio review required.
ART 494 Arts Internship (1-3 units)
Required Supporting and other GE Courses (63 units):
University Electives (9 units)
Title V, United States History, Constitution and
American Ideals (6 units)
General Education (48 units)

## REQUIREMENTS FOR THE MINOR IN ART (24 units)

The Art minor provides non-majors with the opportunity to explore artistic media, techniques and basic art concepts. Coursework includes aspects of art appreciation, aesthetics, art history and studio experience. Students seeking a minor in Art are required to complete a minimum of twenty-four units of Art courses.

Lower Division Required Courses (12 units):
ART 105 Drawing and Composition (3)
ART 106 Color and Design (3)
ART 108 Visual Technologies (3)
Select one additional course from the following:
ART 100 Understanding Fine Arts Processes (3)
ART 102 Multicultural Children's Art (3)
ART 107 Life Drawing (3)
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 Art Courses (6 units):
Select a minimum of two courses from the following:
ART $201 \quad$ Painting (3)
ART 202 Sculpture (3)
ART 203 Illustration (3)
ART 204 Graphic Design (3)
ART 205 Multimedia (3)
ART 206 Animation (3)
ART 207 Ceramics (3)
ART 310 Two-Dimensional Art: Painting Media and Techniques (3)
ART 311 Three-Dimensional Art: Sculpture Media and Techniques (3)
ART 312 Digital Media Art: Time-Based Imaging and Compositing (3)
ART 313 Communication Design Technology: Graphic Design for Print Media (3)
ART 314 Digital Media Art: Digital Photography (3)

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Art History \& Interdisciplinary Art Courses (6
units):
Select a minimum of two courses from the following:
ART \(330 \quad\) 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 336 Art and Music: Dissonance, Diversity
                                and Continuity (3)
ART \(337 \quad\) Art on Film and Film as Art (3)
ART \(338 \quad\) Psychology of Art and Artists (3)
ART 431 European Renaissance Literature and
                                Art (3)
ART 432 Arts of the Harlem Renaissance (3)
ART 433 Women in the Arts (3)
ART 434 The Museum: Culture, Business,
        Education (3)
ART 435 Postmodern Visual Culture (3)
ART 450 Modern and Contemporary Art (3)
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## ASIAN-PACIFIC STUDIES

## PROGRAM OFFERED

- Minor in Asian-Pacific Studies

The minor in Asian-Pacific Studies gives students exposure to the cultures, histories, literatures, philosophies, politics and psychologies related to the study of the Asian-Pacific region. The minor in AsianPacific Studies is appropriate for students interested in understanding the diverse perspectives and influences, traditional and modern, emanating from this part of the world.

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## FACULTY

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# REQUIREMENTS FOR THE MINOR IN ASIANPACIFIC STUDIES (18 units) 

Lower-Division Requirements (0 units):
None.

## Upper-Division Requirements (18 units):

Eighteen units from the following list (also includes Lower Division courses):
ART 112 Arts of the Eastern World (3)
ENGL 452 Asian/Asian American Literature (3)
HIST $380 \quad$ History of the Pacific Islands (3)
HIST 391 Traditional China (3)
HIST $392 \quad$ Modern China (3)
HIST 393 Contemporary China (3)
HIST 394 Traditional Japan (3)
HIST $395 \quad$ Modern Japan (3)
HIST 396 East Asia: Then and Now (3)
PHED 102 Traditional Asian Martial Arts: Tai Ji (repeatable) (1)
PSY $344 \quad$ Psychology and Traditional Asian Thought (3)
PSY/HIST 436 Psychology and History of Asian Warrior Cultures (3)

## BIOLOGY

## PROGRAMS OFFERED

- Bachelor of Science in Biology
- Bachelor of Science in Biology with an Emphasis in Cell and Molecular Biology
- Bachelor of Science in Biology with an Emphasis in Medical Imaging
- Master of Science in Biotechnology and Bioinformatics
- Minor in Biology
- Certificate in Biotechnology
- Honors in Biology

Biology is the study of life, its origins, diversity and intricacies. It emphasizes the relationship between structure and function in living systems and the processes by which organisms grow, reproduce and interact with each other and their environment. The discipline is dynamic and rapidly advancing, particularly in the areas of biotechnology and information technology. 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 upperdivision electives selected from areas of special interest.

CAREERS: The Bachelor of Science in Biology and the Bachelor of Science in Biology with an Emphasis in Cell and Molecular Biology are designed for students who wish to enter medical, dental or other health professional or graduate schools, the teacher credential program, or to seek careers in science education, business, industry or government.

The Bachelor of Science degree in Biology provides students with a broad background in the biological sciences. The degree program requires coursework in fundamental areas of biology and then allows students to tailor the degree through electives to suit their interests. Students interested in earning a Single Subject Teaching Credential can supplement the BS degree program with 14 units of required courses (see specified courses below) to satisfy the requirements for subject matter preparation in biology.

The Bachelor of Science in Biology with an Emphasis in Cell and Molecular Biology offers students an opportunity to study the exciting developments in genetics, molecular biology, cloning, biotechnology and bioinformatics. Such programs lead to careers in biotechnology, pharmaceuticals, research and development, intellectual property and patent law.

The Bachelor of Science in Biology with an Emphasis in Medical Imaging prepares students for graduate or professional study in the medical sciences (medical imaging, medical physics, health physics, dosimetry, nuclear medicine, radiotherapy, oncology, biomedical engineering), or for entry into professional positions in the clinical environment and in medical imaging research and development.

The Master of Science Degree in Biotechnology and Bioinformatics is a professional degree program designed to meet the needs of biotechnology industry and related public and private agencies and organizations. The program combines rigorous scientific training in interdisciplinary areas in biotechnology and bioinformatics with course work and experience in business management and regulatory affairs. The program includes a set of core courses with two emphases to choose from; biotechnology and bioinformatics. Biotechnology is centered in the laboratory and employs sophisticated molecular biology techniques for applications in human and animal health, agriculture, environment, and specialty biochemical manufacturing. In the next century, the major driving force for biotechnology will be the strategic use of the data derived from large-scale genome sequencing projects. Bioinformatics turns raw data from genome sequencing and new experimental methodologies such as microarrays and proteomics into useful and accessible information about gene function, protein structure, molecular evolution, drug targets and disease mechanisms using computational analyses, statistics, and pattern recognition. Our approach also includes team projects drawn from biotechnology industries to focus on real-world problems and applications of biological and computational sciences and to inculcate interpersonal as well as problem-solving skills using multiple perspectives. Graduates from this program will develop analytical, managerial and interpersonal skills along with sophisticated expertise in biotechnology and bioinformatics. They will be ready to make immediate contributions to scientific research and development, management in biotechnological, biomedical and pharmaceutical industries, biotechnology law and regulations, governmental or environmental agencies, research institutes, consulting firms, research and clinical laboratories, private and public health organizations, or education.

Biology as a discipline has been rapidly advancing in the last decade. With the information derived from the sequencing of the genomes of many organisms, it will have far-reaching impacts on the environment, public health, and on local, regional, and global economies. The Biology Minor allows students in majors other than biology to gain an understanding of these exciting developments. It will provide a solid background in biology and the opportunity to explore selected area(s) at a greater depth. Equipped with a minor in biology, students with a major in other disciplines will have a greater understanding and knowledge of the latest advances in many areas of biology and will therefore be more versatile in their career paths. The requirement for a Minor in Biology is 21 units.

The Certificate in Biotechnology provides students with advanced knowledge and skills in modern biotechnology that will lead to careers in biotech as well as pharmaceutical industries.

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

## Lower Division Requirements (31 units)

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 105 Pre-Calculus or MATH 150 Calculus I (4)
3. Physical Sciences

CHEM 121 General Chemistry I (4)
CHEM 122 General Chemistry II (4)
PHYS 100 Introduction to Physics I (4)
PHYS 101 Introduction to Physics II (4)
(PHYS 200/201 may be substituted for the above
physics sequence.)
(12 units of the above courses will be counted toward lower-division GE credits, 4 units in each of three
different disciplines.)
Upper Division Requirements (21 units)
BIOL $300 \quad$ Cell Biology (4)
BIOL 302 Genetics (4)
BIOL 303 Evolutionary Biology (3)
BIOL 304 Comparative Animal Physiology (3)
BIOL 433* Ecology and the Environment (4)

## AND select one of the following (2):

BIOL 492 Internship
BIOL 494 Independent Research
BIOL 497 Directed Study
AND
BIOL 499 Senior Capstone Colloquium (1)

## Electives in Biology (10-12 units)

Select at least three courses from the following list, one of which must be a lab course.
BIOL 301 Microbiology (4)
BIOL 310 Animal Biology and Ecology (4)
BIOL $311 \quad$ Plant Biology and Ecology (4)
BIOL 312 Marine Biology (4)
BIOL 313 Conservation Biology (4)
BIOL 316 Invertebrate Zoology (4)
BIOL 317 Parasitology (4)
BIOL 400 Molecular Biology and Molecular Genetics (4)
BIOL 401 Biotechnology and Recombinant DNA Techniques (5)
BIOL 402 Toxicology (3)
BIOL 420 Cellular and Molecular Immunology (4)
BIOL 421 Virology (3)
BIOL 422 Molecular Plant Physiology (4)
BIOL 423 Cellular and Molecular Neurobiology (3)
BIOL 424 Human Physiology (3)
BIOL 425 Human Genetics (3)
BIOL 427 Developmental Biology (4)
BIOL 428 Biology of Cancer (3)
BIOL 431* Bioinformatics (4)
BIOL 432* Principles of Epidemiology and Environmental Health (3)
BIOL $450 \quad$ Ichthyology: The Biology of Fishes (4)

## Required Supporting and Other GE Courses (45 units)

American institutions requirement (6)
Other GE courses in Categories A-E (39)

## Electives in Any Discipline (12-14 units)

## Required Courses for Subject Matter Preparation in Biology for Single Subject Teaching Credential (14 units)

Subject matter preparation in biology can be met by fulfilling the requirements for the BS in Biology and successfully completing the following 14 units:
PHYS 105 Introduction to the Solar System (4)
GEOL 121 Physical Geology (4)
BIOL 335* The Biosphere (3)
EDUC 330 Introduction To Secondary Schooling (3)
(Courses with * are double-counted toward upperdivision GE credits.)

# REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BIOLOGY WITH AN EMPHASIS IN CELL AND MOLECULAR BIOLOGY (120 units) 

Lower Division Requirements (31 units)

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. Physical Sciences

CHEM 121 General Chemistry I (4)
CHEM 122 General Chemistry II (4)
AND select either
PHYS 100 Introduction to Physics I (4)
PHYS 101 Introduction to Physics II (4)
OR
PHYS 200 General Physics I (4)
PHYS 201 General Physics II (4)
(12 units of the above courses will be counted toward lower-division GE credits, 4 units in each of three different disciplines.)

Upper Division Requirements (44 units)

1. Biology

BIOL $300 \quad$ Cell Biology (4)
BIOL 301 Microbiology (4)
BIOL 302 Genetics (4)
BIOL 303 Evolutionary Biology (3)
BIOL 400 Molecular Biology and Molecular Genetics (4)
BIOL 401 Biotechnology and Recombinant DNA Techniques (5)
BIOL 431* Bioinformatics (4)
AND select one of the following (2):
BIOL 492 Internship
BIOL 494 Independent Research
BIOL 497 Directed Study

## AND

BIOL 499 Senior Capstone Colloquium (1)
2. Organic Chemistry and Biochemistry

Select one of the following groups of courses:
Group A-
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)
Group B-
CHEM 311 Organic Chemistry I (3)
CHEM 312 Organic Chemistry I Laboratory (1)
CHEM 318 Biological Chemistry (3)

Group C-
(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)
(A year-long organic chemistry sequence with laboratory taken at a community college may be accepted for the Biology major in lieu of CHEM 311, 312, 314, 315.)
3. Required General Education Courses

ENGL 330* Writing in the Disciplines (3)
AND Select one of the following:
BIOL 326 Scientific and Professional Ethics (3)
PHYS/ENGL 338* Science and Conscience (3)
Electives in Biology (9 units)
Select at least 9 units of courses from the following list:
BIOL 402 Toxicology (3)
BIOL 416 Radiobiology and Radionuclides (3)
BIOL 420 Cellular and Molecular Immunology (4)
BIOL 421 Virology (3)
BIOL 422 Molecular Plant Physiology (4)
BIOL 423 Cellular and Molecular Neurobiology (3)
BIOL 424 Human Physiology (3)
BIOL 425 Human Genetics (3)
BIOL 427 Developmental Biology (4)
BIOL 428 Biology of Cancer (3)
BIOL 432* Principles of Epidemiology and Environmental Health (3)
BIOL 433* Ecology and the Environment (4)

## Required Supporting and Other GE Courses (36

 units)American Institutions Requirement (6)
Other GE courses in Categories A-E (30)
(Courses with * are double-counted toward upperdivision GE credits.)

## REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BIOLOGY WITH AN EMPHASIS IN MEDICAL IMAGING (120 units)

## Lower Division Requirements (36 units)

1. Biology

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)
2. Mathematics

MATH 150 Calculus I (4)
3. Physical Sciences

CHEM 121 General Chemistry I (4)
CHEM 122 General Chemistry II (4)

## AND select either

PHYS 100 Introduction to Physics I (4)
PHYS 101 Introduction to Physics II (4)
OR
PHYS 200 General Physics I (4)
PHYS 201 General Physics II (4)
(12 units of the above courses will be counted toward lower-division GE credits, 4 units in each of three different science disciplines.)

Upper Division Requirements (39 units)

1. Biology and Physics

BIOL $300 \quad$ Cell Biology (4)
BIOL 301 Microbiology (4)
BIOL 400 Molecular Biology and Molecular Genetics (4)

AND select one of the following (2):
PHYS 492 Physics Internship,
BIOL 494 or PHYS 494 Independent Research
BIOL or PHYS 497 Directed Study
AND
BIOL or PHYS 499 Senior Capstone Colloquium (1)
2. Organic Chemistry and Biochemistry

CHEM 311 Organic Chemistry I (3)
CHEM 312 Organic Chemistry I Laboratory (1)
CHEM 318 Biological Chemistry (3)
(An organic chemistry I-equivalent course with laboratory taken at a community college may be accepted for the Biology major in lieu of CHEM 311 and 312.)
3. Required General Education Courses

ENGL 330* Writing in the Disciplines (3)

## AND Select one of the following:

BIOL $326 \quad$ Scientific and Professional Ethics (3) PHYS/ENGL 338* Science and Conscience (3)
4. Medical Imaging

BIOL/PHYS 416 Radiobiology and Radionuclides (3)
BIOL/PHYS 434* Introduction to Biomedical Imaging (4)

BIOL/PHYS 464 Biomedical Instrumentation (4)

## Electives in Biology and Physics (9 units)

Select at least 9 units of courses from the following list:
BIOL 302 Genetics (4)
BIOL/PHYS 315 Introduction to Biophysics (4)
BIOL 401 Biotechnology and Recombinant DNA Techniques (5)
BIOL 420 Cellular and Molecular Immunology (4)
BIOL $421 \quad$ Virology (3)
BIOL 423 Cellular and Molecular Neurobiology (3)
BIOL 424 Human Physiology (3)
BIOL 425 Human Genetics (3)
BIOL 427 Developmental Biology (4)
BIOL 428 Biology of Cancer (3)
BIOL 431* Bioinformatics (4)
BIOL 432* Principles of Epidemiology and Environmental Health (3)
BIOL 433* Ecology and the Environment (4)
PHYS 445 Image Analysis and Pattern Recognition (3)

## Required Supporting and Other GE Courses (36 units)

American Institutions Requirement (6)
Other GE courses in Categories A-E (30)
*Double-counted toward upper-division GE credits.)


## REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN BIOTECHNOLOGY AND BIOINFORMATICS (33-35 units)

(Pending approval from the Chancellor's Office and offered through California State University Channel Islands Extended Education Program)

## ADMISSION REQUIREMENTS:

- Applicants must have a BS/BA degree in Biology, Computer Science, Chemistry, Biochemistry, or Mathematics. Alternatively, they must have a BA/BS degree in any field and equivalent work experiences in one of the above fields. The prerequisite courses for the graduate level courses should be completed at the undergraduate level or before enrolling in the set required courses after conditional admission.
- Applicants seeking admission to the professional MS in Biotechnology and Bioinformatics program must be officially accepted into the CSUCI academic program.
- Applicants must declare themselves as graduate students in the professional MS degree program in Biotechnology and Bioinformatics.
- Applicants will be evaluated by the program admissions committee which will consider the applicants in the context of the total applicant pool using our general admission standards. No arbitrary grade point or test score will be used in the evaluation process. However, the following materials are required for our evaluation and admission process.
- Applicants must submit to the program their transcript from their undergraduate institution, Graduate Record Examinations (GRE) General Test scores or the Medical College Admission Test (MCAT) scores.
- Applicants who have received their undergraduate degrees from a university where English is not the language of instruction, or have studied fewer than two years at a university where instruction is in English, must submit to the program their Test of English as a Foreign Language (TOEFL) scores for evaluation.
- A one page "Statement of Purpose" from the applicant and two letters of recommendations from people who are able to judge the applicant's capacity for both academic and professional success should be submitted to the program for evaluation.
- Applicants will be interviewed by the program admissions committee before admission to the program.
- Although a BS/BA in the natural or life science, computer science, or mathematics is likely to provide the most thorough academic preparation for our program, it is not a prerequisite for admission. Relevant work experience in fields of biotechnology, computing, pharmaceuticals, medical, environmental, and agricultural biotechnology, clinical trials, regulatory affairs, intellectual property law, management in biotechnology is looked upon favorably. However, as our program demands sophisticated technical training which requires a comparable level of requisite knowledge and skills, some deficiency in academic preparation among applicants who have relevant work experience may be
offered conditional admission, contingent upon successful completion of prerequisite academic work specified by the admissions committee.
- Once admitted, students must remain in good academic standing throughout the duration of their enrollment in CSUCI.
- Students must complete and fulfill the requirements of the degree program within a designated period specified by the university.


## DEGREE REQUIREMENTS:

## Common Core Courses (19 units): <br> BINF 500 DNA and Protein Sequence Analysis (3) <br> BINF 501 Biological Informatics (3) <br> BIOL 502 Techniques in Genomics and Proteomics (2) <br> MGT 471 Project Management (3) <br> BIOL 600 Team Project (4) <br> BIOL 601 Seminar Series in Biotechnology and Bioinformatics (1)

For Biotechnology Emphasis (14 units):
Required Courses (7 units):
BIOL 504 Molecular Cell Biology (3)
BIOL 505 Molecular Structure (4)

## Electives (7 units):

A minimum of 7 units chosen from the following
courses and/or from the elective courses under the
Computational Biology Emphasis:
BIOL 506 Molecular Evolution (4)
BIOL 507 Pharmacogenomics and
Pharmacoproteomics (3)
BIOL 508 Advanced Immunology (4)
BIOL 509 Plant Biotechnology (4)
MGT 421 Human Resource Management (3)
For Bioinformatics Emphasis (15-16 units):
Required Courses ( 9 units):
BINF 510 Database Systems for Bioinformatics (3)
BINF 511 Computational Genomics (3)
BINF 513 Programming for Bioinformatics (3)

## Electives (6-7 units):

A minimum of two courses chosen from the following and/or from the elective courses under the Biotechnology Emphasis, with at least one course in the BINF category:
BINF 512 Algorithms for Bioinformatics (3)
BINF 514 Statistical Methods in Computational Biology (3)
PHYS 445 Image Analysis and Pattern Recognition (3)
MGT 421 Human Resource Management (3)

## PROPOSED COURSE OF STUDY:

## For Biotechnology Emphasis:

## Year 1 (15 units)

Semester 1 BINF 500 DNA and Protein Sequence Analysis (3)
BINF 501 Biological Informatics (3)
BIOL 502 Techniques in Genomics and Proteomics (2)

Semester 2 BIOL 503 Biotechnology Law and Regulation (3)
MGT 471 Project Management (3)
BIOL 601 Seminar Series in Biotechnology and Bioinformatics (1)

Year 2 (18 units)
Semester 1 BIOL 504 Molecular Cell Biology (3)
BIOL 505 Molecular Structure (4) Electives (3)

Semester 2 BIOL 600 Team Project (4)
Electives (4)
For Bioinformatics Emphasis:
Year 1 ( 15 units)
Semester 1 BINF 500 DNA and Protein Sequence Analysis (3)
BINF 501 Biological Informatics (3)
BIOL 502 Techniques in Genomics and Proteomics (2)

Semester 2 BIOL 503 Biotechnology Law and Regulation (3)
MGT 471 Project Management (3)
BIOL 601 Seminar Series in Biotechnology and
Bioinformatics (1)
Year 2 (16-17 units)
Semester 1 BINF 510 Database Systems for Bioinformatics (3)
Electives (6-7)
Semester 2 BINF 511 Computational Genomics (3)
BIOL 600 Team Project (4)

## REQUIREMENTS FOR THE MINOR IN BIOLOGY (21 units)

Lower Division Requirements (8 units):
BIOL 200 Principles of Organismal and Population Biology (4)
BIOL 201 Principles of Cell and Molecular Biology (4)
Upper Division Requirements (13 units):

1. Biology (8 units)

BIOL 300 Cell Biology (4)
BIOL 302 Genetics (4)

## 2. Biology Electives (5 units)

A minimum of 5 units of 300-400 level biology courses, with no more than one course selected from BIOL 331342.

## REQUIREMENTS FOR THE CERTIFICATE IN BIOTECHNOLOGY (23-24units)

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

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 Techniques (5)
BIOL 420 Cellular and Molecular Immunology (4) BIOL 431 Bioinformatics (4)
3. Complete another 4 units of upper-division biology course in consultation with the program;
4. Complete an internship course;
5. Complete the capstone course;
6. Approval by the Biology program.

## REQUIREMENTS FOR HONORS IN BIOLOGY

Candidacy for honors in biology is voluntary. To be eligible, a student must fulfill the following requirements:

1. Achieve a minimum grade point average of 3.5 for all courses satisfying the requirements for the major as defined above;
2. Take at least seven courses in the major at this university;
3. Satisfactorily complete a Service Learning course from BIOL 492, 494 or 497;
4. Satisfactorily complete a Senior Capstone course.

Application for candidacy must be made at the beginning of the senior year. Approval of candidacy and of the Service Learning project and project advisor rests with the Biology Program. The project advisor will have the sole responsibility for acceptance of the completed project.

The Biology Program may grant honors to exceptional students who have not met the above requirements, but who have in the judgment of the Program brought distinction upon themselves and the Program in some other significant and appropriate manner.

## BUSINESS AND ECONOMICS

## PROGRAMS OFFERED

- Bachelor of Science in Business

Emphasis In Entrepreneurship
Emphasis In Global Business

- Minor in Business Management
- Minor in Economics
- Master of Business Administration (MBA)

The Business Program has a liberal arts and interdisciplinary focus. It is built on the three Cs: critical thinking, cooperation (working with others), and communication (oral and written English). Students learn the fundamental principles of accounting, economics, finance, information systems, management, and marketing as applied in a variety of organizational settings. 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 Chemistry, 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. To provide an integrative and cross disciplinary experience in a relevant business area, students are required to select one of two emphases: Global Business or Entrepreneurship. Both emphases draw on upperdivision courses from accounting, economics, management, and marketing to offer an in-depth perspective into two critical areas of business. We anticipate enhancing the curriculum with additional choices as the program grows.

CAREERS: An objective of the Business Program is to prepare students for working in a variety of organizations - both public and private. The Bachelor of Science degree prepares students for several types of graduate and professional school studies: MBA, MPA, law school.

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## 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 Computer Information Systems (3)
ECON 110 Principles of Microeconomics (3)
ECON 111 Principles of Macroeconomics (3)
ENGL 103 Stretch Composition II (3)
OR
ENGL 105 Composition \& Rhetoric I (3)
MATH 140 Calculus for Business \& Economics (3)
OR
MATH 150 Calculus (4)
Upper Division Required Major Courses (36 units):
ACCT 300 Applied Managerial Accounting (3)
BUS 320 Business Operations (3)
BUS 499 Capstone: Global Strategic Simulation (3)
CIS 310 Management Info Systems (3)
ECON 310 Intermediate Microeconomics (3)
OR
ECON 329 Managerial Economics (3)
ECON 311 Intermediate Macroeconomics (3)
OR
ECON 320 Money \& Banking (3)
ENGL 483 Technical Visual Communication (3)
FIN $300 \quad$ Business Finance (3)
MATH 329 Statistics for Business \& Economics (3)
MGT 307 Management of Organizations (3)
MGT 326 Scientific \& Professional Ethics (3)
MKT 310 Principles of Marketing (3)
Upper Division Interdisciplinary Major Courses (6 units):
BUS 334 The Business of Art (ART) (3)
BUS 340 Business and Money in American Literature (ENGL) (3)
BUS 341 Drug Discovery \& Development (CHEM) (3)

BUS 342 The Zoo: Conservation, Education and Recreation (BIOL, ECON, EDUC) (3)
BUS 349 History of Business \& Economics in North America (HIST) (3)
BUS 434 The Museum: Culture, Business \& Education (ART, EDUC) (3)
ECON 343 Capital Theory (FIN) (3)
Emphasis: MUST SELECT 1 OR 2, (15 units each):

1. ENTREPRENEURSHIP

BUS 342 Drug Discovery \& Development (3)
ECON 411 Economics of Entrepreneurship (3)
MGT 325 Management of Entrepreneurship (3)
MKT 411 New Product Development And Management (3)
Electives (3)

## 2. GLOBAL BUSINESS

ACCT 410 International Accounting (3)
MGT 310 Management of International Business (3)
MKT 410 International Marketing Management (3)
Select one from the following:
ECON 370 World Economy (3)
ECON 471 International Trade (3)
ECON 472 International Macroeconomics (3)
Electives (3)

## Required Supporting and other GE Courses (48 units):

Upper Division Interdisciplinary courses outside Business Major (3)
Title V: United States History, Constitution and American Ideals (6)
Other GE Courses in Categories A-E (39)

## REQUIREMENTS FOR THE MINOR IN BUSINESS MANAGEMENT (21 units)

The minor in Business Management offers students a foundation in principles related to managing people. The minor stresses critical thinking and the application of management concepts in a variety of organizational environments. The minor provides non-business majors with a basic understanding of management issues.

Lower Division Requirements (9 units):
BUS 110 Business Law (3)
CIS 110 Computer Information Systems (3)
COMP 150 Object Oriented Programming (3)
ECON 300 Fundamentals of Economics (3)
ENGL 330 Writing in the Disciplines (3)
MATH 140 Calculus for Business and Economics (3) OR
MATH 150 Calculus (3)
Upper Division Requirements (12 units):
BUS 320 Business Operations (3)
BUS $420 \quad$ Cases in Strategy (3)
BUS 424 Business, Government and Society (3)
MATH 329 Statistics for Business and Economics (3)
MGT 307 Management of Organizations (3)
MGT 310 Management of International Businesses (3)
MGT 325 Entrepreneurial Management (3)
MGT 326 Scientific and Professional Ethics (3)
MGT 421 Human Resource Management (3)
MGT 426 Management of Healthcare Organizations (3)

MKT 310 Principles of Marketing (3)

## REQUIREMENTS FOR THE MINOR IN ECONOMICS (21-22 units)

The economics minor familiarizes students with the tools of economics analysis, and applies these tools to economic decisions made by individuals in their personal and professional lives, and to the workings of national economies and the world economy.

Careers: The economics minor is suitable for students desiring careers in all fields of business, education, journalism, law and government.

Lower Division Requirements (6-10 units):
ECON 110 Principles of Microeconomics (3)
ECON 111 Principles of Macroeconomics (3)
OR
ECON 300 Fundamentals of Economics (3)
Note: If ECON 300 is taken in place of ECON 110 and 111, an additional 3 unit course must be taken from upper division electives.
MATH $140 \quad$ Calculus for Business and Economics (3) OR
MATH 150 Calculus I (4)
Upper Division Requirements (6 units):
ECON 310 Intermediate Microeconomics (3) OR
ECON 329 Managerial Economics (3)
ECON 311 Intermediate Macroeconomics (3) OR
ECON 320 Money and Banking (3)

## Electives (6-9 units):

Additional upper divisions course in economics. (Totals units for the minor must add up to at least 21).

## MASTER OF BUSINESS ADMINISTRATION (MBA)

(Pending approval from the Chancellor's Office and offered through California State University Channel Islands Extended Education Program)

CSUCI's MBA program is designed to develop business leaders capable of working in an increasingly multicultural and global environment. Key elements include:

- Learning Community/Cohort Experience
- Evening Classes
- Online Foundations of Business courses
- Focus on International Business and Entrepreneurial Innovation
- Study Abroad Option
- Real-World Orientation


## The MBA Curriculum

The curriculum is comprised of three parts: Foundations of Business ( $0-16$ semester units), Required Core (24 semester units), and Electives ( 9 semester units) for a total of 33-49 semester units.

## Foundations of Business

The Foundations of Business courses provide the theoretical concepts and quantitative tools that are the basis for making business decisions. These courses are designed to provide students with a general understanding of accounting, economics, finance, ethics and law, statistics, management, and marketing. Some or all of these courses may be waived depending upon the applicant's undergraduate degree and coursework. Students with a bachelor's degree in business from CSUCI or from other accredited institutions within the last 10 years will have met the Foundations of Business requirements. Individual business courses taken as an undergraduate student at CSUCI or another institution may also meet specific Foundations requirements.

Upon acceptance to the program, a student's transcripts will be reviewed for completion of the necessary coursework for mastery of the Foundations of Business. A grade of "C" or better is required to meet the criteria.

## Required Core

The core MBA courses are presented in a crossfunctional, integrative manner that provides a comprehensive view of the structure of business operations. Students learn to view and analyze business problems from a variety of perspectives. The seven core courses provide the skills and competencies students will need to be effective business leaders in the 21st century.

A distinguishing aspect of the MBA Program is its focus on entrepreneurship and global business awareness. Several courses will involve students in service-learning through community-based projects. In addition, the Capstone Course BUS 570 will provide students with the opportunity to integrate their knowledge through an International Operations Simulation exercise.

## Electives

Upon advisor approval, students will choose 9 additional units of upper-division or graduate level courses.

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## REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION: (33-49 units)

Foundations of Business (0-16 units):
BUS 500 Economics for Managers (3)
BUS 502 Quantitative Methods for DecisionMaking (3)
BUS 504 Introduction to Accounting and Finance (4)

BUS 506 Principles of Management and Marketing (3)

BUS 508 Business Ethics and Law (3)
Required Core (24 units):
BUS 510 High Performance Management (3)
BUS 520 Strategy and Leadership (3)
BUS 530 Managing Business Operations (3)
BUS 540 Financial Reporting and Analysis (3)
BUS 550 The Contemporary Firm (3)
BUS 560 The Entrepreneurial Manager (3)
BUS 570 Competing in a Global Environment (6)
Upon advisor approval, students will choose 9 units of upper-division or graduate-level courses.


## CHEMISTRY

## PROGRAMS OFFERED

- Minor in Chemistry
- Certificate in Chemistry

The boundaries between Chemistry and other scientific disciplines (i.e. Biology, Physics, Computer Science, and Mathematics) are increasingly difficult to distinguish, and new interdisciplinary fields continue to appear that lie at the interface between Chemistry and these other disciplines, i.e. bioinorganic and bioorganic chemistry, environmental chemistry, cheminformatics and computational chemistry.

Careers: The purpose of the Chemistry minor is to provide non-majors with the Chemistry background that is needed to pursue graduate study or a career in an interdisciplinary field. Students in pre-professional programs (pre-medical, pre-dental, pre-veterinary, prepharmacy), or majoring in Biology or Environmental Science and Resource Management, in particular, should consider obtaining a Chemistry minor, since a significant portion of the coursework needed for the Chemistry minor is included in these programs.

## CONTACT INFORMATION

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## FACULTY

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## REQUIREMENTS FOR THE MINOR IN CHEMISTRY (23 units)

Lower Division Requirements (8 units):
CHEM 121 General Chemistry I and Laboratory (4)
CHEM 122 General Chemistry II and Laboratory (4)
Upper Division Requirements (8 units):
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)
Electives (7 units):
A total of 7 units of electives on the 300-400 level or CHEM 250 and CHEM 251; a maximum of three units of an upper-division interdisciplinary General Education course (CHEM 330-349 or CHEM 430-449) and/ or one unit of a Learning Community course (CHEM 313 or 316) can be applied to the Chemistry minor. Interdisciplinary General Education courses that are cross-listed with Chemistry can be counted toward the Chemistry minor.

## REQUIREMENTS FOR THE CERTIFICATE IN CHEMISTRY ( 23 units)

The Certificate in Chemistry is designed to provide individuals who have already obtained a B.A. or B.S. degree in another discipline with the opportunity to obtain a certificate for advanced Chemistry coursework that is equivalent to a minor in Chemistry.

Lower Division Requirements (8 units):
CHEM 121 General Chemistry I and Laboratory (4)
CHEM 122 General Chemistry II and Laboratory (4)
Upper Division Requirements (8 units):
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)
Electives (7 units):
A minimum of seven units of courses with the CHEM prefix to include CHEM 250 and 251 or other upperdivision CHEM prefix courses, but excluding upperdivision general education courses (CHEM 330-349 or 430-449). A maximum of one unit of a Learning Community course (CHEM 313 or 316) may be applied toward the Certificate.

## CHICANO/A STUDIES

## PROGRAM OFFERED

- Minor in Chicano/a Studies

The minor in Chicano/a studies affords students the opportunity to investigate the multi-dimensional culture of the Chicano/a community in the United States. It is, by definition, interdisciplinary and seeks to provide students with a nuanced appreciation of this population. The minor offers non-majors the opportunity to investigate the historical complexities of societies and social movements and their legacies in the present. Therefore the minor serves as a primer to the scholarly appreciation of the past.

## CONTACT INFORMATION

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## REQUIREMENTS FOR THE MINOR IN CHICANO/A STUDIES (18-20 units)

Lower Division Requirements (6-8 units):
SPAN 201 Intermediate Spanish I (4)
SPAN 202 Intermediate Spanish II (4) OR
SPAN 211 Spanish for Heritage Speakers I (4)
SPAN 212 Spanish for Heritage Speakers II (4) OR
Six upper division units in Spanish approved by minor advisor.

> Upper Division Requirements (12 units) Select four courses from the following: EDUC $464 \quad$ The Chicano/a Child (3) ART/HIST 333 History of Southern California  BUS/ECON/

Other upper division courses approved by the minor advisor.

## COMPUTER SCIENCE

## PROGRAMS OFFERED

- Bachelor of Science in Computer Science
- Minor in Computer Science

The Computer Science degree offers the latest cuttingedge education for various industrial and applied fields. Students will be given a strong background in computer hardware and software, as well as a substantial amount of "hands-on" experience. The program will stress interdisciplinary applications in other sciences and business and prepare students for graduate studies.

CAREERS: The program will prepare students for careers in high-tech, computer and Internet-driven industries, where interdisciplinary, dynamic and innovative professionals trained in the latest technologies are increasingly sought.

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## FACULTY

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## REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE (123 units)

Lower Division Requirements (42-43 units):
Students take the following courses, plus a 2 semester science sequence and an additional science course (one lab section required) in Physics, Biology, or Chemistry
(11-12, G.E. B1 and B2)
COMP 150 Object Oriented Programming (4)
COMP 151 Data Structures and Program Design (4)
COMP 162 Computer Architecture and Assembly Language (3)
COMP 232 Programming Languages (3)
COMP 262 Computer Organization and Architecture (3)
MATH 150 Calculus I (4)
MATH 151 Calculus II (4)
MATH 240 Linear Algebra (3)
PHIL 230 Logic (3)
Upper Division Requirements (28 units):
COMP 350 Software Engineering (3)
COMP 362 Operating Systems (3)
COMP 447 Societal Issues in Computing (3, G.E. D)
COMP 454 Automata, Languages and Computation (3)
COMP 499 Senior Colloquium (1)
MATH 300 Discrete Mathematics (3)
MATH 352 Probability and Statistics (3)
MATH 448 Scientific Computing (3)
MATH 454 Analysis of Algorithms (3)
Choose one from the following:
COMP 420 Database Theory and Design (3)
COMP 464 Computer Graphics I (3)
Electives (12-13 units):
COMP/PHYS 345 Digital Image Processing (3)
COMP 422 Design of Compilers (3)
COMP 424 Computer System Security (3)
COMP 429 Computer Networks (3)
COMP/PHYS 445 Image Analysis and Pattern Recognition (3)
COMP 449 Human Comp. Interaction (3)
COMP 452 Computational Bioinformatics (4)
COMP 462 Advanced Object Oriented Programming (3)
COMP 464 Computer Graphics I (3)
COMP 466 Computer Graphics II (3)
COMP 469 Artificial Intelligence/Neural Nets (3)
COMP 492 Internship (3)
COMP 494 Independent Research(3)
COMP 497 Directed Study (3)
COMP 499 Senior Colloquium (1)
ENGL 482 Technical Writing (3)
MATH 429 Operation Research (3)
PROPOSED COURSE OF STUDY
Freshman Year (31 units):
ENGL 105 Composition and Rhetoric* (3, G.E. A2)
MATH 150 Calculus I (4, G.E. B3)
COMP 150 Object Oriented Programming (4, G.E. B4)
G.E. Section A or C (3)

MATH 151 Calculus II (4)
MATH 230 Logic and Mathematical Reasoning (3, G.E. A3)

COMP 151 Data Structures and Program Design (4)
COMP 162 Comp. Architecture and Assembly Language (3)
G.E. Section A or C (3)

* Or ENGL 102 and 103 (6)

Sophomore Year (26-27 units):
MATH 240 Linear Algebra (3)
COMP 232 Programming Languages (3)
COMP 262 Computer Organization and Architecture (3)
MATH 300 Discrete Mathematics (3)
Select one interdisciplinary G.E. (3, G.E. D)
Recommend one of:
BIOL 431 Bioinformatics (3)
PHYS 434 Biomedical Imaging (3)
MATH 331 History of Mathematics (3)
Select one 2 semester science sequence and an additional science course (one lab section required) in Physics, Biology, or Chemistry ( 11-12, G.E. B1 and B2)

Junior Year (15 units + G.E):
MATH 454 Analysis of Algorithms (3)
COMP 454 Automata, Languages and Computation (3)
COMP 362 Operating Systems (3)
MATH 342 Probability and Statistics (3)
COMP 350 Software Engineering (3)
Senior Year ( 22 units + GE):
COMP 420 Database Theory and Design (3) OR
COMP 464 Computer Graphics I (3)
COMP 447 Societal Issues in Computing (3, G.E. D, Interdisciplinary)
MATH 448 Scientific Computing (3, Interdisciplinary)
COMP 499 Senior Colloquium (1)
Choose 4 or more Computer Science Electives from the following list (12):
COMP/PHYS 345 Digital Image Processing (3)
COMP 422 Design of Compilers (3)
COMP 424 Computer System Security (3)
COMP 429 Computer Networks (3)
COMP/PHYS 445 Image Analysis and Pattern Recognition (3)
COMP 449 Human Comp. Interaction (3)
COMP 452 Computational Bioinformatics (4)
COMP 462 Advanced Object Oriented Programming (3)
COMP 464 Computer Graphics I (3)
COMP 466 Computer Graphics II (3)
COMP 469 Artificial Intelligence/Neural Nets (3)
COMP 492 Internship (3)
COMP 494 Independent Research(3)
COMP 497 Directed Study (3)
COMP 499 Senior Colloquium (1)
ENGL 482 Technical Writing (3)
MATH 429 Operation Research (3)
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 Courses Included in Major
Requirements (18 units):
MATH 150 Calculus I (4, G.E. B3)
COMP 150 Object-Oriented Programming (4, G.E. A3)
MATH 230 Logic (3, G.E. A3)
COMP 447 Societal Issues in Computing (3, G.E. D) Sciences (4, G.E. B1, B2)

## REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE DEGREE (123 units)

Lower Division Required Major Courses (43)
Upper Division Required Major Courses (28)
Upper Division Elective Major Courses (12)
Elective Courses (6)
General Education and Title V (34)
Note: General Education Included in Major
Requirements (18)

## REQUIREMENTS FOR THE MINOR IN COMPUTER SCIENCE (25 units)

| MATH 150 | Calculus I (4) |
| :--- | :--- |
| MATH 151 | Calculus II (4) |
| COMP 150 | Object Oriented Programming (4) |
| COMP 151 | Data Structures and Program Design (4) |
| MATH 300 | Discrete Math (3) |

In addition, students select two upper-division courses from the CS program approved by the advisor (6).


## EDUCATION

## PROGRAMS OFFERED

- Multiple Subject Teaching Credential
- Single Subject Teaching Credential
- Special Education Teaching Credential
- Master of Arts in Education: Specialization in Principals Leadership
- Administrative Services Credential

The Education Program is devoted to the advancement of teaching and learning. Our image for teacher education begins with a vision for K-12 schools in the 21 st century. The transformation from an industrial economy to an information society in the U.S., combined with an increasing emphasis on global issues and technology, demands more highly skilled adults to function effectively in the workforce. Young people who complete their schooling are the most educationally, socially and economically advantaged. They become adults who are lifelong learners and have the basic skills necessary for leading a full and rewarding life in an interdependent society and an information and servicedriven economy. The power of educators to make the fundamental difference in students' lives makes education the most important social service.

The Education Program builds from the foundation of the undergraduate Liberal Studies option in Teaching and Learning (subject matter program) and extends to Masters of Arts in Education. Our Education Programs contribute to the teaching profession by producing teachers and school administrators who believe that all students have the ability to achieve high standards, who adapt their teaching to reach all students, and who respect the diversity of all students. Our graduates are reflective about their teaching, their attitudes, and their ability to work in collaborative analytical teams.

The Master of Arts in Education program focuses on Principals Leadership and also leads to the Preliminary Administrative Services Credential.

Multiple Subject, Single Subject and Special Education programs have been approved by the California Commission on Teacher Credentialing. Students who are hired by local public schools on emergency credentials may be eligible for an internship program. Contact the credential advisor or program chair for an internship application.

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## MULTIPLE SUBJECT TEACHING CREDENTIAL

This program specifically prepares teachers for the diversity of languages and cultures often encountered in California's public school classrooms. It 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.

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

## REQUIREMENTS FOR ADMISSION TO THE MULTIPLE SUBJECT TEACHING CREDENTIAL PROGRAM

1. Application. Apply to both the University and the Education Program. Applications to the Program are available in the Credential Office.
2. CBEST Examination. Students must pass 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.
*3. Subject Matter Preparation. The CSU Channel Islands Liberal Studies Option 2 in 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 Multiple Subject Teaching Credential Program, students may also complete a State-approved subject matter program from other California colleges or universities. Beginning July 1, 2004, all students must pass the California Subject Examination for Teachers (CSET) Multiple Subjects Examination or Multiple Subjects Assessment for Teachers (MSAT) prior to admission to the Multiple Subject Credential Program. The CSET or 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 (16 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
EDUC 510

EDUC 512

SPED 345
EDUC 520

Classrooms (3)
EDUC 521 Field Experience (1)
5. U.S. Constitution. Knowledge of the U.S. Constitution demonstrated by completion of two units (semester) of a college level course or college level examination.
6. Grade Point Average. A student must have a cumulative grade point average (GPA) of 2.67 or 2.75 in the last 60 semester units completed to be accepted into the Multiple Subject credential program offered at CSU Channel Islands. If a student does not have the required GPA, conditional admission may be available on a limited basis.
7. Health Clearance. Evidence of a negative tuberculin test is required. The tuberculin test is valid for four (4) years and must be valid through student teaching. The tuberculin test may be completed at a private physician's office, the County Health Department, or the CSU Channel Islands 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. The Certificate of Clearance is a background check and clearance conducted by the Department of Justice and Federal Bureau of Investigation.
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 Records, and one official set of transcripts must be submitted to the Credential Office 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. Experience. At least 45 hours of documented field experience in a K-8 classroom or an equivalent documented field experience must be completed.
12. 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.
13. Writing Sample. Writing samples are required as part of the application process. The writing sample includes a 500-600 word essay describing the applicant's interest in teaching children with the diversity of languages and cultures represented in California schools.
14. Interview. An Education Program Admissions Committee will interview candidates once all other portions of the admissions requirements are complete.
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.

Certification in adult, infant and child CPR competency is required by the CCTC for an initial issuance of a teaching credential.

## Program Maintenance Requirements:

As a condition of remaining in the program, students must maintain a grade point average of $3.0(\mathrm{~B})$ or better, with no course grades lower than a $\mathrm{C}+$.

## REQUIREMENTS FOR THE MULTIPLE SUBJECT TEACHING CREDENTIAL

FULL-TIME MULTIPLE SUBJECT CREDENTIAL PROGRAM (34 units)
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)
EDMS 565 Initial Student Teaching (7)
EDMS 566 Initial Student Teaching Seminar (1)

[^1]PART-TIME MULTIPLE SUBJECT CREDENTIAL PROGRAM (38 units)
First Semester:
EDMS 522 Literacy 1: Multicultural/Multilingual (3)
EDMS 526 Modern Methods in Mathematics Teaching (3)
EDMS 562 Field Experience Multiple Subject (Part-time program) (2)

Second Semester:
EDMS 527 History, Social Studies and Integrated Arts (4)
EDMS 523 Literacy 2: Multicultural/Multilingual (4)
EDMS 562 Field Experience: Multiple Subject (Part-time program) (2)

Third Semester:
EDMS 529 Science, Health and PE (4)
EDMS 565 Initial Student Teaching (7)
EDMS 566 Initial Student Teaching Seminar (1)
Fourth Semester:
EDMS 575 Advanced Student Teaching (7)
EDMS 576 Advanced Student Teaching Seminar (1)


## SINGLE SUBJECT TEACHING CREDENTIAL PROGRAM

This program specifically prepares teachers for the diversity of languages and cultures often encountered in California Public Schools. 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 secondary school setting. An underlying principle of the program is that all students (regardless of race, ethnicity, gender, ability or economic status) are capable learners.

CAREERS: The Single Subject Teaching Credential Program prepares teachers to work with students in subject specific content areas in departmentalized schools. Single Subject Credential Teachers most often teach in departmentalized middle, junior high and high schools.

## REQUIREMENTS FOR ADMISSION TO THE SINGLE SUBJECT TEACHING CREDENTIAL PROGRAM

1. Application. Apply to both the University and the Education Program. Applications for the Program are available in the Credential Office.
2. CBEST Examination. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Teaching Credential Program. Students are urged to take this examination at the earliest possible time after deciding to pursue a teaching credential.
3. Subject Matter Preparation. Prior to admission to the CSU Channel Islands Single Subject Teaching Credential Program, students may complete a stateapproved subject matter program in the specific content area from other colleges or universities. Students who have not completed a state-approved subject matter program must pass the California Subject Examination for Teachers (CSET) in the subject matter area of the single subject credential prior to admission to the Credential Program. The CSET 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 (13 units). If taken at CSU Channel Islands, the courses 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 (3) |
| :--- | :--- |
| EDUC 512 | Equity, Diversity and Foundations of <br> Schooling (3) |
| SPED 345 | Individuals with Disabilities in Society (3) |
| EDUC 520 | Observing and Guiding Behavior in <br> Multicultural/Multilingual and Inclusive <br> Classrooms (3) |
| EDUC 521 | Field Experience (1) |

5. U.S. Constitution. Knowledge of the U.S. Constitution demonstrated by completion of two units (from a semester program) of a college level course or college level examination.
6. Grade Point Average. A student must have a cumulative grade point average (GPA) of 2.67 or 2.75 in the last 60 semester units completed to be admitted into the Single Subject Teaching Credential Program offered at CSU Channel Islands. If a student does not have the required GPA, conditional admission may be available on a limited basis.
7. Health Clearance. Evidence of a negative tuberculin test is required. The tuberculin clearance is valid for four (4) years and must be valid through student teaching. The tuberculin test may be completed at a private physician's office, the County Health Department, or the CSU Channel Islands 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. The Certificate of Clearance is a background check and clearance conducted by the Department of Justice and Federal Bureau of Investigation.
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 Admissions and Records, and one official set of transcripts must be submitted to the Credential office 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.
10. Field Experience. At least 45 hours of documented field experience in a 7-12 classroom or an equivalent documented field experience must be completed and submitted with the application to the program.
11. Bachelor's Degree. A bachelor's degree or, for the student still in his/her last term, all undergraduate academic subjects for a bachelor's degree must be completed or in progress before entering the Single Subject Teaching Credential Program. A bachelor's degree is a requirement for teacher certification.
12. Writing Sample. Writing samples are required as part of the application process. The writing sample includes a 500-600 word essay describing the applicant's interest in teaching children with the diversity of languages and cultures represented in California schools.
13. Interview. An Education Program Admissions Committee will interview candidates once all other portions of the admissions requirements are complete.

Please Note: Certification in adult, infant and child CPR competency is required by the CCTC for an initial issuance of a teaching credential.

## Program Maintenance Requirements:

As a condition of remaining in the program, students must maintain a grade point average of $3.0(\mathrm{~B})$ or better, with no course grades lower than a $\mathrm{C}+$.

## REQUIREMENTS FOR THE SINGLE SUBJECT TEACHING CREDENTIAL ( 30 units)

EDSS 530 General Secondary School Methods (3)
EDSS 540 Literacy in Secondary Schools (3)
EDSS 550 Access to Learning: English Language Learners (2)
EDSS 560 Access to Learning: Special Needs Learners (2)
EDSS 570 Field Experience Middle School (Part-Time Program) (1)
EDSS 571 Student Teaching Seminar Middle School (1)

EDSS 575 Student Teaching Middle School (6)
EDSS 580 Field Experience High School (Part-Time Program) (1)
EDSS 581 Student Teaching Seminar High School (1)
EDSS 585 Student Teaching High School (6)
Students take two courses from one of the following subject areas: mathematics, science or English:

Students seeking a single subject credential in mathematics take the following courses:
EDSS 531 Teaching Mathematics in Middle Schools (3)
EDSS 541 Teaching Mathematics in Secondary Schools (3)

Students seeking a single subject credential in science take the following courses:
EDSS 532 Teaching Science in Middle Schools (3)
EDSS 542 Teaching Life/Physical/Geo- Science in Secondary Schools (3)

Student seeking a single subject credential in English take the following courses:
EDSS 533 Teaching Writing and Literature in Secondary Schools (3)
EDSS 543 Teaching Language Skills in Secondary Schools (3)

## COURSE OF STUDY FOR THE FULL-TIME SINGLE SUBJECT PROGRAMS

## FULL TIME SINGLE SUBJECT MATHEMATICS PROGRAM (30 units) <br> First Semester (Fall): $\mathbf{1 5}$ units <br> EDSS 530 General Secondary School Methods (3) <br> EDSS 531 Teaching Mathematics in Middle Schools (3) <br> EDSS 560 Access to Learning: Special Needs Learners (2) <br> EDSS 575 Student Teaching Middle School (6) <br> EDSS 571 Student Teaching Seminar Middle School (1)

Second Semester (Spring): 15 units
EDSS 540 Literacy in Secondary Schools (3)
EDSS 550 Access to Learning: English Language Learners (2)
EDSS 541 Teaching Mathematics in Secondary Schools (3)
EDSS 585 Student Teaching High School (6)
EDSS 581 Student Teaching Seminar High School (1)

## FULLTIME SINGLE SUBJECT SCIENCE <br> PROGRAM (30 units) <br> First Semester (Fall): 15 units <br> EDSS 530 General Secondary School Methods (3) <br> EDSS 532 Teaching Science in Middle Schools (3) <br> EDSS 560 Access to Learning: Special Needs Learners (2) <br> EDSS 575 Student Teaching Middle School (6) <br> EDSS 571 Student Teaching Seminar Middle School (1)

## Second Semester (Spring): 15 units

EDSS 540 Literacy in Secondary Schools (3)
EDSS 550 Access to Learning: English Language Learners (2)
EDSS 542 Teaching Life/Physical/Geo- Science in Secondary Schools (3)
EDSS 585 Student Teaching High School (6)
EDSS 581 Student Teaching Seminar High School (1)

## FULLTIME SINGLE SUBJECT ENGLISH <br> PROGRAM (30 units) <br> First Semester (Fall): 15 units

EDSS 530 General Secondary School Methods (3)
EDSS 533 Teaching Writing in Secondary Schools (3)
EDSS 560 Access to Learning: Special Needs Learners (2)
EDSS 575 Student Teaching Middle School (6)
EDSS 571 Student Teaching Seminar Middle School (1)
Second Semester (Spring): 15 units
EDSS 540 Literacy in Secondary Schools (3)
EDSS 550 Access to Learning: English Language Learners (2)
EDSS 543 Teaching Language Skills in Secondary Schools (3)
EDSS 585 Student Teaching High School (6)
EDSS 581 Student Teaching Seminar High School (1)

## COURSE OF STUDY FOR THE PART-TIME SINGLE SUBJECT PROGRAM (33 units)

## First Semester:

Prerequisites (6)

## Second Semester:

Prerequisites (7)

## Third Semester:

EDSS 530 General Secondary School Methods (3)
EDSS 560 Access to Learning: Special Needs (2)
EDSS 570 Field Experience Middle School
(Part-time) (1)

## Fourth Semester:

EDSS 540 Literacy in Secondary Schools (3)
EDSS 550 Access to Learning: English Language Learners (2)
EDSS 570 Field Experience Middle School (Part-time) (1) OR depending on semester taken
EDSS 580 Field Experience High school (Part-time) (1)

## Fifth Semester:

## Option A

EDSS 531, English, Math, or Science Content
532, Methods Course (3)
or 533
EDSS 570 Field Experience Middle School
(Part-time) (1)
Option B
EDSS 531, English, Math, or Science Content
532, Methods Course (3)
or 533
EDSS 57
Student Teaching Seminar Middle School (1)
EDSS 575 Student Teaching Middle School (6)

## Sixth Semester:

## Option A

EDSS 541, English, Math or Science Content 542, Methods Course (3)
or 543
EDSS 580 Field Experience High School (Part-time) (1)
OR
Option B
EDSS 541, English, Math or Science Content
542, Methods Course (3)
or 543
EDSS 585
Student Teaching High School (6)
EDSS 581 Student Teaching Seminar High School (1)

## Seventh Semester: (Option A Students)

EDSS 571 Student Teaching Seminar Middle School (1)
EDSS 575 Student Teaching Middle School (6)
EDSS 585 Student Teaching High School (6)
EDSS 581 Student Teaching Seminar High School (1)

## SPECIAL EDUCATION TEACHING CREDENTIAL: MILD/MODERATE DISABILITIES, LEVEL I

The program prepares candidates to teach students with mild/moderate disabilities in self-contained special education and general education classrooms. The program specifically prepares candidates for the diversity of languages and cultures often encountered in California's public school 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 or secondary 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-12 student actively engaged in his/her learning.

This is a post baccalaureate program that has two levels. Level I prepares candidates for a preliminary certificate. After Level I is successfully accomplished, Level II is completed while working in a special education setting and requires the collaboration of the university preparation program and the candidate's employing school department. Successful completion of the Level II program will result in the candidate's eligibility for a professional certificate. The Level II program must be completed within five years of completion of Level I.

CAREERS: The Education Specialist Program prepares candidates to complete the California Commission on Teacher Credentialing standards for the preparation of teachers of children with mild and moderate disabilities from kindergarten to grade 12.

## REQUIREMENTS FOR ADMISSION TO THE EDUCATION SPECIALIST TEACHING CREDENTIAL PROGRAM:

1. Application. Apply to both the University and the Education Program Area. Applications to the Program are available in the Credential Office.
2. CBEST Examination. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Education Specialist Teaching Credential Program. Students are urged to take this examination at the earliest possible time after deciding to pursue a teaching credential.
*3. Subject Matter Preparation. The CSU Channel Islands Liberal Studies Option - Teaching and Learning best prepares students for the subject matter knowledge and skills required for the Education Specialist Teaching Credential Program. Prior to admission to the CSU Channel Islands Education Specialist Teaching Credential Program, students may also complete a state-approved multiple subjects subject matter program from other California colleges or universities. Students who have not completed a state-approved subject matter program must pass a California Subject Examination for Teachers (CSET) in any content area or Multiple Subjects Assessment for Teachers (MSAT) prior to admission to the

Education Specialist Credential Program. The CSET or 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 (3)
EDUC 510 Learning theory and development applied in multicultural education contexts (3)
EDUC 512 Equity, Diversity and Foundations of Schooling (3)
SPED 345 Individuals with Disabilities in Society (3)
5. U.S. Constitution. Knowledge of the U.S. Constitution demonstrated by completion of two units (semester) of a college level course or college level examination.
6. Grade Point Average. A student must have a cumulative grade point average (GPA) of 2.67 or 2.75 in the last 60 semester units completed to be accepted into the Education Specialist credential program offered at CSUCI. If a student does not have the required GPA, conditional admission may be available on a limited basis.
7. Health Clearance. Evidence of a negative tuberculin test is required. The tuberculin test is valid for four (4) years and must be valid through student teaching. The tuberculin test 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. The Certificate of Clearance is a background check and clearance conducted by the Department of Justice and Federal Bureau of Investigation.
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 Admissions and Records, and one official set of transcripts must be submitted to the Credential office 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. Experience. At least 45 hours of documented field experience in a K-12 or special education classroom or an equivalent documented field experience must be completed.
12. 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.
13. Writing Sample. Writing samples are required as part of the application process. The writing sample includes a 500-600 word essay describing the applicant's interest in teaching children with disabilities and with the diversity of languages and cultures represented in California schools.
14. Interview. An interview is conducted by an Education Program Admissions Committee once all other portions of the admissions requirements are complete.

Please Note: The California Commission on Teacher Credentialing requires passing the Reading Instruction Competence Assessment (RICA) for the initial issuance of a Education Specialist 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.

## Program Maintenance Requirements

As a condition of remaining in the program, students must maintain a grade point average of $3.0(\mathrm{~B})$ or better, with no course grades lower than a C +

## REQUIREMENTS FOR THE EDUCATION SPECIALIST TEACHING CREDENTIAL

## FULL-TIME EDUCATION SPECIALIST CREDENTIAL PROGRAM (35 units) <br> First Semester:

EDMS 522*+ Literacy I:Multicultural/Multilingual (3)
EDMS 526*+ Modern methods in mathematics teaching (3)
SPED $541 \quad$ Foundations of special education (2)
SPED 544++ Inclusionary Teaching Methods (2)
SPED 546++ Consultation and communication with families and professionals (3)
SPED $570 \quad$ Field Experience in general education (3)

## Second Semester:

EDSS 540**+ Literacy in Secondary Schools (3)
SPED 542**** Managing learning environments (3)
SPED $543^{* * * * *}$ Educating diverse learners with mild to moderate disabilities (3)
SPED 545+ Assessment of students with disabilities (3)
SPED $580 \quad$ Student teaching in special education (8)

* Not required of individuals holding a valid Multiple Subject Credential
** Not required of individuals holding a valid Single Subject Credential
**** Students must demonstrate competence teaching
students in elementary and secondary settings. This may occur through field experience, student teaching and prior teaching experiences.
+ Coursework requires field experience and/or observation time at a school site.
++ Course must be taken with SPED 570, 580 or full time teaching.


## PART-TIME EDUCATION SPECIALIST MILD/MODERATE LEVEL I CREDENTIAL PROGRAM (36 units)

Courses for the Education Specialist program follow a planned sequence. The pairs of courses in sections A-D must be taken concurrently once all prerequisite courses are completed. Courses in section D must be taken during the final semester of the program. EDMS 522 and EDMS 526 must be taken prior to or concurrently with SPED 570. Students must demonstrate competence teaching students in elementary and secondary settings. This may occur through field experience, student teaching and prior teaching experiences.

Fall or Spring
EDMS*++
522 Literacy I Multicultural/ Multilingual (3)
EDMS*++ 526 Modern methods in mathematics teaching (3)
EDMS $562 \quad$ Field Experience (2)
Spring only
EDSS 540*+
Literacy in Secondary Schools (3)
A. Fall

SPED 541
SPED 546
Foundations of Special Education (2)
Consultation and Communication with
families and professionals (3)
B. Fall

SPED 544** Inclusionary Teaching Methods (2)
SPED $570 \quad$ Field experience in general education (3)
C. Spring

SPED 545*
Assessment of students with disabilities (3)
SPED 542* Managing Learning Environments (3)
EDMS 562 Field Experience (2)
D. Spring

SPED 543** Educating Diverse Learners with mild to moderate disabilities (3)
SPED $580 \quad$ Student teaching in special education (8)

* Course requires field experience and/or observation time at school sites
** Course must be taken with SPED 570, SPED 580 or full time teaching
+ Not required of individuals holding a valid Single Subject Credential
++ Not required of individuals holding a valid Multiple Subject Credential


## MASTER OF ARTS IN EDUCATION

(Pending approval from the Chancellor's Office and offered through California State University Channel Islands Extended Education Program)

The Master of Arts in Education provides advance preparation for educational professionals and leaders. The first specialization to be offered at CSU Channel Islands prepares principals for schools and educational programs.

## Principals' Leadership Specialization

The Principals' Leadership Specialization prepares candidates to complete the California Commission on Teacher Credentialing Preliminary Administrative Services Credential. Completion of this entry level administrative program is one of the components leading to the Professional Administrative Services Credential. The program prepares students to serve in positions of educational leadership in the California Public Schools. Through integration of course work and field experiences students are provided multiple opportunities to learn and practice the California Professional Standards for School Leaders. The program offers students understanding and application of leadership skills related to relationship building, communication, and the ability to apply, model, and analyze curriculum, instructional strategies, assessment, standards-based accountability systems, and data-based school improvement. The program also develops each student's understanding of basic school administrative responsibilities including resource management, personnel supervision, and daily operational issues related to safety, law, and public policy.

Prior to recommendation for certification university faculty determine eligibility based on fully documented evidence that each student has demonstrated satisfactory performance on the full range of standards set forth by the California Commission on Teacher Credentialing.

A Masters degree is required for CSU Channel Islands to recommend a candidate Preliminary Administrative Services Credential. Candidates already possessing a Masters degree who complete the required 30 units will successfully be recommended for the Level I credential without a research project (1 unit).

CAREERS: The Master of Arts in Education: Principals Leadership Specialization prepares candidates for leadership positions as school principals. It prepares educational leaders who can develop, coordinate, and assess instructional programs; evaluate and supervise certificated and classified personnel, provide students' with discipline, manage school site, district, or county level fiscal services; and develop, coordinate and supervise student support services.

## REQUIREMENTS FOR ADMISSION TO THE MASTER OF ARTS IN EDUCATION AND PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL

1. Application to the Extended Education Office.
2. One Set 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 Extended Education Office. Cumulative grade point average of 3.0 is required to be accepted into the Preliminary Administrative Services Credential Program.
3. CBEST Examination-Copy of card indicating passage of the CBEST or verification that you have taken the test prior to admission to the program. Passage of CBEST is required for certification.
4. Copy of a valid California teaching credential requiring a baccalaureate degree and a program of professional preparation, including student teaching; or a valid California Designated Subjects teaching credential provided the applicant also possesses a baccalaureate degree; or a valid California services credential in Pupil Personnel Services, Health Services, Library Media Teacher Services, or Clinical or Rehabilitative Services requiring a baccalaureate degree and a profession preparation program including field practice or the equivalent submitted to the Extended Education Office.
5. Documentation of at least three years of full-time successful teaching experience (substitute or part-time service does not apply).
6. Two letters of recommendation from professionals who are knowledgeable of the candidate's professional work at least one of whom is the candidate's current school administrator.
7. Interview with Education Program Admissions Committee
8. Writing Sample. A written statement of purpose (500600 word essay) describing why the candidate desires to be a school administrator serving the children and families of the diverse communities of California. This essay will include personal and professional reflection on personal goals and developing the knowledge and skills to achieve these goals.

## Course Requirements for Preliminary Administrative Services Credential (34 units) <br> Prerequisites

- Advanced coursework or a component of an induction program focusing on the integration of technology into education
- Advanced coursework or a component of an induction program focusing in Special Education


## Masters Core Courses

Educ 605 Education in a Diverse Society (3)
Educ 615 Principles of Educational Research (3)

Educ 616 Masters Research Thesis/Project (continuing registration required) (1)

## Required Courses for Specialization in Principals Leadership

EDPL 610 Foundations of Curriculum, Instruction and Assessment (3)
EDPL 620 Instructional Leadership of the Collaborative Inclusive School (3)
EDPL 621 Law and School Management (3)
EDPL 622 School Finance and Principles of Applied Leadership (3)
EDPL 623 Understanding and Influencing Organizations in Diverse Communities (3)
EDPL 624 Human Resource Management in Education Settings (3)
EDPL 625 Building Collaborative, Inclusive Learning Communities (3)
EDPL 631 Professional Development and Field Experience I (2)
EDPL 632 Professional Development and Field Experience II (4)

## Program Maintenance Requirements:

As a condition of remaining in the program, students must maintain a grade point average of 3.0 (B) or better with no course grades lower than a C+. The progress of students in meeting this requirement and in progressing toward completion in a timely manner will be monitored at the conclusion of each term as part of the Professional Development and Field Experience Courses (EDPL 630633.)

## PROPOSED COURSE OF STUDY:

Summer Session I (2004)
EDUC 605 Education in a Diverse Society (3)
EDPL 610 Foundations of Curriculum Instruction and Assessment (3)
EDUC 615 Principles of Educational Research (3)
EDPL 631 Professional Development/Fieldwork I (1)
Fall Semester (2004)
EDPL 620 Instructional Leadership of the Collaborative Inclusive School (3)
EDPL 621 Law and School Management (3)
EDPL 631 Professional Development/Fieldwork I (1)
Spring Semester (2005)
EDPL 622 School Finance and Principles of Applied Leadership (3)
EDPL 623 Understanding and Influencing Organizations in Diverse Communities (3)
EDPL 632 Professional Development/Fieldwork II (2)

## Summer Session II (2005)

EDPL 624 Human Resource Management in Education Settings (3)
EDPL 625 Building a Collaborative, Inclusive Learning Community (3)
EDPL 632 Professional Development/ Fieldwork II (2)
EDUC 616 Research Project * (1)
*Continuous Registration of One Credit Per Term Required Until Research Project Complete

## ENGLISH: LITERATURE AND WRITING

## PROGRAMS

- 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
- Bachelor of Arts In English with an emphasis in English Education Preparation, Pre-Credential
- Certificate in Technical Writing
- Minor in English

The major in English at California State University Channel Islands approaches the study of Literature, Writing and Criticism in an interdisciplinary context. Students develop a sound foundation in all three areas. They develop analytical and critical skills as well as 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 the English language, literature written in English, and other literatures in translation.

Course work in the English: Literature and Writing program is completed in three areas. Foundation courses provide the tools for intellectual discussion of materials. Interdisciplinary courses provide connections with different ideas, approaches and ways of knowing. The required sequence provides 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, Multicultural Literature, English Education Preparation, or a certificate in Technical Writing.

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.

CAREERS: The B.A. in English prepares students for graduate programs in English, Linguistics, Comparative Literature, Creative Writing, Journalism, and Secondary Education. English majors, trained in logical thinking, interpretative reading, and effective writing also do very well on the LSAT exams for law schools. The major is also excellent preparation for a variety of creative professions such as: editor for a publishing company, book agent, magazine editor, newspaper reporter, teacher of English abroad, free-lance magazine writer, script reader, speech writer, advertising copy writer, and director of communications for businesses.

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## 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 103 or ENGL 105). In addition, the following 12 units of 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 (27 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 Language Structure and Linguistics (3)
ENGL 326 Major British and European Authors (3)
ENGL 327 Major American Authors (3)
ENGL 330 Writing in the Disciplines (3)
ENGL 410 Shakespeare (3)
ENGL 420 Literary Theory (3)
ENGL 449 Perspectives on Multicultural Literature (3)
ENGL 499 Capstone Project/ Senior Seminar (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 sequences. (Note that ENGL 449 is a required course and can double-count for both the core requirement and as half of the required sequence, with three units total credits given; students who elect this sequence will take three additional elective units.)

Sequence A:
ENGL 449 Perspectives on Multicultural Literature (3)
Plus one of the following:
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)
OR
Sequence B:
ENGL 460 Perspectives in Creative Writing (3)
Plus one of the following:
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)
OR

## Sequence C:

ENGL 475 Language in Social Context (3)
ENGL 477 Adolescent Literature (3)
OR

## Sequence D:

ENGL 482 Technical Writing* (3)

## Plus one of the following:

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.

Electives: (6 units):
COMM/EDUC 345 Media Literacy And Youth Culture (3)
ENGL 328 Mythology (3)
ENGL 333 Multicultural Drama in Performance/ Production (3)
ENGL 334 Narratives of Southern California (3)
ENGL 335 American Ethnic Images in Novels, Film and Art (3)
ENGL 337 Literature of the Environment (3)
ENGL 338 Science and Conscience (3)
ENGL 339 Psychology and Literature (3)
ENGL 340 Business and Economics in American Literature (3)
ENGL 378 Contemporary Native American Authors: Telecourse (3)
ENGL 400 Contemporary Literature (3)
ENGL 412 Drama of Ancient Greece (3)
ENGL 431 European Renaissance Literature and Art (3)
ENGL 432 Arts of the Harlem Renaissance (3)
ENGL 433 Gay/Lesbian/Bisexual/Transgender Studies (3)
ENGL $450 \quad$ 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 455 Bilingual Literary Studies/Estudios literarios bilingües (3)
ENGL 456 Fiction by Women Authors (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 474 Approaches To English Grammar (3)
ENGL 478 Writing And Metacognition (3)
ENGL 482 Technical Writing (3)
ENGL 483 Technical Visual Communication (3)
ENGL 484 Technical Writing for the Sciences (3)

## REQUIRED SUPPORTING AND OTHER GE COURSES (69 units):

Electives (15)
American Institutions Requirement (6)
General Education (48)

## EMPHASIS IN CREATIVE WRITING (12 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 following genres. Students selecting this emphasis must choose Sequence $B$ above plus nine units from the following:
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)
PLUS
ENGL 465 Creative Writing Project (3)

## EMPHASIS IN MULTICULTURAL LITERATURE (12 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, nonfiction, poetry, drama and film) in one of the following course areas. Students selecting this emphasis must choose Sequence A above plus nine units from the following:

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)

## PLUS

ENGL 454 Multicultural Literature Project/Seminar (3)

## EMPHASIS IN ENGLISH EDUCATION, PRECREDENTIAL (12 units)

The English Education Emphasis gives the English major an opportunity to gain the coursework and experience necessary to pursue a teaching credential in English at the secondary level. This program is designed to prepare the student to succeed on the state subject examination and may fulfill a waiver requirement in lieu of the examination (pending state approval). Students selecting this emphasis must choose sequence $C$ above plus the following nine units*:

COMM 345 Media Literacy And Youth Culture (3)
ENGL 474 Approaches To English Grammar (3)
ENGL 478 Writing And Metacognition (3)

## PLUS

EDUC 330 Introduction to Secondary Schooling (3)
*Students in this emphasis need to complete a specialized list of English and communications courses that will likely affect their elective and GE choices. Annual consultation with an advisor in English is required for students in this emphasis.

## REQUIREMENTS FOR THE CERTIFICATE IN TECHNICAL WRITING (18 units):

(Open to All Students)
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 Project/Seminar course, which may be an internship or a project the student chooses in consultation with his or her advisor. Courses may not fulfill the "required sequence" in the Literature and Writing major as well as count toward the certificate. The certificate requires each of the following:
ENGL 310 Research Methods (3)
ENGL 330 Writing in the Disciplines (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/Seminar (3)

## REQUIREMENTS FOR THE MINOR IN ENGLISH (24 units)

The English minor provides non-majors with the opportunity to explore literature and become more involved with the writing process. The Literature and Writing minor is an excellent addition to the baccalaureate degree for all majors. A minor in English requires a grade of C or better in each course.

## Lower Division requirements (12 units):

ENGL 120 American Literature I (3)
ENGL 150 British/European Literature I (3)
ENGL 220 American Literature II (3)
ENGL 250 British/European Literature II (3)
Upper Division Requirements (12 units)
ENGL 310 Research Methods (3)
ENGL 330 Writing in the Disciplines (3)
ENGL 410 Shakespeare (3)
Plus one of the following:
ENGL 326 Major British and European Authors (3)
ENGL 327 Major American Authors (3)
ENGL 328 Mythology (3)
ENGL 333 Multicultural Drama in Performance/ Production (3)
ENGL 334 Narratives of Southern California (3)
ENGL 335 American Ethnic Images in Novels, Film and Art (3)
ENGL 337 Literature of the Environment (3)
ENGL 338 Science and Conscience (3)
ENGL 339 Psychology and Literature (3)
ENGL 340 Business and Economics in American Literature (3)
ENGL 378 Contemporary Native American Authors: Telecourse (3)
ENGL 400 Contemporary Literature (3)
ENGL 412 Drama of Ancient Greece (3)
ENGL 420 Literary Theory (3)
ENGL 431 European Renaissance Literature and Art (3)
ENGL 432 Arts of the Harlem Renaissance (3)
ENGL 433 Gay/Lesbian/Bisexual/Transgender Studies (3)
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 455 Bilingual Literary Studies/Estudios literarios bilingües (3)

## ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

## PROGRAMS OFFERED

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

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.

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: This curriculum prepares students for professional careers in Environmental Science and Resource Management and for subsequent graduate study. 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 might pursue a Ph.D. in Environmental Science at UCLA or in Environmental Science and Policy at UC Santa Barbara.

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## REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT (120 units)

Lower Division Requirements (34-36 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)
ESRM 100 Introduction to Environmental Science and Resource Management (3)
MATH 140 Calculus for Business Applications (3) OR
MATH 150 Calculus I (4)
(MATH 151 Calculus II is also recommended)
GEOL 121 Physical Geology (4)
OR
GEOL 122 Historical Geology (3)
One of the following:
MATH 202 Biostatistics (3)
MATH 329 Statistics for Business and Economics (3)
MATH 352 Probability and Statistics (3)
Upper Division Requirements (28 units):
BIOL 433 Ecology and the Environment (4)
ECON 362 Environmental Economics (3)
ENGL 337 Literature of the Environment (3)
ESRM 313 Conservation Biology (3)
ESRM 328 Introduction to Geographical Information Systems (3)
ESRM 329 Environmental Law and Policy (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 an emphasis in Environmental Science or Resource Management and take the associated coursework.

## REQUIREMENTS FOR AN EMPHASIS IN ENVIRONMENTAL SCIENCE (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)
ENGL 330 Writing in the Disciplines (3)
ESRM 481 Topics in Environmental Pollution (3)
MATH 430 Research Design and Data Analysis (3)
PHYS 201 General Physics II (4)

## REQUIREMENTS FOR AN EMPHASIS IN RESOURCE MANAGEMENT (16 units)

ECON 488 Applied Managerial Econometrics (4)
Two of the following courses:
ESRM 462 Coastal and Marine Resource Management (3)
ESRM 463 Water Resources Management (3)
ESRM 464 Land Use Planning and Agricultural Management (3)

A total of six units from the following courses:
ECON 443 Capital Theory (3)
ECON 464 Natural Resource Economics (3)
ECON 480 Topics in Environmental and Natural Resource Economics (3)
ENGL 330 Writing in the Disciplines (3)
ESRM 332 Human Ecology (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)
Title V, United States History, Constitution and
American Ideals (6 units)
Other GE Courses (18)

## 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 103 Stretch Composition (3)
OR
ENGL 105 Composition and Rhetoric I (3)
ESRM 100 Introduction to Environmental Science and Resource Management (3)
Title V, United States History, Constitution and
American Ideals (3)
Sophomore Year (27-29 units):
GEOL 121 or 122 (3-4)
MATH 140 or MATH 150 (3-4)
MATH 202, 329 or 352 (3)
Title V, United States History, Constitution and
American Ideals (3)
Elective Courses (9)
GE courses (6)
Junior Year (31 units):
BIOL 433 Ecology and the Environment (4)
ECON 310 or ECON 329 (3)
ECON 362 Environmental Economics (3)
ENGL 337 Literature of the Environment (3)
ESRM 313 Conservation Biology (3)
ESRM 328 Introduction to Geographical Information Systems (3)
ESRM 329 Environmental Law and Policy (3)
Elective in the Emphasis (3)
GE courses (6)

## Senior Year (29 units):

ESRM 499 Capstone (3)
GEOL 321 Environmental Geology (3)
Required Course in the Emphasis (3)
Required Course in the Emphasis (4 or $2+2$ )
Electives in the Emphasis (16)

## REQUIREMENTS FOR THE MINOR IN ENVIRONMENTAL SCIENCE and RESOURCE MANAGEMENT (23 units)

The Environmental Science and Resource Management minor provides non-majors with the opportunity to explore environmental issues and examine human impacts on natural systems. It provides students with an understanding of how their personal choices affect the environment around them. In addition, it equips students for further study in environmental science, law, policy, or management.

## Lower Division Requirements (7 units): <br> ESRM 100 Introduction to Environmental Science and Resource Management (3)

BIOL 200 Principles of Organismal and Population Biology (4)

Upper Division Requirements (13 units):
BIOL 433 Ecology and the Environment (4)
ECON 300* Fundamentals of Economics (3)
ECON 362 Introduction to Environmental
Economics (3), OR
ENGL 337 Literature of the Environment (3)
ESRM 329 Environmental Law and Policy (3)
Upper Division Electives (3 units):
Any other 300-400 level ESRM course (3)

* ECON 110 Principles of Microeconomics (3) and ECON 111 Principles of Macroeconomics (3) may be substituted for ECON 300.



## HISTORY

## PROGRAMS OFFERED

- Major In History
- Minor in History

As a discipline that documents and interprets continuity and change through time, California State University Channel Islands' History Program prepares students to research, analyze, as well as communicate ideas, verbally and in the written form. An emphasis of the program is to examine events from local and global perspectives. In this regard, a defining aspect of the History Program consists of a cutting-edge series of courses that emphasize the United States' relationship with the Pacific Rim, encompassing the Americas, the Pacific Islands, and Asia.

In support of the University's commitment to an interdisciplinary education, the History Program affords students the opportunity to integrate into their plan of study cross-listed history courses as well subjects outside the discipline to be utilized as part of their electives. Furthermore, the History Program promotes communitybased applied research by placing student interns within public, private, and non-profit institutions as part of its Capstone Course.

CAREERS: The History program trains students in the art of inquiry and effective communication. In this respect, students with a History degree will be prepared to continue their graduate and post-baccalaureate education. Many history students also find careers in law, education, journalism, or foreign service.

## CONTACT INFORMATION

history@csuci.edu

## FACULTY

Nian-Sheng Huang, Ph.D. Associate Professor of History Chair, History Program Professional Building, Room 213 (805) 437-8879
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REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN HISTORY (120 units)
(All courses listed below are 3 units)
Lower Division Required Courses (15 units)
6 units of World Civilizations:
HIST 211 World Civilizations: Origins to 1500*
HIST 212 World Civilizations: Since 1500*
6 units of American History
HIST 270 The United States to 1877†
HIST 271 The United States Since 1877†
3 units in Methodology
HIST 280 The Historian's Craft*

* Courses fulfilling the GE requirement
$\dagger$ Courses fulfilling the Title V requirement
Upper Division Required Courses (31-33 units)
9-12 units in History of North America
Students should select at least three courses from the following list:

HIST 333 History of Southern California Chicana/o Art
HIST 334 Narratives of Southern California
HIST 335 American Ethnic Images in Novels and Film
HIST 349 History of Business and Economics in North America
HIST 350 Chicano History and Culture
HIST 369 California History and Culture
HIST 370 United States Colonial History
HIST 371 The Founding of the United States
HIST 372 United States Industrialism and Progressivism
HIST 373 American Labor History
HIST 374 United States since 1945
HIST 402 Southern California History and Culture
HIST 403 The American Intellectual Tradition
HIST 420 History of Mexico
HIST 421 Revolutionary Mexico, 1876-1930
HIST 470 People and Everyday Life in Early
America

## 9-12 units in World History

Students should select at least three courses from the following list:

HIST 310 History of the Mediterranean
HIST 319 European History, 1871-1945
HIST 320 European History 1945 to the Present
HIST 340 History and Psychology of Nazi
Germany
HIST 365 Themes in World History
HIST 366 Oceans of World History
HIST 367 Environmental History
HIST 380 Pacific Islands History
HIST 391 Traditional China
HIST 392 Modern China

HIST 393 Contemporary China
HIST 394 Traditional Japan
HIST 395 Modern Japan
HIST 396 East Asia: Then and Now
HIST 410 Global Perspectives on the History of Science
HIST 436 Psychology and History of Asian Warrior Cultures
HIST 442 African Diaspora

## 6 units in Thematic History

Students should select two courses from the following list:

HIST 365 Themes in World History
HIST 366 Oceans of World History
HIST 367 Environmental History
HIST 410 Global Perspectives on the History of Science
HIST 412 Law and Society
HIST 413 World Religions and Classical Philosophy
HIST 414 Women in History
HIST 415 Society and Radicalism

## 3 units in Historiography

HIST 490 Historiography
1-3 units in Capstone Project or Internship or Service Learning
HIST 499A Capstone Project
HIST 499B Internship
HIST 499C Service Learning
46-48 units required for the major
24-26 units of free electives in any discipline
48 units of General Education
120 Total Units for Graduation

## About double-counting for History Majors:

1) Courses double counted from the requirements by both the History Program and GE would increase the standard units (24-26) for free electives.
2) According to the GE requirements, students should take nine units from those interdisciplinary courses numbered $330-349$ and 430-449, and six of the nine units can be double counted. History majors are encouraged, but not required, to select from the following interdisciplinary courses offered by the History Program:

HIST 333 History of Southern California Chicana/o Art
HIST 334 Narratives of Southern California
HIST 335 American Ethnic Images in Novels and Film
HIST 340 History and Psychology of Nazi Germany
HIST 349 History of Business and Economics in North America
HIST 436 Psychology and History of Asian Warrior Cultures
HIST 442 African Diaspora

## REQUIREMENTS FOR THE MINOR IN HISTORY (18 units)

Affords non-majors the opportunity to investigate the historical complexities of societies and movements and their legacies in the present. Therefore the minor serves as a primer to the scholarly appreciation of the past.

## Lower Division Requirements (9 units):

Students must select three lower division History courses. They must select at least one course from each area listed below:

## World History:

HIST 211 World Civilizations: Origins to 1500 (3)
HIST 212 World Civilizations: Since 1500 (3) OR
articulated transfer courses of African, Asian, Latin American or Western Civilization based on history advisor's approval may be substituted

## American History:

HIST 270 The United States to 1877 (3)
HIST 271 The United States since 1877 (3)
HIST 272 Constitutional History of the U.S. (3)
Methodology:
HIST 280 The Historian's Craft (3)
Upper Division Requirements (9 units):
Students must select any three courses from the program's upper-division offerings.


## FACULTY

The following faculty members have expressed a willingness to serve as advisors for a student's Program of Study in the Concentrated Studies Option in the indicated area.

William Adams (Anthropology, Social Science)
Mary Adler (Single-subject English)
Simone Aloisio (Single-subject chemistry, Chemistry, Environmental Chemistry, Forensic Science)
Harley Baker (Human Development)
Terry Ballman (Humanities)
Frank Barajas (History and Social Science)
Bob Bleicher (Education)
Rainer Buschmann (History and Social Science)
Renny Christopher (Gender Studies)
Maria Denney (Special Education, Child Development)
Amy Denton (Biology, Environmental Biology)
Nikolaos Diamantis (Mathematics)
Geoff Dougherty (Physics, Medical Imaging)
Jesse Elliott (Mathematics)
Scott Frisch (Political Science)
Jorge Garcia (Mathematics)
Ivona Grzegorczyk (Mathematics)
Phil Hampton (Premedical Studies, Single-subject Chemistry, Chemistry, Business and Science of Drug Discovery)
Nian-Sheng Huang (History)
Antonio Jimenez (Spanish)
Liz King (Art and Multimedia)
Nancy Mozingo (Single-Subject Science-Biology, Biology, and Pre-Professional Programs)
Joan Peters (Creative Writing-fiction and non-fiction, Oral History and Journalism)
Don Rodriguez (Environmental Resource Management)
Peter Smith (Computers and Computer Science)
Kevin Volkan (Social Sciences)
Ching-Hua Wang (Single-Subject Science-Biology, Biology, and Pre-Professional Programs)
Amy Wallace (Library and Information Science)
William Wolfe (Computers and Computer Science)
Mark Zacharias (Environmental Studies)

## CREDENTIAL INFORMATION

The Liberal Studies Teaching and Learning Option has been designed to meet the State-approved Multiple Subject Matter Preparation Program. Completion of the Liberal Studies Teaching and Learning Option, or a passing score on the CSET, and completion of prerequisite courses are required for entrance into CSU Channel Islands’ Multiple Subject Credential Program. For more information about credential programs see the Education section and contact Suzanne Garrett, Credential Advisor.

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

## REQUIREMENTS FOR THE CONCENTRATED STUDIES OPTION (57 units)

In addition to the General Education and Title V requirements, this option consists of a 9 unit Core, a 45 unit Program of Study, and a 3 unit Capstone. The Program of Study must be developed with a tenure-track faculty advisor and a preliminary Program of Study contract must be submitted within the first sixty (60) days after a student begins to take classes at CSUCI. General Education and Title V may not be doublecounted with the requirements for this Option.

## Required Core Courses (9 UNITS):

Choose one course from each of the following Core areas.

## Advanced Writing Course (3): <br> ENGL 330 Writing in the Disciplines (3) <br> ENGL 460 Perspectives in Creative Writing (3) <br> ENGL 478 Writing and Metacognition (3) <br> ENGL 482 Technical Writing (3) <br> ENGL 484 Technical Writing in the Sciences (3)

Multicultural Studies (3):
Any course approved for General Education Area C3b. Students who are pursuing a pre-credential Program of Study should consider taking EDUC 512 to meet this requirement, since EDUC 512 is also a prerequisite for the credential programs.

## Computer Literacy (3):

COMP 101 Computer Literacy (3)

## Program of Study (45 UNITS)

The Program of Study must be arranged with a tenure track faculty advisor and must be a clearly focused, interdisciplinary program. Students are strongly encouraged to pursue a minor as part of the Program of Study. A minimum of 21 units must be upper-division. Community college and CSUCI courses may be used in the Program of Study provided that they are approved by the faculty advisor and are not used to meet General Education or Title V requirements. Students must select a tenure-track faculty member advisor within the first 60 days after a student begins taking coursework at CSU Channel Islands and submit their preliminary Program of Study to the Advising Center. A list of faculty who are willing to serve as advisors to Concentrated Studies

Option students is provided at the beginning of this catalog description.

Program of Study examples include, but are not limited to, Pre-Medical or Pre-Dental Studies, Teaching (Grades K-8), and Interdisciplinary Studies. The Teaching (Grades K-8) Program of Study allows a student greater flexibility in designing their preparation for taking the California Subject Matter Examination for Teachers (CSET); a description of the coursework in this Program of Study is provided on the Liberal Studies website: http://liberalstudies.csuci.edu.

## Capstone (3 units):

All students must complete a three-unit capstone project including a minimum of one unit of LS 499 during the final year prior to graduation.
LS 492 Individual Research (1-2)
LS 494 Service Learning/Internship (1-2)
LS 497 Directed Studies (1-2)
LS $499 \quad$ Capstone Project (1-3)
Required Supporting and other GE Courses (63 units):
Electives (9)
If not met in prior coursework, electives should be selected to meet the Multicultural and Foreign Language Graduation Requirements.
American Institutions Requirement (6)
General Education (48)

## REQUIREMENTS FOR THE TEACHING AND LEARNING OPTION (84-87 units)

A total of 84-87 units are required for the Bachelor of Arts in Liberal Studies, Teaching and Learning Option. These units include General Education, Liberal Studies Core, Emphasis, and Capstone courses. Requirements for the Emphases are available from the Advising Center or on the Liberal Studies website:
http://liberalstudies.csuci.edu. Three of the six units of the American Institutions Requirement (Title V) and 3639 units of General Education are included in the Core for the Teaching and Learning Option. Students must select one of the specified areas of emphasis.

## Required Core Courses (76-79 units):

1. Reading, Language, and Literature (15-18 units)

COMM 210 Interpersonal Communication (3)
ENGL 105 Composition and Rhetoric (3)
OR
ENGL 102 Stretch Composition I (3)
AND
ENGL 103 Stretch Composition II (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 (21 units):

HIST 211 World Civilizations: Origins to 1500 (3) OR
ANTH 310 Civilizations of an Ancient Landscape:
World Archeology (3)
OR
HIST 365 Themes in World History (3)
HIST 212 World Civilizations: Since 1500 (3)
OR
HIST 365 Themes in World History (3)
HIST 275 The United States to 1900 (3)
HIST 369 California History and Culture (3)
ANTH 102 Cultural Anthropology (3)
EDUC 101 Introduction to Education (3)
EDUC 320 Education in Modern Society (3)
3. Mathematics ( 6 units):
$\begin{array}{ll}\text { MATH 208 } & \text { Modern Math for Elementary Teaching I: } \\ \text { Mumbers and Problem Solving (3) } \\ \text { MATH 308 } & \begin{array}{l}\text { Modern Math for Elementary Teachers II: } \\ \text { Geometry, Probability and Statistics (3) }\end{array}\end{array}$
4. Science ( 15 units):

BIOL 170 Foundations of Life Science (4)
PHSC 170 Foundations of Physical Science (4)
COMP 101 Computer Literacy (3)
GEOL 300 Foundations of Earth Science (4)
5. Visual and Performing Arts (6 units):

ART $100 \quad$ Understanding Fine Art Processes (3)
ART 102 Multicultural Children's Art (3)
ART 110 Prehistoric Art to the Middle Ages (3) OR
ART 111 Renaissance to Modern Art (3)
ART 112 Arts of the Eastern World (3) OR
ART 331 Art and Mass Media (3) OR
ART $332 \quad$ Multicultural Art Movements (3)
ART 333 History of Southern California Chicano/a Art (3)
ENGL/TH 333 Multicultural Drama (3) OR
MUS 330 Jazz in America (3) OR
MUS 343 Teaching Music to Children (3)
6. Physical Education and Health (4 units):

PHED 302 Motor Learning, Fitness and Development in Children (2)
HLTH 322 Health Issues in Education (2)

## 7. Human Development, Learning and Cognition (6 units): <br> PSY 210 Learning, Cognition and Development (3) SPED 345 Individuals with Disabilities in Society (3)

## 8. Capstone (3 units):

All students must complete a three-unit capstone project including a minimum of one unit of LS 499 during the final year prior to graduation.

LS 492 Individual Research (1-2)
LS 494 Service Learning/Internship (1-2)
LS 497 Directed Studies (1-2)
LS 499 Capstone Project (1-3)

## REQUIRED EMPHASIS (9 units)

Nine additional units must be taken from one of the following Emphases:

Reading, Language and Literature
History and Social Science
Mathematics
Science
Visual and Performing Arts
Physical Education and Health
Human Development and Psychology
Bilingual Studies: Spanish/ English
Required Supporting and Other GE Courses (32-35 units):
Electives (17-23)
Title V, National and State Government Requirement (3) General Education outside the Core (9-12)

Additional Courses (0-10):
Students should consider taking EDUC 510, EDUC 512, EDUC 520, and EDUC 521 as electives since these courses are prerequisites for admission to the MultipleSubject Teaching Credential.


## REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS (120 units)

Lower Division Requirements (34-35 units):
MATH 150 Calculus I (4)
MATH 151 Calculus II (4)
MATH 230 Logic and Mathematical Reasoning (3)
MATH 250 Calculus III (3)
MATH 240 Linear Algebra (3)
COMP 105 Computer Programming Introduction (4)
Additional Computer Science course (2-4) OR
COMP 150 Object Oriented Programming
PHYS 200 General Physics I (4)
either PHYS 201 and one additional science course
or 2 semester science sequence in sciences (7-8)
Upper Division Requirements (20 units):
MATH 300 Discrete Mathematics (3)
MATH 350 Differential Equations and Dynamical Systems (3)
MATH 331 History of Mathematics (3)
MATH 352 Probability and Statistics (3)
MATH 351 Real Analysis (3)
MATH 451 Complex Analysis (3)
MATH 499 Senior Colloquium (1) (twice)

## Emphasis (6-9 units)

By the sophomore year the student should decide on one of the emphases listed in the Proposed Plan of Study (below). Students planning on teaching mathematics have to choose Education Emphasis to meet the Single Subject Matter Preparation requirements.

## ELECTIVES IN MAJOR (9-13 units):

Note:

1) courses used for the emphases cannot be counted as elective.
2) Students planning on teaching math have to choose MATH 492 for field experience requirement. Other courses recommended for teaching careers are marked with T.

MATH 318 Mathematics for Secondary School Teachers (3-T)
MATH 320 Mathematics and Fine Arts (3-T)
MATH 354 Analysis of Algorithms (3)
MATH 393 Abstract Algebra (3-T)
MATH 430 Research Design and Data Analysis (3)
MATH 429 Operations Research (3)
MATH 450 Partial Differential Equations and Mathematical Physics (3)
MATH 448 Scientific Computing (3)
MATH 480 Differential and Riemaniann Geometry (3)
MATH 482 Number Theory and Cryptography (3-T)
MATH 484 Algebraic Geometry and Coding Theory (3)
MATH/PHYS 345 Digital Image Processing (3)
MATH/PHYS 445 Image Analysis and Pattern
Recognition (3)
MATH/COMP 452 Computational Bioinformatics (3)
MATH 490 Topics in Mathematics (3)
MATH 492 Internship (3-T - required)
MATH 494 Independent Study (3)
MATH 497 Directed Study (3)
MATH 499 Senior Colloquium (1)

## Required Supporting and other GE Courses

Elective Courses (16)
General Education and Title V (34)

## PROPOSED COURSE OF STUDY

Freshman Year (30-32 units):
ENGL 105 Composition and Rhetoric (3, G.E. A2) OR
ENG 102 and 103 (6)
MATH 150 Calculus I (4, G.E. B3)
COMP 150 Object Oriented Programming OR
COMP 105 Computer Programming Introduction (3-4, G.E. B4)
G.E. Section A, or C (3)

MATH 151 Calculus II (4)
MATH 230 Logic and Mathematical Reasoning (3, G.E. A3)
Computer Science Course (2-4)
PHYS 200 General Physics I (4, G.E. B2)
G.E. Section A, C, D, or E (3)

Sophomore Year (22-23 Units):
MATH 250 Calculus III (3)
MATH 240 Linear Algebra (3)
MATH 300 Discrete Mathematics (3)
MATH 350 Differential Equations and Dynamical Systems (3)
Select one interdisciplinary G.E. (3)
Recommended:
PHYS 434 Biomedical Imaging (3)
COMP 447 Societal Issues in Computing (3)
COMP 449 Human Computer Interactions (3)
Select either PHYS 201 and one additional science
course or 2 semester science sequence in sciences (7-8, G.E. B1 and B2]

## Emphasis

By the sophomore year, in order to plan their electives, students should decide on one of the following emphases and take all courses listed in the section.

## Biomathematics (6):

Students selecting this emphasis should take BIOL 201.
MATH 430 Research design and Data Analysis (3, G.E. B1,B3, Interdisciplinary)
COMP 452 Computational Bioinformatics (4)

## Computer Science (9):

Students selecting this emphasis should take COMP 150 and COMP 151 for the computer science requirements COMP 350 Software Engineering (3)
MATH 488 Scientific Computing (3, G.E. B4,B3, Interdisciplinary))
MATH 454 Analysis of Algorithms (3)
Physics (6):
Students selecting this emphasis should take PHYS 200
and 201(8) as the science sequence.
MATH 350 Partial Differential Equations and Mathematical Physics (3)
Upper division Physics course (3)

Applied Physics (6):
Students selecting this emphasis should take PHYS 200 and 201(8) as the science sequence.
COMP/PHYS 345 Digital Image Processing (3)
COMP/PHYS 445 Image Analysis and Pattern Recognition (3)

Actuarial Sciences/Economics (9):
ECON 300 Fundamentals of Economics (3, G.E. D)
ECON 486 Introduction to Econometrics (3)
MATH 429 Operations Research (3)
Business Management (9):
ECON 300 Fundamentals of Economics (3, G.E.D)
MATH 429 Operations Research (3)
Upper Division Management Course (3)
Cognitive Science (9):
MATH 430 Research Design and Data Analysis (3)
PSY 210 Learning, Cognition and Development
Upper Division Cognitive Psychology Course (3)
Education (9):
EDUC 512 Equity, Diversity and Foundation of Schooling
MATH 318 Mathematics for Secondary School Teachers (3)
MATH 393 Abstract Algebra (3)
Applied Mathematics:
MATH 450 Partial Differential Equations and Mathematical Physics (3)
MATH 448 Scientific Computing (3, G.E. B3, B4, Interdisciplinary)
MATH 429 Operations Research (3)

## Digital Design:

MATH 393 Abstract Algebra (3)
ART 108 Visual Technologies (3)
ART 312 or 314 Digital Media Art
Choice of other emphases or individualized emphasis is possible upon approval of the mathematics advisor.

Junior Year (15-18 Units + G.E):
MATH 331 History of Mathematics (3, G.E. B3, D, Interdisciplinary)
MATH 352 Probability and Statistics (3)
MATH 351 Real Analysis (3)
Choose one of the groups from the Emphasis Courses listed above.

Senior Year (14-15 Units+ G.E.):
MATH 451 Complex Analysis (3)
MATH 499 Senior Colloquium (1) Fall
MATH 499 Senior Colloquium (1) Spring
Choose 3 or more Math Electives (9-12)

## TOTAL REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS DEGREE (120 units)

Lower Division Required Major Courses (34-35)
Upper Division Required Major Courses (20)
Upper Division Elective and Emphasis Major Courses (15-19)
Electives (16)
General Education Included in Major Requirements (18)
General Education and Title V Requirements (34)

## REQUIREMENTS FOR THE MINOR IN MATHEMATICS (20 units)

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MATH 150 Calculus I (4)
MATH 151 Calculus II (4)
MATH 300 Discrete Math (3)
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In addition, students should select three upper division courses (9 units) from the Mathematics program approved by the advisor.


## POLITICAL SCIENCE

## PROGRAMS OFFERED

- Minor in Political Science

Political Science is the study of government, public policies and political behavior. Political Science uses both humanistic and scientific perspectives and skills to examine all countries and regions of the world. The minor in Political Science exposes students in other majors to the major subfields of Political Science International Relations, Political Theory, Comparative Politics and American Politics.

CAREERS: The Political Science minor prepares students for careers in federal state and local governments, law, business, international organizations, nonprofit associations and organizations, campaign management and polling, journalism, education, electoral politics, research and advocacy. In addition, the minor in Political Science prepares students for graduate and professional study in the field of Political Science as well as International Relations and Public Administration.

## CONTACT INFORMATION <br> FACULTY:

Scott Frisch, PhD.
Associate Professor of Political Science
Professional Building, Room 215
Phone: (805) 437-2770
E-Mail: scott.frisch@csuci.edu

## REQUIREMENTS FOR THE MINOR IN POLITICAL SCIENCE (18 units)

## Lower-Division Requirements (9 Units):

POLS 102 Comparative Government (3)
POLS 103 Introduction to International Politics (3)
POLS 150 American Political Institutions (3)
Upper-Division Requirements (9 Units):
ECON 370 The World Economy (3)
ESRM 328 Introduction to Geographic Information Systems (3)
ESRM 329 Environmental Law and Policy (3)
FIN $421 \quad$ Public Financial Management (3)
HIST 412 Law and Society
POLS 301 Political Theory (3)
POLS 315 Congress and the Presidency (3)
POLS 320 Public Administration (3)
POLS 325 American Public Policy (3)
POLS 494 Independent Research (3)

## PSYCHOLOGY

## PROGRAMS OFFERED

- Bachelor of Arts in Psychology
- Minor in Psychology
- Minor in Developmental Psychology

Psychology is the study of the aspects of mind related to human nature, our relationships to each other, and our relationship to the world at large. While psychology is often scientific in its outlook, it also includes ways of knowing and understanding the world based on philosophy and the arts. In this sense psychology is one of the broadest of disciplines, encompassing a wide range of academic areas and endeavors.

Psychology recognizes the diverse cultural, economic, ethnic, historical, and political viewpoints that exist in a multicultural world. The discipline seeks to understand how these viewpoints interact with individual and group behavior in order to encourage a rich pluralism of human interaction.

The psychology program at CSUCI is unique in two aspects. The first is that students will have some exposure to all major areas of psychology through a required sequence of core courses. Included in these courses is a year-long upper division course in quantitative reasoning. This core-course curriculum borrows an ideology from the best undergraduate psychology programs, producing students with knowledge in all branches of psychology as well as methodological skills that can be widely applied within and outside of the discipline.

The second unique aspect of the CSUCI psychology program is its interdisciplinary course offerings. These interdisciplinary courses offer students a chance to experience the intersection of psychology with other disciplines. This closely follows how psychology is understood and practiced in the world at large.

CAREERS: Graduates of the CSUCI undergraduate psychology program will be prepared to work in a variety of settings. Typically, psychology graduates do well finding jobs. However, we recognize that nationally approximately $23 \%$ of undergraduate psychology majors go on to graduate school for masters, doctorates, or other professional degrees. Therefore, the psychology faculty at CSUCI is committed to helping students gain admittance into graduate or professional schools.

## CONTACT INFORMATION

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## FACULTY

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## REQUIREMENTS FOR THE B.A. IN PSYCHOLOGY (120 UNITS)

Lower Division Required Courses (15 units):
Psychology majors must take each of these courses:
PSY 100 Introduction to Psychology (3)
PSY 202 Statistics (same as BIO 202 and Math 202) (3)

PSY 211 Cognitive and Learning Psychology (3)
PSY 213 Developmental Psychology (3)
PSY 217 Theories of Personality (3)
Students will need to obtain a grade of C- or better to apply these courses to the psychology major. Students may substitute equivalent courses taken at other universities in each area by articulation agreement or by permission of the Psychology program. 9 units from these required lower division courses may be counted towards GE requirements.

Upper Division Required Core Courses (22 units):
Psychology majors will normally take these courses at CSUCI. Students may substitute equivalent courses taken at other universities in each area by articulation agreement or by permission of the Psychology program. All courses must be passed with a grade of C - or better to apply towards the Psychology major.

| PSY 300 | Psychological Research and Statistical <br> Methods with Lab I, (3) <br> Psychological Research and Statistical <br> PSY 301 |
| :--- | :--- |
| Methods with Lab II, (3) |  |
| PSY 310 | History and Systems of Psychology, (3) <br> PSY 312 |
| Social Psychology, (3) |  |

PSY 313 Clinical and Abnormal Psychology, (3)
PSY 314 Behavioral Neuroscience, (4)
PSY 316 Sensation And Perception, (3)

## Upper Division Psychology Electives (12 units):

Psychology majors must take 12 units of Upper Division Psychology Electives. These courses range from 330-499 (up to 6 units from interdisciplinary Psychology courses number 330-349 or 430-449 may be double-counted towards the upper division GE requirement). Not all courses will be taught in all years. Students must obtain a grade of C - or better (or CR) in each of these courses to apply them to the psychology major. The current list of Upper Division Elective courses in Psychology is as follows:

PSY 333 Measurement and Testing of Groups and Individuals (3)
PSY 337 Psychological Ethics and Moral Philosophy (3)
PSY 338 Psychology of Art and Artists (3)
PSY $339 \quad$ Psychology in Literature (3)
PSY $340 \quad$ History and Psychology of Nazi Germany (3)
PSY $344 \quad$ Psychology and Traditional Asian Thought (3)
PSY 345 Individuals with Disabilities and Society (3)
PSY 346 Psychology of Motivation (3)
PSY 415 Assessment of Children (3)
PSY 436 Psychology and History of Asian Warrior Cultures (3)
PSY $441 \quad$ Psychology of Space (3)
PSY 445 Adolescent Development (3)
PSY 449 Human-Computer Interaction (3)
PSY 450 Advances in Neural Science (3)
PSY 457 Criminal Behavior (3)
PSY 461 Advanced Topics in Child and Adolescent Development (3)
PSY $470 \quad$ Seminar in Freud and Object Relations Theory (3)
PSY 471 Seminar in Jungian and Archetypal Psychology (3)
PSY 473 Bizarre Behavior and Culture Bound Syndromes (3)
PSY 483 Applied Multivariate Analyses (3)
PSY 489 Advanced Topics in Psychology (3)
PSY 492 Psych Internship or Service Learning (1-3 units)
PSY 494 Independent Research in Psych (1-3 units)
PSY 497 Directed Study in Psychology (1-3 units)
PSY 499 Senior Capstone in Psychology (1-3 units)

## Require Supporting and Other GE Courses (72 units):

General Education (48 units)
Title V, United States History, Constitution and
American Ideals (6)
University electives (18 units)

## MINOR IN PSYCHOLOGY (18-19 units)

The minor in psychology gives students concentrated exposure to the philosophy, history, methods and theories related to the study of the mind and behavior. The minor in psychology is appropriate for students interested in understanding how human psychological perspectives can influence their major field of study and the world around them.

Lower-Division Requirements (9 units):

1. PSY100 Introduction to Psychology (3)
2. Two courses from the following list (6):

PSY 210 Learning, Cognition \& Development (3), OR
PSY 211 Cognition \& Learning (3)
PSY 212 Neurobiology and Cognitive Science (3)
PSY 213 Developmental Psychology (3)
PSY 217 Theories of Personality (3)
PSY 220 Human Sexual Behavior (3)
Upper-Division Requirements (9-10 units):

1. One course from the following list ( 3 units):

PSY $310 \quad$ History \& Systems in Psychology (3) PSY 312 Social Psychology (3)
PSY 313 Clinical and Abnormal Psychology (3)
PSY $314 \quad$ Behavioral Neuroscience (4)
2. Six (6) units of coursework from any psychology courses at the 300 level or above ( 6 units).

## MINOR IN DEVLOPMENTAL PSYCHOLOGY (Child \& Adolescent Emphasis) (18-19 units)

The minor in developmental psychology gives students concentrated exposure to the methods and theories related to how children and adolescents develop. Cognitive, emotional, and social perspectives will be covered as well as methods for psychological assessment. The minor in developmental psychology is appropriate for students interested in understanding how human developmental perspectives can influence their major field of study.

Lower-Division Requirements (6 units)

1. Each of the following courses ( 6 units):

PSY 210 Learning, Cognition \& Development (3), OR
PSY 211 Cognition \& Learning (3)
PSY 213 Developmental Psychology (3)
Upper-Division Requirements (12-13 units)

1. One course from the following list (3 units):

PSY $310 \quad$ History \& Systems in Psychology (3)
PSY $312 \quad$ Social Psychology (3)
PSY 313 Clinical and Abnormal Psychology (3)
PSY 314 Behavioral Neuroscience (4)
2. Three courses from the following list ( 9 units):

PSY 333 Measurement and Testing of Groups and Individuals (3)
PSY 345 Individuals with Disabilities and Society (3)
PSY 415 Assessment of Children (3)
PSY 445 Adolescent Development (3)
PSY 461 Advanced Topics in Child and Adolescent (3)

## SPANISH

## PROGRAM OFFERED

- Minor in Spanish

The Spanish minor provides students the opportunity to develop their Spanish-language skills while deepening their knowledge of the peoples and cultures of the Hispanic world. Students can choose from coursework which focuses on language, linguistics, culture, Spanish for careers, literature and art or history.

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## REQUIREMENTS FOR THE MINOR IN SPANISH (20 units)

Lower Division Requirements (8 units):
SPAN 201 Intermediate Spanish I (4)
SPAN 202 Intermediate Spanish II (4)
SPAN $211 \quad$ Spanish for Heritage Speakers I (4)
SPAN 212 Spanish for Heritage Speakers II (4)
Upper Division Requirements (12 units):
Select four courses from the following:
SPAN 301 Advanced Spanish I (3)
SPAN 302 Advanced Spanish II (3)
SPAN 304 Spanish for Careers and Professions (3)
SPAN 310 Introduction to Prose and Poetry (3)
SPAN 320 Introduction To Spanish Translation (3)
SPAN 401 Contrastive Features of Spanish and English (3)
SPAN $410 \quad$ Civilizations and Cultures of Spain (3)
SPAN 411 Civilizations and Cultures of Latin America (3)
SPAN $421 \quad$ Spanish for Educators I (3)
SPAN 422 Spanish for Educators II (3)
ART 333/HIST 333 History of Southern California Chicana/o Art (3)
ENGL 455/SPAN 455 Bilingual Literary Studies (3)


Course
Descriptions



## COURSE NUMBERING

| 100-299 | Lower-Division Courses |
| :---: | :---: |
| 300-499 | Upper-Division Courses |
| 330-349 | Interdisciplinary Courses-without prerequisites (including cross-listed courses) |
| 397 | Directed Studies Course-variable topic/ credit courses |
| 430-449 | Interdisciplinary Courses-may have prerequisites or require permission from the instructor (including cross-listed 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 |

500-599 Graduate and Teacher Credential Courses

## COURSE DESCRIPTIONS

## ACCOUNTING

## ACCT 210 FINANCIAL ACCOUNTING (3)

Three hours lecture per week
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 lecture per week
Prerequisite: ACCT 210
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 lecture per week
Prerequisite: ACCT 210 and 220 or equivalent courses Presents and analyzes the principles, methods, procedures, and applications for managerial accounting. Topics include understanding the business environment, cost concepts and classifications, joborder costing, process costing, cost behavior and relationships to volume and profits, variable costing, Activity Based Costing, profit planning, standard costs, relevant costs, capital budgeting decisions, cash flows, Economic Value Added, and financial statement analysis.

ACCT 410 INTERNATIONAL ACCOUNTING
(3)

Three hours lecture per week
Prerequisite: ACCT 210 and 220
Designed to develop a fundamental knowledge of the assumptions, environmental considerations and techniques underlying the collection and reporting of financial information on an international scale.

## ACCT 490 SPECIAL TOPICS (3)

Three hours seminar per week
Prerequisite: Consent of instructor
In-depth analysis of current topics in accounting.
Topics vary each semester. Repeatable by topic.

## ACCT 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor
Enrollment in this course is with permission of faculty member in charge. Individual internship through service learning. Graded Credit/No Credit.

## ACCT 497 DIRECTED STUDY (1-3)

Variable hours per week
Prerequisite: Consent of instructor Individual contracted study on topics or research selected by the student and faculty mentor. Repeatable for up to nine units. Graded Credit/No Credit.

## ANTHROPOLOGY

## ANTH 102 CULTURAL ANTHROPOLOGY (3)

Three hours lecture per week
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: C3b and D

## ANTH 103 HUMAN BEGINNINGS: BIOLOGICAL AND CULTURAL EVOLUTION (3)

Three hours lecture per week
Human biological and cultural evolution from 6 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 310 CIVILIZATIONS OF AN ANCIENT LANDSCAPE: WORLD ARCHAEOLOGY (3)

Three hours lecture per week
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 and including change from hunting and gathering groups to sedentary agriculturalists and pastoralists giving rise to later complex social organizations. Examines art, architecture, science, religion, trade economic and social systems.
GenEd: D

## ANTH 323 NATIVE AMERICANS OF CALIFORNIA TO THE 1850s (3)

Three hours lecture per week This course examines the development of Native American peoples and cultures in California as they adapted to diverse 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 culture 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: C3b and D

## ANTH 332 HUMAN ECOLOGY (3)

Three hours lecture per week
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 among 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 popula-tion and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars. Same as ESRM 332
GenEd: D and Interdisciplinary

## ANTH 345 HUMAN EVOLUTION AND DIVERSITY

Three hours lecture per week
Human biological evolution from the African savannah of 5 million years ago to the present, focusing upon adaptation to environmental conditions, disease, diet. Includes segments on ecology, evolutionary theory, genetics, natural selection, nonhuman 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: B2 and Interdisciplinary

## ANTH 442 THE AFRICAN DIASPORA (3)

Three hours lecture per week
Examines the dispersal of Africans to other continents over the last two thousand years. Special attention will be paid to the African slave trade, identity formation, and nationalism. The course employs interdisciplinary methods borrowed from anthropology, art history, linguistics, and literature. Same as HIST 442
GenEd: D and Interdisciplinary

## ANTH 443 MEDICAL ANTHROPOLOGY: CROSSCULTURAL PERSPECTIVES ON HEALTH AND HEALING (3)

Three hours lecture per week
This course provides a cross-cultural perspective on human health issues. Uses biological, cultural, and behavioral approaches to understanding the concepts of diseases and their treatment, ethnoscience, health, and complementary and alternative medicine placed in a global perspective.
GenEd: D and Interdisciplinary

## ANTH 490 SEMINAR IN ANTHROPOLOGY (3)

Three hours seminar per week
Prerequisite: Consent of instructor
This seminar explores a different topic each term.
Repeatable by topic

## ANTH 492 SERVICE LEARNING/INTERNSHIP (1-3)

Variable hours per week
Prerequisite: Consent of Instructor
Individual internship through service learning. Graded Credit/No Credit

## ANTH 494 INDEPENDENT STUDY (1-3)

Variable hours per week
Prerequisite: Consent of Instructor
Individual contracted study/research on topics selected by the student for further study. Graded Credit/No Credit

## ART

ART 100 UNDERSTANDING FINE ARTS PROCESSES (3)

Two hours lecture and two hours laboratory per week Entry-level art experience for non Art majors. This course integrates elements of drawing, painting, sculpture and mixed media techniques. Students gain an understanding of the function of Art in everyday life through participation in the artistic process. GenEd: C1
ART 102 MULTICULTURAL CHILDREN'S ART (3) Two hours lecture and two hours laboratory per week Hands-on creation of artistic projects emphasize the importance of art in the child's development and the understanding of multicultural art traditions in subject matter, materials and processes. Historical contexts and indigenous aesthetics are investigated as they relate to the development of primary skills and appreciation for art and the creative process. GenEd: C1, C3b

## ART 105 DRAWING AND COMPOSITION (3)

## Six hours laboratory per week

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
Explorations in basic color theory are conducted within two-and three-dimensional design contexts. Visual elements including line, shape, form and texture are explored incorporating elements of color interaction, harmony and dissonance within a variety of visual motifs.

## ART 107 LIFE DRAWING (3)

Six hours laboratory per week
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 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
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
Survey of the history of art and architecture from the European Renaissance through 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 ART OF THE EASTERN WORLD (3)

Three hours lecture per week
Exploration of painting, architecture and crafts of India, China, Japan and Southeast Asia. An examination of artistic, cultural, and historical events explores the exchange of influences and ideas related to Eastern cultures.
GenEd: C1, C3b
ART 201 PAINTING (3)
Six hours laboratory per week
Prerequisite: ART 105, 106, 107
An introduction to basic painting materials and techniques. Experiments in representational and abstract painting will explore oil, acrylic, and waterbased 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, 106, 107
An introduction to basic sculpture materials and techniques. Experiments in representational and abstract sculpture will explore a variety of threedimensional 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, 106, 107
An introduction to basic materials and rendering techniques utilized in commercial illustration including a variety of media and styles exploring quash, colored pencils, pen and ink, pastels and markers. 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, 106, 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: ART 105, 106, 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, 106, 107
An introduction to basic techniques and processes involved in the production of animation. Projects include elements of concept and story development, character design, story boarding, timing, key framing, inbetweening, and cell production leading to the creation of short works in animation.

## ART 207 CERAMICS (3)

Six hours laboratory per week
Prerequisite: ART 105, 106
Explorations into a wide variety of ceramic ideas, techniques and materials utilized in the development of hand-building methods as applied to sculptural and vessel forms. Basic competence with the potter's wheel will also be covered.

## ART 208 THE PHYSICS OF ART AND VISUAL PERCEPTION (3)

Two hours lecture and two hours lab per week A course on the physics of light, color, art and visual perception. The course will cover the nature of light and optical phenomena, the perception and psychology of color, the reproduction of color in different media, and the analysis of art from a science perspective. The emphasis is on factors which permit the artist and observer to understand and more fully control the design and interpretation of images of all kinds. Demonstrations, experiments, and video/computer simulations are used to analyze signals received by the eyes or instruments. Same as PHYS 208
GenEd: B1, C1

## ART 310 TWO-DIMENSIONAL ART: PAINTING MEDIA AND TECHNIQUES (3)

Six hours laboratory per week
Prerequisite: ART 108, 201
Studio projects explore media and methodologies in painting, drawing and related two-dimensional art forms. Assignments emphasize the integration of traditional art materials and techniques with related digital art technologies in the creation of twodimensional art projects.

## ART 311 THREE-DIMENSIONAL ART: SCULPTURE MEDIA AND TECHNIQUES (3)

Six hours laboratory per week
Prerequisite: ART 108, 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 threedimensional art projects.

## ART 312 DIGITAL MEDIA ART: TIME-BASED IMAGING AND COMPOSITING (3)

Six hours laboratory per week
Prerequisite: ART 108, 205
Studio projects explore media and methodologies in digital imaging and non-linear compositing for timebased art, digital video and digitally generated animation. Assignments emphasize the integration of traditional art techniques with emerging digital technologies in the development of time-based digital art projects presented on video, CD ROM and DVD.

## ART 313 COMMUNICATION DESIGN TECHNOLOGY: GRAPHIC DESIGN FOR PRINT MEDIA (3)

Six hours laboratory per week
Prerequisite: ART 108, ART 204
Studio projects explore media and methodologies in typography and graphic design for print media. Assignments emphasize the integration of traditional design concepts with digital art technology in projects created for print and Internet applications.

## ART 314 DIGITAL MEDIA ART: DIGITAL PHOTOGRAPHY (3)

Six hours laboratory per week
Prerequisite: ART 108
An introduction to digital photography as an art form. Investigations into photographic processes include camera techniques, lighting, color imaging, photographic composition and visual design. Digital photographic software applications, monochrome prints and digital color image manipulation will be explored as related to photographic media and traditions. Photography as a commercial medium will also be investigated.

## ART 320 TWO DIMENSIONAL ART : PAINTING THEORY AND PROCESS (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. Repeatable for up to 6 units.

## ART 321 THREE-DIMENSIONAL ART: SCULPTURE THEORY AND PROCESS (3)

Six hours laboratory per week
Prerequisite: ART 311
Studio topics explore theoretical 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. Repeatable for up to 6 units.

## ART 322 DIGITAL MEDIA ART: TIME-BASED GRAPHICS AND VISUAL EFFECTS (3)

Six hours laboratory per week
Prerequisite: ART 312
Studio topics explore thematic projects involving visual continuity and technical competency working in digital time-based art, animated graphics and visual effects. Projects focus on the integration of artistic concept and technological proficiency in the creation of time-based digital art presented on video, CD Rom and DVD. Repeatable for up to 6 units.

## ART 323 COMMUNICATION DESIGN TECHNOLOGY: PACKAGING AND PRE-PRESS (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, production art and product identity in preparation for mass media distribution. At this phase of study, projects focus on the integration of artistic concept and technological proficiency in the creation of design projects for print, packaging, and publishing. Repeatable for up to 6 units.

## ART 324 COMMUNICATION DESIGN TECHNOLOGY: WEB DESIGN (3)

Six hours laboratory per week
Prerequisite: ART 204, 205
Studio projects investigate artistic techniques and digital applications leading to the design and implementation of Websites. The course explores factors that affect Web layout and design, such as browser, screen resolution, navigation, connection speed, typography, graphics, and color. An introduction to basic HTML will also be covered. Repeatable for up to 6 units.

## ART 325 DIGITAL MEDIA ART: DIGITAL FILMMAKING (3)

Six hours laboratory per week Prerequisite: ART 312, 314 Studio projects focus on filmmaking as an art form. Emerging digital technologies simulate traditional motion picture production. Assignments include aspects of producing, storyboarding, directing, cinematography, lighting, and editing in digital formats, resulting in short digital film projects presented on DVD. Repeatable for up to 6 units.

## ART 326 DIGITAL MEDIA ART: 3D COMPUTER ANIMATION (3)

Six hours laboratory per week
Prerequisite: ART 206, 312
Studio projects explore applications of digital technologies utilized in the production of 3D Computer Animation. Assignments involve character design, wire frame modeling, texture mapping, lighting techniques, motion paths and animation techniques. Class projects result in the creation of CGI and 3D animation presented on video or DVD. Repeatable for up to 6 units.

ART 327 COMMUNICATION DESIGN TECHNOLOGY: MULTIMEDIA THEORY AND PROCESS (3)
Six hours laboratory per week
Prerequisite: ART 205
In-depth exploration of artistic techniques and visual concepts involved in the production of interactive multimedia. Projects investigate interactive technologies utilized in the design and creation of digital graphics, websites and computer games while emphasizing creative project development and artistic skills. Repeatable for up to 6 units.

## ART 328 DIGITAL MEDIA ART: PHOTOGRAPHIC THEORY AND PROCESS (3)

Six hours laboratory per week
Prerequisite: ART 314
Artistic theories and digital imaging processes involved in photography as an art form and commercial medium are explored through in-depth projects including camera techniques, lighting, color imaging, photographic composition and visual design. Digital photographic software applications utilized in the creation of color and monochrome prints as well as custom image manipulation will be investigated. A focus on subject matter, history and trends in photographic media will also be covered. Repeatable for up to 6 units.

## ART 329 THREE-DIMENSIONAL ART: CERAMICS THEORY AND PROCESS (3)

Six hours laboratory per week
Prerequisite: ART 207
In-depth exploration into sculptural and throwing skills, including theories and processes involved in glaze materials and specialized ceramic techniques. Functionality of gas and electric kilns in oxidation and reduction atmospheres will also be covered through individual and class projects that explore the application of ceramic technology and media as a vital and expressive art form. Repeatable for up to 6 units.

## ART 330 CRITICAL THINKING IN A VISUAL WORLD (3)

 Three hours lecture per weekA 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 the psychological impact of corporate logos, religious iconography and secular symbolism. The genesis of cultural icons is investigated from a historical perspective in relationship to their role in a global society. GenEd: C1 and Interdisciplinary

## ART 331 ART AND MASS MEDIA (3)

## Three hours lecture per week

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: C1, D and Interdisciplinary

## ART 332 MULTICULTURAL ART MOVEMENTS (3)

Three hours lecture per week
A exploration into 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 indigenous methods and aesthetics.
GenEd: C1, C3b and Interdisciplinary

## ART 333 HISTORY OF SOUTHERN CALIFORNIA CHICANA/O ART (3)

Three hours lecture per week
An exploration of the Southern California Chicano/a culture focusing on 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: C3b, D and Interdisciplinary

## ART 334 THE BUSINESS OF ART (3)

Three hours lecture per week
Exploration into aspects of "art world" business including the financial activities of art consultants, private dealers, commercial galleries, corporate art collections, 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: C1, D and Interdisciplinary

## ART 335 AMERICAN ETHNIC IMAGES IN NOVELS, FILM AND ART (3)

Three hours lecture/discussion per week Examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological 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 ENGL 335 and HIST 335
GenEd: C2, C3b and Interdisciplinary

## ART 336 ART AND MUSIC: DISSONANCE, DIVERSITY AND CONTINUITY (3)

Three hours lecture per week
An interdisciplinary analysis of the essential elements defining modern and contemporary art and music.
Discusses how artistic characteristics and music issues of the period are connected and intertwined within specific historic and cultural environments. Same as MUS 336
GenEd: C1, D and Interdisciplinary

## ART 337 ART ON FILM AND FILM AS ART (3)

Three hours lecture per week
An interdisciplinary study of the relationships between film and traditional visual arts such as painting, sculpture and architecture. Comparative analyses expose the visual and conceptual modalities of expression used by film and art to create symbolic
meanings and reveal complex links that exist between still and moving images within specific artistic, cultural, and historical contexts.
GenEd: C1, D and Interdisciplinary

## ART 338 PSYCHOLOGY OF ART AND ARTISTS (3)

Three hours lecture per week
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 genre in painting, sculpture, film and music. The self-image of the artist will be examined from private and public point of view. Same as PSY 338
GenEd: C1, E and Interdisciplinary

## ART 420 ADVANCED ARTISTIC PROBLEMS: TWODIMENSIONAL ART (3)

Six hours laboratory per week
Prerequisite: ART 320
Investigations into the development of advanced concepts, innovative processes and personal artistic style working in two-dimensional art. Students achieve increased artistic depth and advanced technical proficiency in the development of a congruent body of work in painting, drawing and mixed media. Creation of a professional portfolio presented on slides and CD ROM is a required component of the course work.

## ART 421 ADVANCED ARTISTIC PROBLEMS: THREEDIMENSIONAL ART (3)

Six hours laboratory per week
Prerequisite: ART 321
Investigations into the development of advanced concepts, innovative processes and personal artistic style working in three-dimensional art. Students achieve increased artistic depth and advanced technical proficiency leading to the development of a congruent body of work in three-dimensional media. Creation of a professional portfolio presented on slides and CD ROM is a required component of the course work.

## ART 422 ADVANCED ARTISTIC PROBLEMS: DIGITAL MEDIA ART (3)

Six hours laboratory per week Prerequisite: ART 322 or 325 or 326 or 328 Investigations into the development of advanced concepts, innovative processes and personal artistic style working in digital media art. Students achieve increased artistic depth and advanced technical proficiency leading to the development of a congruent body of work. Creation of a professional portfolio presented on Video, CD ROM or DVD is a required component of the course work.

## ART 423 ADVANCED ARTISTIC PROBLEMS: COMMUNICATION DESIGN TECHNOLOGY (3)

Six hours laboratory per week
Prerequisite: ART 323 or 324
Investigations into the development of advanced concepts, innovative processes and personal artistic style working in communication arts and design
technology. Students achieve increased artistic depth and advanced technical proficiency leading to the development of a congruent body of work. Creation and presentation of a professional portfolio in print and interactive CD ROM is a required component of the course work.

## ART 431 EUROPEAN RENAISSANCE LITERATURE AND ART (3)

Three hours lecture/discussion per week Prerequisite: ENGL 103 or 105 or equivalent Examination of the literature and art of the Renaissance of the 15th and 16th centuries in Europe and England focusing on the "re-birth" of the human spirit and the legacies of the Renaissance artists and writers. Same as ENGL 431
GenEd: C1, C2 and Interdisciplinary

## 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 and MUS 432
GenEd: C1, C2 and Interdisciplinary

## ART 433 WOMEN IN THE ARTS (3)

Three hours lecture per week
An investigation into the historical roles and influences of women artists in Western and nonWestern 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 and Interdisciplinary

## ART 434 THE MUSEUM: CULTURE, BUSINESS AND EDUCATION (3)

Three hours lecture per week
This course is an interdisciplinary, in-depth study of a museum from the perspective of art, business, and education. Analyzes how artistic values, business and management issues and educational projects are linked within museum practices. Each term this course is offered it will focus on a specific museum in the area. May be repeated to a maximum of 9 units. Same as BUS 434 and EDUC 434
GenEd: C1, D, and Interdisciplinary

## ART 435 POSTMODERN VISUAL CULTURE (3)

Three hours lecture per week
An examination of the major visual components of postmodern culture. This course will explore a wide range of issues related to the multicultural identity of contemporary culture. Developments in the 20th and early 21 st centuries such as film, digital media, and critical theory as well as traditional visual forms of expression such as painting and sculptures will be discussed.
GenEd: C1, C3b and Interdisciplinary

## ART 450 MODERN AND CONTEMPORARY ART (3)

Three hours lecture per week
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 489 ARTS SEMINAR (3)

Three hours activity per week
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 group and individual projects that help prepare them for a variety of careers in the arts.

## ART 490 SPECIAL TOPICS IN ART (3)

Three hours activity per week Prerequisite: Art Major, Upper Division Standing Special topics explore a variety of themes investigating the relationships of art and artists to aspects of social commentary, multiculturalism, experimental genres, commerce, first amendment rights and the role of art in a global society. Topics are presented on a rotating basis. Students are given the opportunity to experience in-depth interaction with visiting artists, industry professionals, art scholars and academicians.

## ART 492 INTERNSHIP IN THE ARTS (1-3)

Variable hours per week
Prerequisite: Senior standing, Art Program portfolio review, and consent of the instructor
Experiential study in a professional artistic environment appropriate to student's interests and artistic goals. Service learning internship 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 Art program and University.

## ART 494 DIRECTED INDEPENDENT STUDY (1-3)

Variable hours per week
Prerequisite: Senior standing, Art Program portfolio review, and consent of instructor Independent art projects are created in conjunction with the supervising faculty. Completed projects are presented for critique and assessment.

## ART 499 ARTS CAPSTONE PROJECT (3)

One hour seminar and two hours field work per week Prerequisite: Senior standing, portfolio review and consent of the instructor
A culminating interdisciplinary experience in which students from various Art disciplines work in groups with fellow artists, 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 organizations or businesses.

## AMERICAN SIGN LANGUAGE

## ASL 101 AMERICAN SIGN LANGUAGE (3)

Three hours of lecture per week
An introduction to American Sign Language (ASL) and the visual and expressive skills needed for basic communication in ASL including finger-spelling, vocabulary, and grammar. Appreciation for the culture and diversity of the Deaf community and the contributions of Deaf individuals to literature and the Arts.
GenEd: C3a

## ASL 102 AMERICAN SIGN LANGUAGE II (3)

Three hours of lecture per week
A continuing exploration of American Sign Language (ASL) and the visual and expressive skills needed for basic communication in ASL including fingerspelling, vocabulary, and grammar. Appreciation for the culture and diversity of the Deaf community and the contributions of Deaf individuals to literature and the Arts.
GenEd: C3a

## ASTRONOMY

ASTR 105 INTRODUCTION TO THE SOLAR SYSTEM (4)
Three hours lecture and two hours activities per week Descriptive introduction to the astronomical properties of the Solar System. Topics include: the historical development of astronomy, the laws that govern the behavior of the Universe, the properties of the stars and galaxies, including their origin and evolution and the Big Bang theory. Activity sessions will include computer-simulated exercises, and two field trips.
Same as PHYS 105.
GenEd: B1

## BIOINFORMATICS

## BINF 500 DNA AND PROTEIN SEQUENCE ANALYSIS (3)

Three hours lecture per week
Prerequisite: BIOL 400 or consent of instructor This course will introduce the computational aspects of biological inference from nucleic acid and protein sequences. Pairwise sequence comparison and multiple sequence alignment will be studied in detail. Additional topics include: RNA structure prediction, conserved sequence pattern recognition (sequence profile analysis), phylogenetic analysis algorithms, sequence data as a means to study molecular evolution, models and algorithms for genetic regulation, contig assembly, PAM and BLOSUM matrices, protein three dimensional structure prediction.

## BINF 501 BIOLOGICAL INFORMATICS (3)

Three hours lecture per week
Prerequisite: BIOL 431 or consent of instructor This course describes relational data models and database management systems with an emphasis on answering biologically important questions; teaches the theories and techniques of constructing relational databases to store various biological data, including sequences, structures, genetic linkages and maps, and signal pathways. Topics include: relational database query language SQL and the ORACLE database management system, summary of currently existing biological databases, web based programming tools, data integration and security, future directions for biological database development.

## BINF 510 DATABASE SYSTEMS FOR BIOINFORMATICS (3)

Three hours lecture per week
Prerequisite: BINF 501, COMP 420, or consent of instructor
This course is an applied, hands-on sequel to BINF 501, designed for students with interests in careers as professional programmers, analysts, designers, and managers involved in design or implementation of large bioinformatic systems. Covers concepts and methods for the design, creation, query and management of large enterprise databases, functions and characteristics of the leading database management systems. Topics include: object oriented database systems, distributed database systems, advanced database management topics, web application design and development, data warehouse systems, database mining.

## BINF 511 COMPUTATIONAL GENOMICS (3)

Three hours lecture per week
Prerequisite: BINF 500 or consent of instructor This course applies the theories and algorithms taught in BINF 500 to real-life genomic data sets, with an emphasis on practical applications, hands-on analysis, integrated approaches and collaboration. Lecture and laboratory will explore the computational and engineering tools for analyzing genomic data. The relationships between sequence, structure, and function in complex biological networks will be studied using quantitative modeling.

## BINF 512 ALGORITHMS FOR BIOINFORMATICS (3)

Three hours lecture per week
Prerequisite: BINF 500 or consent of instructor This course will cover advanced theory in the area of biological informatics and will build on concepts introduced in BINF 500. Topics include: methods to support construction and application of combinatorial biochemical libraries, applications of algorithmic information theory, string matching, dynamic programming, prediction of three-dimensional protein structure from peptide sequence.

## BINF 513 PROGRAMMING FOR BIOINFORMATICS (3)

Three hours lecture per week
Prerequisite: BINF 501 and COMP 462 or equivalent, or permission of instructor
This course will provide theory and practical training in the development of programming tools and data processing systems for use in genomic/sequence analysis. There will be a strong emphasis on the development of fully-functional web-based applications under the client/server model. Students will be required to complete a term project which will involve the development of a complete client/server application directed toward a relevant bioinformatics task.

## BINF 514 STATISTICAL METHODS IN COMPUTATIONAL BIOLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 202, MATH 151 or consent of instructor
Techniques in statistical inference and stochastic modeling required for the interpretation and utilization of genomic data, including biological sequence alignment and analysis, sequence structure and function prediction, database searching, gene expression profiling, statistical genetics, phylogenetic inference and genetic epidemiology.

## BIOLOGY

## BIOL 100 EXPLORING THE LIVING WORLD (4)

Three hours lecture and three hours laboratory per week
An overview of biology from the molecular to the ecosystem level. Topics include the origin, diversity and evolution of life, ecology of populations and communities, the structure and function of plant and animal organ systems, biological molecules, cellular structure/function, genetics and cell division. No credit given toward the major in biology. A lab fee is required.
GenEd: B2

## BIOL 170 FOUNDATIONS OF LIFE SCIENCE (4)

Three hours lecture and three hours laboratory per week
This course meets the needs of prospective elementary school teachers. The course will cover a broad spectrum of topics including introduction to scientific inquiry with living organisms, physiology, cell biology, genetics, evolution and ecology. Current issues in biology will also be considered. The laboratories will focus on hands-on activities particularly relevant to elementary school students. No credit given toward the major in Biology. A lab fee is required.
GenEd: B2

## BIOL 200 PRINCIPLES OF ORGANISMAL AND POPULATION BIOLOGY (4)

Three hours lecture and three hours laboratory per week
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 lab fee is required.
GenEd: B2

## BIOL 201 PRINCIPLES OF CELL AND MOLECULAR BIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: CHEM 105 or CHEM 121
This course will cover principles of basic chemistry, biological macromolecules, prokaryotic and eucaryotic cell structure and function, homeostasis, metabolism including both respiration and photosynthesis, cell division, 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 lab fee is required. GenEd: B2

## BIOL 202 BIOSTATISTICS (3)

Three hours lecture/laboratory per week Prerequisite: A passing score on the Entry Level Mathematics Exam (ELM) or MATH 105 or equivalent
Critical reasoning using a quantitative and statistical problem-solving approach to solve real-world problems. Uses probability and statistics to describe and analyze biological data collected from laboratory or field experiments. Course will cover descriptions of sample data, probability and empirical data distributions, sampling techniques, estimation and hypothesis testing, ANOVA, and correlation and regression analysis. Students will use standard statistical software to analyze real world and simulated data. Same as MATH 202 and PSY 202 GenEd: B3

BIOL 210 HUMAN ANATOMY AND PHYSIOLOGY I (4)
Three hours lecture and three hours laboratory per week.
Study of gross and microscopic anatomy and physiology of the human body. Topics include homeostasis, cell structure/function, histology, the skeletal system, the muscular system, the digestive system and the nervous and sensory systems. A lab fee is required.
BIOL 211 HUMAN ANATOMY AND PHYSIOLOGY II (4)
Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 210
Study of gross and microscopic anatomy and physiology of the human body. Topics include the integumentary system, the endocrine system, the circulatory system, the immune system, the respiratory system, the urinary system and the reproductive system. A lab fee is required.

## BIOL 212 NEUROBIOLOGY AND COGNITIVE SCIENCE (3)

Three hours lecture per week
Prerequisite: BIOL 100 or BIOL 200 or BIOL 201
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: B2, E

## BIOL 213 SEX, GERMS AND DISEASES (3)

Three hours lecture/discussion per week This is a course to introduce biology of sexually transmitted diseases and their impact on society. It covers reproductive system, factors in the spread of diseases, biology and pathogenesis of infectious agents and sexually transmitted diseases caused by bacteria, viruses, fungi and protozoa. Topics also include impact of current biotechnology in relation to vaccine development, treatment and improved diagnostics of these diseases as well as challenges of these diseases to economy, public health system, individuals, and society at large.
GenEd: B2, E

## BIOL 214 FROM EGG TO ORGANISM (3)

Three hours lecture per week
How does a single cell give rise to a complex organism? How are stem cells produced and what are possible uses of stem cell lines? How are clones produced and what are the ethical considerations for cloning human beings? How are test tube babies produced? This course will explore answers to these questions by presenting an overview of developmental biology and then focusing on the impact of biotechnology on humankind. No credit given toward the major in biology.
GenEd: B2

## BIOL 215 ANIMAL DIVERSITY (4)

Three hours lecture and three hours laboratory per week
This course will survey the animal kingdom emphasizing the continuity of animal life from simple to more complex body forms and life histories. The diversity of animal life is projected on a framework of basic ecological and evolutionary concepts. Human interactions with animals are explored through management and conservation issues as well as historical examples from the sciences of zoology, classification and evolution. Field trips to selected sites will allow direct examination of local animal diversity. A lab fee is required.
GenEd: B2

## BIOL 300 CELL BIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 201 with a grade of C or better, CHEM 122, CHEM 311 and 312 or concurrent enrollment
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. A lab fee is required.

## BIOL 301 MICROBIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 201 with a grade of C or better and CHEM 122
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 lab fee is required.

## BIOL 302 GENETICS (4)

Three hours lecture and one hour recitation per week Prerequisite: BIOL 201 with a grade of C or better and CHEM 122
Principles of classical transmission genetics, population genetics, with an introduction to modern molecular genetics.

## BIOL 303 EVOLUTIONARY BIOLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 200 and 201
This course will examine principles of biological evolution. Topics include evolutionary genetics, adaptation and natural selection, the fossil record, speciation and macroevolution.

## BIOL 304 COMPARATIVE ANIMAL PHYSIOLOGY (3)

Three hours lecture per week
This course will use a comparative approach to examine physiological principles in a variety of vertebrate and invertebrate animals. Topics include homeostasis, respiration, excretion and physiological adaptations to environmental conditions.
BIOL 310 ANIMAL BIOLOGY AND ECOLOGY (4)
Three hours lecture and three hours laboratory per week
Animal adaptation and diversity and their relationship to the development of evolutionary theory and the environment. Identification of the common invertebrates and vertebrate animals. Field trips to local ecosystems will be taken. A lab fee is required.

## BIOL 311 PLANT BIOLOGY AND ECOLOGY (4)

Three hours lecture and three hours laboratory per week
A general introduction to diverse structures and functions of plants and their relationship to the environment. Identification of local native plants and plant communities, uses of native plants by Native Americans, and human and environmental impacts on native plant communities. Field trips to local sites will be taken. A lab fee is required.

## BIOL 312 MARINE BIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 200
Overview of the 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. Topics included diverse interactions of organisms in the intertidal zone, over the continental shelves and in the open oceans. Field trips to local marine environments will be taken. A lab fee is required.

## BIOL 313 CONSERVATION BIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 200 and ESRM 100
This course explores issues surrounding the conservation of biodiversity. Topics to be covered include: species-, population-, and ecosystem-level issues, biodiversity, extinction, sustained yield, exotic species, and reserve design. Management implications and the ecology of issues are integrated throughout the course. Lab fee required. Same as ESRM 313

## BIOL 315 INTRODUCTION TO BIOPHYSICS (3)

Three hours lecture and two hours activity per week Prerequisite: PHYS 200
Co-requisite: BIOL 300
This course applies physical methods to the study of biological systems, including transport processes and membrane phenomena, bioelectric phenomena, photosynthetic systems and visual systems.
Biophysical methods will include the techniques of patch clamping and optical tweezers, and the measurement of action potentials and evoked responses. There will be an emphasis on modeling and on problem solving, with appropriate mathematics when necessary. The practical activity session will include computer modeling and simulation, and laboratory demonstrations and exercises. Same as PHYS 315

## BIOL 316 INVERTEBRATE ZOOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 200
This course will survey invertebrates from simple, single-celled protists to the most complex of invertebrate animals. Over ninety-five percent of the animals on earth are invertebrates -- animals without backbones. Aspects of the ecology, physiology and evolutionary history of this diverse array of animals will be examined. Human interactions with invertebrates and conservation issues will also be highlighted. Field trips will be required. A lab fee is required.

## BIOL 317 PARASITOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 200
This course surveys the diversity of parasitic animals and protists. The parasitic life mode is found in a broad range of animal and protistan phyla, as well as some plant groups. Parasite-host relationships are often tightly co-evolved. Parasites have remarkable and complex adaptations to allow survival and successful reproduction and dispersal. Topics examined will include evolution and life histories of representative parasites, along with medical and epidemiological factors of those that affect humans or domestic animals. A lab fee is required.

## BIOL 326 SCIENTIFIC AND PROFESSIONAL ETHICS (3)

Three hours lecture per week
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 CHEM 326 and MGT 326 (formally BIOL 346)
GenEd: D

## BIOL 331 BIOTECHNOLOGY IN THE TWENTY-FIRST CENTURY (3)

Three hours lecture per week
Presentation of recent advances in biotechnology and discussion of societal implications. Topics include the processes and methods used to manipulate living organisms, or the substances and products from them, for use in medicine, agriculture, food production, gene therapy, forensics and warfare. The social, ethical and political issues raised by modern biotechnology will be discussed. No credit given toward the biology major.
GenEd: B2, D and Interdisciplinary

## BIOL 332 CANCER AND SOCIETY (3)

Three hours lecture per week
The underlying molecular causes of cancer, the impact of environmental and genetic factors on cancer causation and prevention, recent advances in diagnosis and treatment of the disease, and the impact that this disease, which will affect one in three adults, has on society. No credit given toward the biology major. GenEd: B2, D, and Interdisciplinary

## BIOL 333 EMERGING PUBLIC HEALTH ISSUES (3)

Three hours lecture per week
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: B2, E and Interdisciplinary

## BIOL 334 NATURAL HISTORY OF VENTURA COUNTY (3)

Three hours lecture and three hours laboratory per week
This course will explore the biota and ecosystems of Ventura County. Local ecosystems include chaparral, marine, stream, desert, mountain and island. Topics covered will be classification and diversity of conspicuous regional flora and fauna in the field and laboratory, basic ecological and evolutionary principles of botanical and zoological classification, ecosystem diversity and function. Indigenous cultural and colonial era use of biotic resources, history of scientific exploration of the region, conservation and preservation issues, restoration of natural habitats, adaptation, life history and physiology of resident organisms will also be covered. Field trips will be required.
GenEd: B2 and Interdisciplinary

## BIOL 335 THE BIOSPHERE (3)

Three hours of lecture per week
The biosphere, the region of the planet where life exists, extends up into the atmosphere as well as down into the deepest ocean trenches. This course will examine the origin, workings, and human influence on earth's biosphere. Topics include evolution of life on earth, atmosphere and climate changes, earth's resources and human impacts.
GenEd: B2 and Interdisciplinary

## BIOL 342 THE ZOO: CONSERVATION, EDUCATION AND RECREATION (3)

Three hours lecture per week
An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo. Field trips to local zoos will be required. Same as BUS 342, ECON 342 and EDUC 342
GenEd: D and Interdisciplinary

## BIOL 400 MOLECULAR BIOLOGY AND MOLECULAR GENETICS (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 300 or 302 with a grade of C or better, CHEM 314, 315, and 318 or 400
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 lab fee is required

## BIOL 401 BIOTECHNOLOGY AND RECOMBINANT DNA TECHNIQUES (5)

Three hours lecture and six hours laboratory per week Prerequisite: BIOL 300 and 302 with grades of C or better and CHEM 318 or 400
Theory and practice of various biotechnologies and recombinant DNA techniques applicable to research and development, drug discovery, clinical therapies, preventive 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 lab fee is required.

## BIOL 402 TOXICOLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 201 with a grade of C or better and CHEM 122
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 416 RADIOBIOLOGY AND RADIONUCLIDES (3)

Three hours lecture per week
Prerequisite: BIOL 300 and PHYS 201
Topics include: nature and effects of ionizing radiation on biomolecular structures and living cells; applied radiobiology and radionuclides; genetic effects of ionizing radiation and methods of protection and dosimetry. Same as PHYS 416

## BIOL 420 CELLULAR AND MOLECULAR IMMUNOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 300 with a grade of C or better and CHEM 122
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 lab fee is required

## BIOL 421 VIROLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 301 with a grade of C or better and CHEM 122
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)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 300 with a grade of C or better and CHEM 318 or 400
Study of principles and methods of plant physiology at the molecular level combined with modern plant technology. Topics include plant tissue and cell culture, genetic engineering and transformation, plant defense, genomics and applications of DNA technology. A lab fee is required.

## BIOL 423 CELLULAR AND MOLECULAR NEUROBIOLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 300 with a grade of C or better and CHEM 122
Study of the nervous system at cellular and molecular levels including cellular structure of neurons and their function and interactions, neurotransmitters and their function and regulation, chemical agents and their effects on neuronal cells and normal responses by the cells and the molecules of the nervous system and their responses under adverse conditions.

## BIOL 424 HUMAN PHYSIOLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 300 with a grade of C better and CHEM 122
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)

Three hours lecture per week
Prerequisite: BIOL 300 and 302 with grades of C or better and CHEM 122
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 427 DEVELOPMENTAL BIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 300 with a grade of C or better and CHEM 122
This course will use descriptive, experimental and comparative approaches in the study of animal development. Developmental stages including gametogenesis, fertilization, cleavage, gastrulation and organogenesis will be discussed in a variety of animal phyla. The molecular and cellular mechanisms underlying morphogenesis and the evolutionary conservation of developmental mechanisms in various animal phyla will be examined. A lab fee is required.

## BIOL 428 BIOLOGY OF CANCER (3)

## Three hours lecture per week

Prerequisite: BIOL 300 with a grade of C or better and CHEM 122
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 431 BIOINFORMATICS (4)

Four hours lecture in the lab per week Prerequisite: BIOL 400 with a grade of C or better and CHEM 318 or 400
The rapid expansion of data acquisition for the human genome and proteome has huge implications for our understanding of the most fundamental processes that direct human life. An understanding of the methodologies used to acquire, store and analyze these data bases is of great value for students choosing to pursue careers in molecular biology, genetics and biotechnology. Topics include: regulating the genome, including epigenetic mechanisms, the human genome project, including the clinical genetics databases, bioinformatics tools and databases,
identifying functional and structural sequence elements, analysis of gene expression: microarrays and other tools. A lab fee is required.
GenEd: B2, B4, and Interdisciplinary

## BIOL 432 PRINCIPLES OF EPIDEMIOLOGY AND ENVIRONMENTAL HEALTH (3)

Three hours lecture per week
Prerequisite: BIOL 201 with a grade of C or better and CHEM 122
Distribution and dynamics of human health problems and 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.
GenEd: B2, D and Interdisciplinary

## BIOL 433 ECOLOGY AND THE ENVIRONMENT (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 200
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. Field trips to local ecosystems will be taken. A lab fee is required. GenEd: B1, B2 and Interdisciplinary

## BIOL 434 INTRODUCTION TO BIOMEDICAL IMAGING (4)

Three hours lecture and two hours lab activity per week
Prerequisite: BIOL 210 or PHYS 200
The course will present an overview of biomedical images and imaging systems. The fundamental concepts used in several imaging modalities (such as projection radiography, mammography, DEXA, computed tomography, ultrasonography and magnetic resonance imaging) will be examined: the emphasis will be on an intuitive and descriptive presentation of the main components of these systems. Image formation and reconstruction will be addressed. The resulting clinical images will be correlated with the underlying structure and function of the organs, and the diagnostic utility and limitations of the images will be considered. Same as HLTH 434 and PHYS 434
GenEd: B2, E and Interdisciplinary

## BIOL 450 ICHTHYOLOGY: THE BIOLOGY OF FISHES (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 200
This course will survey the diversity of living and fossil fishes. Fishes are the largest and most diverse group of vertebrate animals. Aspects of the ecology, physiology and evolutionary history of these animals will be examined. Extensive human interactions with fishes and particularly conservation issues will be
highlighted. Emphasis will be placed on the identification and biology of California coastal and inland species. Field trips will be required. A lab fee is required.

## BIOL 464 MEDICAL INSTRUMENTATION (4)

Three hours lecture and two hours lab activity per week
Prerequisite: PHYS/BIOL/HLTH 434
The detection, acquisition, processing and display of diagnostic clinical images. The course will concentrate on the fundamentals of the design of the instruments and the use of appropriate reconstruction algorithms in (computed) radiography, (digital) fluoroscopy, computed tomography, ultrasound, magnetic resonance imaging and radionuclide imaging. Activities will include image reconstruction examples, investigation of recent innovations, and two trips to local Radiology departments. Same as PHYS 464

## BIOL 490 SPECIAL TOPICS (3)

Three hours seminar per week
Prerequisite: Consent of instructor
In-depth analysis of current topics in biology. Topics vary each semester. Repeatable by topic.

## BIOL 491 SPECIAL LABORATORY TOPICS (1-3)

Prerequisite: BIOL 300 with a grade of C or better and CHEM 122
Laboratory study of a selected topic, the title of which is to be specified in advance. Repeatable by topic. A lab fee is required.

## BIOL 492 INTERNSHIP (2-3)

Prerequisite: Consent of instructor and program approval
Supervised work and study in work situations involving biological research and technical skills. May involve service learning. All students are required to attend the Biology Program Senior Capstone Colloquium to present their projects. Graded Credit/No Credit

## BIOL 494 INDEPENDENT RESEARCH (1-3)

Prerequisite: Consent of instructor and program approval
Laboratory and/or library research that may involve service learning in selected areas of biology conducted under the direction of a faculty member. All students are required to attend the Biology Program Senior Capstone Colloquium to present their projects. Graded Credit/No Credit

## BIOL 497 DIRECTED STUDY (1-3)

Consent of instructor and program approval Reading and library research that may involve service learning in selected areas of biology conducted under the direction of a faculty member. All students are required to attend the Biology Program Senior Capstone Colloquium to present their projects. Graded Credit/No Credit

BIOL 499 SENIOR CAPSTONE COLLOQUIUM (1)
One hour lecture per week
Prerequisite: BIOL 492, 494 or 497
Oral and written presentation of completed or work-in-progress projects of BIOL 492, 494, or 497
courses. Graded Credit/No Credit

## BIOL 502 TECHNIQUES IN

GENOMICS/PROTEOMICS (2)
Six hours laboratory per week
Prerequisite: BIOL 401 or consent of the instructor This laboratory course introduces students to the current techniques and methodologies in the fields of comparative and functional genomics and proteomics.
Topics and techniques covered include genome sequencing, micorarrays, mutagenesis, transgenic plants and animals, single nucleotide polymorphism (SNP) discovery and analysis. Students will gain hands-on lab bench experience and will make on-site visits to high volume regional biotechnology facilities.
BIOL 503 BIOTECHNOLOGY LAW AND REGULATION (3)
Three hours lecture per week
Individual and organizational responsibility in R\&D and commercial aspects of biotechnology. Topics include: intellectual property, privacy, government and industrial regulation, liability, ethics, and policy responses to societal concerns in the U.S. and abroad. Case studies involving gene therapy, cloning, and biomaterials in the medical and health sector, and farming and crop modification in the agricultural sector will be explored in detail.

## BIOL 504 MOLECULAR CELL BIOLOGY (3)

Three hours lecture per week
Prerequisite: BIOL 300 or consent of instructor This course will examine molecular and mechanistic aspects of cell biology. Topics include: cell biochemistry and biosynthesis, cell signaling, regulation of the cell cycle and membrane trafficking.

## BIOL 505 MOLECULAR STRUCTURE (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 400 or consent of instructor This course will examine the structural biology of proteins. Topics include general principles of protein structure, the biochemical function of proteins, the relationship of protein structure to its function and experimental approaches to determining and predicting protein structure and function.

## BIOL 506 MOLECULAR EVOLUTION (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 400 or BIOL 401 or consent of instructor
This course will examine evolutionary change at the molecular level. Topics include: The driving forces behind the evolutionary process, the effects of the various molecular mechanisms on the structure of genes, proteins, and genomes, the methodology for
dealing with molecular data from an evolutionary perspective and the logic of molecular hypothesis testing.

## BIOL 507 PHARMACOGENOMICS AND PHARMACOPROTEOMICS (3)

Three hours lecture per week
Prerequisite: BINF 500, BIOL 504 or permission of instructor
Structural and functional genomics with an emphasis on how these fields operate in drug discovery and optimization. Topics include: genetics of the human response to prophylactic and therapeutic agent, impact of genetic variation on therapeutic efficacy, disease mechanisms, proteomics of genetic and communicable disease, drug action and toxicity, structure encoding, lead discovery and optimization, parallel synthesis, screening virtual libraries.

## BIOL 508 ADVANCED IMMUNOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: BIOL 300 or consent of instructor This course will examine cellular and molecular aspects of the immune system. Topics include: molecular genetics and molecular structure of immunoglobulin, T cell receptor, and the MHC antigens; the functions and dysfunctions of the components of the immune system; applications of immunological technologies in modern scientific research and development.


## BUSINESS

## BUS 110 BUSINESS LAW (3)

Three hours lecture per week
Introduction to the legal and regulatory environment of business, emphasizing the USA legal system.
Topics include contracts, personal property, litigation, antitrust, labor agreements, discrimination, environmental protection and international trade and law.

## BUS 320 BUSINESS OPERATIONS (3)

Three hours lecture per week
Prerequisite: MATH 140 or 150
Exploration and application of quantitative techniques, systems analysis and operations analysis of business functions, with an emphasis on the optimization of process and operational efficiencies. A variety of management science methodologies will be applied to theoretical and real-world situations.

## BUS 334 THE BUSINESS OF ART (3)

Three hours lecture per week
Exploration into aspects of "art world" business including the financial activities of art consultants, private dealers, commercial galleries, corporate art collections, 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 ART 334
GenEd: C1, D and Interdisciplinary

## BUS 340 BUSINESS AND ECONOMICS IN AMERICAN LITERATURE (3)

Three hours lecture/discussion per week Explores the ways in which business and economics have been represented in American literature. Employs critical methodologies from the fields of Business, Economics, and Literary studies. Same as ECON 340 and ENGL 340
GenEd: C2, D and Interdisciplinary

## BUS 341 DRUG DISCOVERY AND DEVELOPMENT (3)

Three hours lecture per week
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 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 investment and development. Same as CHEM 341 and ECON 341
GenEd: B1, D and Interdisciplinary

## BUS 342 THE ZOO: CONSERVATION, EDUCATION AND RECREATION (3)

Three hours lecture per week
An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo. Field trips to local zoos will be required. Same as BIOL 342, ECON 342 and EDUC 342
GenEd: D and Interdisciplinary

## BUS 349 HISTORY OF BUSINESS AND ECONOMICS IN NORTH AMERICA (3)

Three hours of lecture per week
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 ECON 349 and HIST 349
GenEd: D and Interdisciplinary

## BUS 420 CASES IN STRATEGY (3)

Three hours seminar/discussion per week Prerequisite: Senior standing or consent of professor A case study seminar that integrates functional areas of business into the development and analysis of strategy and strategic planning. Emphasizes practical strategic solutions that could reasonably lead to success in the marketplace. Topics include: Competitive Analysis, Value Chain Analysis, Globalization Strategies and Strategies for Chaotic Environments.

## BUS 424 BUSINESS, GOVERNMENT, AND SOCIETY (3)

Prerequisite: MGT 307
Discussions of the history and interactions of American business, government, and society. Topics include the history of business power, social responsibility and ethical theories, governmental regulation, managing environmental quality, and consumerism.
GenEd: D

## BUS 434 THE MUSEUM: CULTURE, BUSINESS AND EDUCATION (3)

Three hours lecture per week
This course is an interdisciplinary, in-depth study of a museum from the perspective of art, business, and education. Analyzes how artistic values, business and management issues and educational projects are linked within museum practices. Each term this course is offered it will focus on a specific museum in the area. Same as ART 434 and EDUC 434
GenEd: C1, D, and Interdisciplinary

## BUS 499 CAPSTONE (3)

Three hours lecture per week Prerequisite: All Lower Division (24 units) and other Upper Division ( 33 units) required courses in the Business Major or consent of instructor An integration of all prior business core subject matter via two major components: 1) Teams of students participate in a PC-based simulation of an ongoing (fictitious) international business. Requires decisionmaking under uncertainty but within strict deadlines, competitor analysis, and formal oral/written reporting of results. 2) Individually and in teams, students analyze, research, discuss and report on complex written business cases - which provides interdisciplinary exposure.

## BUS 500 ECONOMICS FOR MANAGERS (3)

Three hours lecture per week
A course in economics for MBA students covering material from both microeconomics and macroeconomics. Topics include market structure, demand analysis, consumer behavior, nature of the firm, measuring economic activity, inflation, unemployment, money and banking, and the role of the government. May be offered with an extensive online component.

## BUS 502 QUANTITATIVE METHODS FOR DECISIONMAKING (3)

Three hours lecture per week
Overview of core quantitative skills for effective managerial decision-making. Topics include statistical principles, regression analysis, forecasting, multiattribute decision-making, benefit-cost analysis, and spreadsheet modeling of businesses cases. May be offered with an extensive online component.

## BUS 504 INTRODUCTION TO ACCOUNTING AND FINANCE (4)

Four hours lecture per week
Presents an overview of the role of accounting and finance in business. The first part of the course focuses on accounting as the language of business. Topics include basic assumptions and principles of accounting, the content and purpose of financial statements, and uses and limitations of the financial statements. The second part of the course focuses on the role of finance in supporting the functional areas of a business. Topics include time value of money, risk, and capital structure. May be offered with an extensive online component.

## BUS 506 PRINCIPLES OF MANAGEMENT AND MARKETING (3)

Three hours lecture per week Presents an overview of the disciplines of management and marketing. Explains the basic elements of good management practices. Describes the key aspects of effective marketing. Combines management and marketing disciplines through cases, role-play simulations, and computer based simulations that are used to model managers' planning and decision-making processes. May be offered with an extensive online component.

## BUS 508 BUSINESS ETHICS AND LAW (3)

Three hour seminar per week
An overview of the ethical environment for business operations, with a special emphasis on the legal environment. Explores decision-making frameworks for managers in addressing ethical and legal issues that confront modern business organizations. May be offered with an extensive online component.

## BUS 510 HIGH PERFORMANCE MANAGEMENT (3)

Three hours seminar per week
Co-requisite: BUS 520
Develops the managerial skills that affect individual and group performance in organizations. Topics include managerial communication, team-building, negotiation, conflict resolution, and intercultural management.

## BUS 520 STRATEGY AND LEADERSHIP (3)

Three hours seminar per week
Co-requisite: BUS 510
An integrated overview of strategy, strategic planning and strategic management for business leaders. Through the use of complex business cases, the course analyzes the major elements of strategic management and the interactions among major participants. Special emphasis is given to the role of leadership in the strategic management process.

## BUS 530 MANAGING BUSINESS OPERATIONS (3)

Three hours seminar per week
Prerequisite: BUS 520
Co-requisite: BUS 540
Building on previous business courses this courses develop skills required for managers to operate a business organization. Topics include change management, product design, process selection, quality management, supply chain design, strategy and control. Managing a firm's business operations involves the design, operation and improvement of systems that create and deliver an organization's product and services to customers.

## BUS 540 FINANCIAL REPORTING AND ANALYSIS (3)

Three hours seminar per week
Prerequisite: BUS 520
Co-requisite: BUS 530
Provides an understanding of the use of financial information in managing an organization. The course focuses on analyzing and interpreting financial statements, applying analytical tools and techniques to financial statements in order to make sound investment and operating decisions, and applying standard corporate funding models in corporate financial management.

## BUS 550 THE CONTEMPORARY FIRM (3)

Three hours seminar per week
Prerequisite: BUS 540
This course emphasizes the strategic and management issues associated with the effective use of information technology. Topics include information systems \& control, databases and data mining, systems development, IT infrastructure and strategy.

## BUS 560 THE ENTREPRENEURIAL MANAGER (3)

Three hours seminar per week
Prerequisite: BUS 540
A course that focuses on aspects of starting a new business, with an emphasis on recognizing and creating opportunities. Also develops the managerial skills and perspectives that contribute to innovative and entrepreneurial management in growing and established organizations. Topics include attributes of entrepreneurs and entrepreneurial careers, evaluating opportunities, writing business plans, consumer and market analysis, new product design and development, creativity, innovation, forecasting, resource requirements, financing, and managing new ventures.

## BUS 570 COMPETING IN A GLOBAL ENVIRONMENT (6)

Three hours seminar and six hours activity per week Prerequisite: Completion of all other MBA Core courses
Acknowledging the global environment in which business operates, this course addresses management concerns for maximum organizational effectiveness in international business. Topics include international market identification, trade practices and policy, legal issues in business, international currency markets, joint ventures, international business strategy, and global management. Intercultural management issues, negotiation, and cross-cultural differences will also be addressed.

## CHEMISTRY

## CHEM 100 CHEMISTRY AND SOCIETY (4)

Three hours lecture and three hours laboratory per week
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. Lab fee required. GenEd: B1

## CHEM 105 INTRODUCTION TO CHEMISTRY (3)

Three hours lecture per week
Prerequisite: A passing score on the ELM Examination
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. GenEd: B1

## CHEM 121 GENERAL CHEMISTRY I (4)

Three hours lecture and three hours laboratory per week
Prerequisite: CHEM 105 or 1 year high school chemistry.
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. Lab fee required.
GenEd: B1

## CHEM 122 GENERAL CHEMISTRY II (4)

Three hours lecture and three hours laboratory per week
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. Lab fee required.
GenEd: B1

## CHEM 123 GENERAL CHEMISTRY I PROBLEMSOLVING (1)

One hour activity per week
Co-requisite: Must be taken concurrently with CHEM 121
An instructor/peer-supervised interactive problemsolving session for students in CHEM 121 where students work in small groups on problems related to the content in CHEM 121.

## CHEM 124 GENERAL CHEMISTRY II PROBLEM- <br> SOLVING (1)

One hour activity per week
Co-requisite: CHEM 122
An instructor/peer-supervised interactive problemsolving session for students in CHEM 122 where students work in small groups on problems related to the content in CHEM 122.

## CHEM 250 QUANTITATIVE ANALYSIS (2)

Two hours lecture per week
Prerequisite: CHEM 122 with a grade of C or better Co-requisite: CHEM 251
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)

Six hours of laboratory per week
Prerequisite: CHEM 122 with a grade of C or better Co-requisite: 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. Lab fee required.

## CHEM 301 ENVIRONMENTAL CHEMISTRY (3)

Three hours lecture per week
Prerequisite: CHEM 122 with a grade of C or better An introductory course to the chemistry of the environment. The goal of this course is to teach the fundamental natural chemical processes of the atmosphere, oceans and soil of the Earth, as well as the anthropogenic effects on this system. Current topics of environmental interest will be discussed. The sciences behind these processes will be the focus of this course.

## CHEM 311 ORGANIC CHEMISTRY I (3)

Three hours 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, GCMS, IR, and UV-visible) used to characterize molecules.

## CHEM 312 ORGANIC CHEMISTRY I LABORATORY (1)

Three hours laboratory per week
Prerequisite: CHEM 311 (or taken concurrently) with a grade of C or better
A laboratory course designed to provide students with an exposure to the techniques and instrumentation (NMR, GC, GC-MS, LC, IR, and UV-visible) used to purify and characterize organic molecules resulting from organic reactions. Lab fee required.

## CHEM 313 ORGANIC CHEMISTRY I LEARNING COMMUNITY (1)

One hour recitation per week
Co-requisite: CHEM 311
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 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.

## CHEM 315 ORGANIC CHEMISTRY II LABORATORY (1)

Three hours laboratory per week
Prerequisite: CHEM 311, 312, and 314 (or taken concurrently ) 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). Lab fee required.

## CHEM 316 ORGANIC CHEMISTRY II LEARNING COMMUNITY (1)

One hour recitation per week
Co-requisite: CHEM 314
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 lecture per week
Prerequisite: CHEM 311 with a grade of C or better An integrated Organic Chemistry II and Biochemistry. The topics covered 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.

## CHEM 326 SCIENTIFIC AND PROFESSIONAL ETHICS (3)

Three hours lecture per week
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 326 and MGT 326
GenEd: D

## CHEM 341 DRUG DISCOVERY AND DEVELOPMENT (3)

Three hours lecture per week
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 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 investment and development. Same as BUS 341 and ECON 341
GenEd: B1, D and Interdisciplinary

## CHEM 343 FORENSIC SCIENCE (3)

Two hours lecture and three hours laboratory per week 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 spectroscopes; fiber comparisons; drug analysis; arson/ explosive residue analysis; toxicological studies; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis. Lab fee required.
GenEd: B1 and Interdisciplinary

## CHEM 344 ENERGY AND SOCIETY (3)

Three hours lecture per week
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 included: energy conservation, efficient usage and transportation of energy, energy resources, fossil fuels, active and passive solar energy, biomass, fuel cells, nuclear (fission and fusion) processes, and hydroelectric, tidal, geothermal, and wind power. Same as PHYS 344
GenEd: B1 and Interdisciplinary

## CHEM 400 BIOCHEMISTRY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: CHEM 314 with a grade of C or better 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. Lab fee required.

CHEM 490 SPECIAL TOPICS IN CHEMISTRY (1-3)
Prerequisite: Consent of instructor
Specialized topics from the fields of Chemistry and Biochemistry. Repeatable by topic.

## 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. Repeatable

## CHEM 494 INDEPENDENT RESEARCH (1-3)

Prerequisite: Consent of instructor
Provides student credit for independent research (laboratory or library) that culminates in a written and oral report. Repeatable.

## CHEM 497 DIRECTED STUDIES (1-3)

Prerequisite: Consent of instructor
Provides student credit for curricular activities under the direction of a Chemistry faculty member. Repeatable.

## COMPUTER INFORMATION SYSTEMS

## CIS 110 COMPUTER INFORMATION SYSTEMS (3)

Three hours lecture per week
Introduces the fundamentals of computer information systems for business. Topics include terminology, hardware, software, database and network concepts. Provides hands-on experience in using PCs to address business issues.
CIS 310 MANAGEMENT INFORMATION SYSTEMS (3)
Three hours lecture per week
Prerequisite: CIS 110
Examines 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.

## CIS 490 SPECIAL TOPICS (3)

Three hours per week
In-depth analysis of current topics in computer information systems. Topics vary each semester. Repeatable by topic.

## CIS 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor
Enrollment in this course is with permission of faculty member in charge. Individual internship through service learning. Graded Credit/No Credit

## CIS 497 DIRECTED STUDY (1-3)

Variable hours per week
Prerequisite: Consent of instructor
Individual contracted study on topics or research selected by the student and faculty mentor. Repeatable for up to nine units. Graded Credit/No Credit

## COMMUNICATION

## COMM 101 PUBLIC SPEAKING (3)

Three hours lecture per week
Introduction to communication theory and the study of the human communication process with an emphasis on effective public communication. Includes intensive practice in public speaking, reasoning, and critical listening.
GenEd: A1
COMM 210 INTERPERSONAL COMMUNICATION (3)
Three hours lecture per week
Analysis of the role communication plays in interpersonal relationships with special emphasis on intercultural communication. Oral interpersonal communication skills will be stressed.
GenEd: A1

## COMM 220 GROUP COMMUNICATION (3)

Three hours lecture per week
This course examines communication in the small group context. It will investigate the important theoretical foundations and practical applications of group communication as well as apply those theories and skills to actual group interactions.
GenEd: A1

## COMM 345 MEDIA LITERACY AND YOUTH CULTURE

 (3)Three hours lecture per week
This interdisciplinary course examines the relationship between mass communication, mass media, and youth culture. Topics include the theories and effects of mass communication, in particular the effects of mass media on children and adolescents. To develop media literacy, students will apply these concepts to their own experiences with popular media, including television, print, and film. Same as EDUC 345 GenEd: A1, D, and Interdisciplinary


## COMPUTER SCIENCE

## COMP 100 COMPUTERS: THEIR IMPACT AND USE (3)

Three hours lecture in the lab per week
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. GenEd: B4

## COMP 101 COMPUTER LITERACY (3)

Three hours lecture in the lab per week An introduction to computer applications, including web applications, word processing, spreadsheets, databases and programming. Includes service learning component. Not open to Computer Science majors. GenEd: B4

## COMP 102 WEB DEVELOPMENT (2)

Three hours lecture in the lab per week Prerequisite: COMP 101 or consent of instructor Introduction to the design and development of web pages. Use of HTML and scripting languages. Use of multimedia content. Current web development tools. GenEd: B4

## COMP 105 COMPUTER PROGRAMMING INTRODUCTION (3)

Three hours lecture in the lab per week An introduction to the design, development and expression of algorithms including: algorithms and their stepwise refinement; expression of algorithms in a formal language. Not open to students who have completed COMP 150.
GenEd: B4

## COMP 150 OBJECT ORIENTED PROGRAMMING (4)

Four hours lecture in the lab per week
Prerequisite: Programming experience Introduction to algorithms, their representation, design, structuring, analysis and optimization. The course introduces the concept of object paradigm, design and implementation of algorithms as structured programs in a high level language.
GenEd: B4

## COMP 151 DATA STRUCTURES AND PROGRAM DESIGN (4)

Four hours 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. Topics include: 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 algorithms.

## COMP 162 COMPUTER ARCHITECTURE AND ASSEMBLY LANGUAGE (3)

Three hours lecture per week
Prerequisite: COMP 150
An introduction to computer architecture, assembly language programming, system software and computer applications.
Topics include: number systems and data representation; internal organization of a computer; primitive instructions and operations; Assembly language; language translation principles; overview of operating systems.

## COMP 232 PROGRAMMING LANGUAGES (3)

Three hours lecture in the lab per week Prerequisite: COMP 151 and COMP 162 Discussion of issues in the design, implementation, and use of high-level programming languages. Topics include: 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 lecture per week
Prerequisite: COMP 151 and COMP 162
Extension of basic addressing concepts to more advanced addressability such as base register and self relative addressing. Topics include: 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.

## COMP 345 DIGITAL IMAGE PROCESSING (3)

Three hours lecture in the lab per week
Prerequisite: Consent of instructor
An introduction to the basic concepts and techniques for digital image restoration and enhancement, analysis, coding and compression. The emphasis is on processes which analyze primarily two-dimensional discrete images represented at the pixel level, including filtering, noise reduction and segmentation. Fourier analysis techniques will be explored.
Programming exercises will be used to implement the various processes, and their performance on synthetic and real images will be studied. Same as MATH 345 and PHYS 345
GenEd: B1, B4 and Interdisciplinary

## COMP 350 INTRODUCTION TO SOFTWARE ENGINEERING (3)

Three hours lecture in the lab per week Prerequisite: COMP 232 and COMP 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 lecture in the lab per week Prerequisite: COMP 262
Examination of the principal types of systems including batch, multi-programming, and timesharing. 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 APPLICATIONS IN BIOMEDICAL FIELDS (3)

Three hours lecture in the lab per week Prerequisite: BIOL 201 or consent of the instructor Current applications of computers and data processing technology to the understanding and solving of specific problems in biomedical fields.

## COMP 420 DATABASE THEORY AND DESIGN (3)

Three hours lecture in the lab per week Prerequisite: COMP 350
Topics include: 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 lecture in the lab per week Prerequisite: COMP 232
Organization of compilers 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 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, and public key security schemas.

## COMP 429 COMPUTER NETWORKS (3)

Three hours lecture in the lab per week Prerequisite: COMP 362, COMP 232
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 will be discussed.

## COMP 445 IMAGE ANALYSIS AND PATTERN RECOGNITION (3)

Three hours lecture in the lab per week
Prerequisite: PHYS/COMP/MATH 345 or consent of instructor
The course addresses the issue of analyzing the pattern content within an image. Pattern recognition consists of image segmentation, feature extraction and classification. The principles and concepts underpinning pattern recognition, and the evolution, utility and limitations of various techniques (including neural networks) will be studied. Programming exercises will be used to implement examples and applications of pattern recognition processes, and their performance on a variety of diverse synthetic and real images will be studied. Same as MATH 445 and PHYS 445
GenEd: B1, B4 and Interdisciplinary

## COMP 447 SOCIETAL ISSUES IN COMPUTING (3)

Three hours lecture in the lab per week
Prerequisite: Senior standing
A survey course on the role of the digital computer in modern society. Topics include: dangers of the misuse of computers, privacy, copyright, computer crime, legal and social issues, as well as the proper and intelligent use of the machines.
GenEd: B4, D and Interdisciplinary
COMP 449 HUMAN-COMPUTER INTERACTION (3)
Three hours lecture in the lab per week
Prerequisite: Programming experience or consent of the instructor
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. Same as PSY 449
GenEd: B4, E and Interdisciplinary

## COMP 452 COMPUTATIONAL BIOINFORMATICS (4)

Four hours lecture in the lab per week
Prerequisite: Programming skills, Statistics, or consent of the instructor
Basic computational models used in molecular biology 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.

## COMP 454 AUTOMATA, LANGUAGES, AND COMPUTATION (3)

Three hours 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.

## COMP 462 ADVANCED OBJECT-ORIENTED PROGRAMMING (3)

Three hours 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 an unifying theme.

## COMP 464 COMPUTER GRAPHIC SYSTEMS AND DESIGN I (3)

Three hours lecture in the lab per week Prerequisite: COMP 350 and MATH 240 Topics include: 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 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 lecture in the lab per week Prerequisite: COMP 350 and 362
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 lecture per week
Prerequisite: Upper-division standing
Current issues in computer science.

## COMP 492 INTERNSHIP (1-3)

Prerequisite: Upper-division standing and program approval of written proposal
Supervised work and study in an industrial or scientific setting involving development of degreerelated skills. All students are required to present their projects at the Senior Colloquium.

## COMP 494 INDEPENDENT RESEARCH (1-3)

Prerequisite: Upper-division standing and program approval of written proposal Supervised project involving theoretical research in the field of computer science and its applications. All students are required to present their projects at the Senior Colloquium.

## COMP 497 DIRECTED STUDIES (3)

Prerequisite: Program approval of written proposal Supervised project involving library research in the field of computer science or its applications. All students are required to present their projects at the Senior Colloquium.

## COMP 499 SENIOR COLLOQUIUM (1)

One hour seminar per week
Prerequisite: Senior standing
Oral presentations of current advancements in the field, and reports on students' projects. Repeatable.


## ECONOMICS

ECON 110 PRINCIPLES OF MICROECONOMICS (3)
Three hours lecture per week
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 lecture per week
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, and international trade.
GenEd: D

## ECON 300 FUNDAMENTALS OF ECONOMICS (3)

## Three hours lecture per week

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 lecture per week
Prerequisite: ECON 110, 111 and 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 lecture per week
Prerequisite: ECON 110, 111 and 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 lecture per week
Prerequisite: ECON 110, 111 and 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 lecture per week
Prerequisite: ECON 110, 111 and 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 ECONOMICS IN AMERICAN LITERATURE (3)

Three hours lecture/discussion per week Explores the ways in which business and economics have been represented in American literature.
Employs critical methodologies from the fields of
Business, Economics, and Literary studies. Same as
BUS 340 and ENGL 340
GenEd: C2, D and Interdisciplinary

## ECON 341 DRUG DISCOVERY AND DEVELOPMENT

 (3)Three hours lecture per week
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 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 investment and development. Same as BUS 341 and CHEM 341
GenEd: B1, D and Interdisciplinary

## ECON 342 THE ZOO: CONSERVATION, EDUCATION AND RECREATION (3)

Three hours lecture per week
An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo. Field trips to local zoos will be required. Same as BIOL 342, BUS 342 and EDUC 342
GenEd: D and Interdisciplinary
ECON 343 CAPITAL THEORY (3)
Three hours lecture per week
Intertemporal choice and decision-making under uncertainty in our financial lives. Topics include: multi-period consumption, multi-period production, capital budgeting, modern portfolio theory and financial management. Same as FIN 343
GenEd: D and Interdisciplinary

## ECON 349 HISTORY OF BUSINESS AND ECONOMICS IN NORTH AMERICA (3)

Three hours of lecture per week 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 and HIST 349
GenEd: D and Interdisciplinary

## ECON 362 ENVIRONMENTAL ECONOMICS (3)

Three hours lecture per week
Prerequisite: ECON 110 and 111, or ECON 300 Economic analysis of environmental problems and policy. Market failures due to externalities, public goods, and common property resources are examined. Private (market) and public (government) solutions to environmental problems are examined.

## ECON 370 THE WORLD ECONOMY (3)

Three hours lecture per week
Prerequisite: ECON 110 or 300
Theory, practice, and institutions of the international economy. Topics include international trade and investment, balance of payments, foreign exchange rates, international institutions in the global economy, and international economic policy.

## ECON 411 ECONOMICS OF ENTREPRENEURSHIP

 (3)Three hours lecture per week
Prerequisite: ECON 110 and 111
Application of economic concepts to entrepreneurial strategies and decisions. Analysis of entrepreneurial activities as related to production, markets, innovation, risk, and the macroeconomy.

## ECON 464 NATURAL RESOURCE ECONOMICS (3)

Three hours lecture per week
Prerequisite: ECON 310 or 329
Microeconomics 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, fishery, energy, water and mineral economics.

## ECON 471 INTERNATIONAL TRADE (3)

Three hours lecture per week
Prerequisite: ECON 310 or 329
The theory of international trade, effects of tariff and non-tariff barriers, and conduct of commercial policy. Topics include theories of comparative advantage, gains from trade, distribution effects of trade, international factor movements and trade restrictions, the political economy of trade and industrial policy.

ECON 472 INTERNATIONAL MACROECONOMICS (3)
Three hours lecture per week
Prerequisite: ECON 311 or 320
Macroeconomic analysis of the open economy, the impact of stabilization policies in a global economy, the role of the balance of payments, and the international monetary system. Topics include balance of payments accounts, spot-forward exchange rates, interest rate arbitrage, purchasing-power parity, exchange rate determination and macroeconomic policy in an open economy.

## ECON 480 TOPICS IN ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS (3)

Three hours lecture per week
Prerequisite: ECON 362 or 464 or consent of the instructor
Application of economic analysis to topics in environmental and natural resource economics. Representative topics include: energy problems and policies, the measurement of market and non-market benefits and costs, endangered species management. Repeatable by topic.

## ECON 486 INTRODUCTION TO ECONOMETRICS (3)

Three hours lecture per week
Prerequisite: ECON 310 or 329 , 311 and MATH 340
Application of mathematical and statistical methods to economic data. Estimation of economic relationships using regression analysis, hypothesis testing, and forecasting.

## ECON 488 APPLIED MANAGERIAL ECONOMETRICS

 (4)Three hours lecture and two hour lab per week Prerequisite: BIOL/MATH/PSY 202 or MATH 329 or 352, ECON 310 or 329 and MATH 150
Emphasis on the collection and manipulation of economic data, and the application of econometric methods to business and resource management issues. Development of testable hypotheses, applications of estimation techniques and interpretation of regression results. Use of econometric software applications to estimate statistical relations.

## ECON 490 SPECIAL TOPICS (3)

Three hours per week
Prerequisite: Consent of instructor
In-depth analysis of current topics in economics.
Topics vary each semester. Repeatable by topic.

## ECON 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor
Individual internship through service learning. Graded Credit/No Credit

## ECON 497 DIRECTED STUDY (1-3)

Variable hours per week
Prerequisite: Consent of instructor
Individual contracted study on topics or research selected by the student and faculty mentor. Repeatable for up to nine units. Graded Credit/No Credit

## EDUCATION MULTIPLE SUBJECTS PROGRAM

## EDMS 522 LITERACY 1:

## MULTICULTURAL/MULTILINGUAL (3)

Three hours of lecture/discussion per week Prerequisite: Admission to the Multiple Subject Teacher Credential Program Co-requisite: EDMS 562 (1-2 units) or EDMS 565 Topics include developmental theory and practice of the reading and writing process across the grade levels; 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; literacy and language needs of English Language Learners and exceptional children; technology for teaching and learning is integrated.

## EDMS 523 LITERACY 2: <br> MULTICULTURAL/MULTILINGUAL (4)

Four hours lecture/discussion per week
Prerequisite: Admission to the Multiple Subject Teacher Credential Program
Co-requisite: EDMS 562 (1-2 units) or EDMS 575
Differentiated instruction and scaffolding for English language learners, special education (including gifted) and English only students. Topics include reading and writing skills across the content areas and literaturebased 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 are integrated.

## EDMS 526 MODERN METHODS IN MATHEMATICS TEACHING (3)

Three hours lecture/discussion per week
Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 562 (1-2 units) or EDMS 565
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 are integrated.

## EDMS 527 HISTORY, SOCIAL STUDIES AND INTEGRATED ARTS (4)

Four hours of lecture/discussion per week Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 562 (1-2 units) or EDMS 565 Focuses on curriculum for History, Social Sciences and Arts as delineated 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 are integrated.

## EDMS 529 SCIENCE, HEALTH AND PHYSICAL EDUCATION (4)

Four hours lecture/discussion per week
Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 562 (1-2 units) or EDMS 575
Study of the application of 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 are integrated.

## EDMS 562 FIELD EXPERIENCE MULTIPLE SUBJECT (PART-TIME PROGRAM) (2)

One full school day per week in local public schools Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: Any of the following two: EDMS 522, $523,526,527$, or 529
Participatory observation in selected schools under the supervision of classroom teacher and university supervisor.

## EDMS 565 INITIAL STUDENT TEACHING MULTIPLE SUBJECT (7)

Equivalent of eight weeks of full-time student teaching
Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 566
Participatory observation and teaching in selected schools under the supervision of classroom teacher and university supervisor, with a student teaching seminar.

## EDMS 566 INITIAL STUDENT TEACHING SEMINAR MULTIPLE SUBJECT (1)

Bi-weekly two hour discussion
Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 565
Discussion and seminar with University Supervisor to discuss practical issues relevant to the student teaching experience.

## EDMS 575 ADVANCED STUDENT TEACHING MULTIPLE SUBJECT (7)

Equivalent of eight weeks of full-time student teaching
Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 576
Participatory observation and teaching in selected
schools under the supervision of classroom teacher and university supervisor, with a student teaching seminar.

## EDMS 576 ADVANCED STUDENT TEACHING SEMINAR MULTIPLE SUBJECT (1)

Bi-weekly two hour discussion
Prerequisite: Admission to the Multiple Subject Credential Program
Co-requisite: EDMS 575
Discussion and seminar with University Supervisor to discuss practical issues relevant to the student teaching experience.

## EDUCATION PRINCIPALS LEADERSHIP PROGRAM

## EDPL 610 FOUNDATIONS OF CURRICULUM, INSTRUCTION, AND ASSESSMENT (3)

Three hours lecture/discussion per week
Prerequisite: Admission to the Principals Leadership Program
Theories for design of curriculum, instruction and assessment in an inclusive school environment will be addressed. Topics include standards based curriculum, differentiated instruction, using assessment data to design on-going instruction at the classroom level, dynamics of the curriculum change process. Course results in the development of a deep and internalized understanding of effective teaching, learning and assessment for all students including English Language Learners and students with special needs.

## EDPL 620 INSTRUCTIONAL LEADERSHIP OF THE COLLABORATIVE INCLUSIVE SCHOOL (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Principals Leadership Program
Leadership skills needed for implementation and evaluation of instructional programs that meet the needs of all learners. Focus on skills needed to involve teachers in reform and renewal of educational practice, shared instructional decision making and systematic improvement processes. Topics include skills needed for effective instructional supervision at the program and individual level, development of instructional staff, mentoring, coaching, direct instructional supervision integrated with the personnel decision making process involving hiring, renewal of contracts and granting of tenure.

## EDPL 621 LAW AND SCHOOL MANAGEMENT (3)

Three hours lecture/discussion per week
Prerequisite: Admission to the Principals Leadership Program
Application of federal, state and local law to school government and management. Topics include legal principles of statutes and case law related to conduct of students, contracts, liabilities, torts, and individual rights; legal framework for the governance of public education; the role of the legislative process in the governance of schools; legal requirements of "due process" as it relates to students, parents, and school personnel; and special education law and procedures.

## EDPL 622 SCHOOL FINANCE AND PRINCIPLES OF APPLIED LEADERSHIP (3)

Three hours lecture/discussion per week
Prerequisite: Admission to the Principals Leadership Program
Application of the principles of leadership and management as found in the research literature to school and finance and management issues. Topics include public school finance, effective management of fiscal resources and business services at the site, budget development and implementation at the site level to support instructional program priorities and needs of instructional staff in meeting the needs of all students. Communication, human relations, power and authority, decision-making, managing conflict, facilitating change in the context of student management, health, safety, security, school community relations, and school support services (food services, custodial services, facilities maintenance.)

## EDPL 623 UNDERSTANDING AND INFLUENCING ORGANIZATIONS IN DIVERSE COMMUNITIES (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Principals Leadership Program
Organizational theory and leadership skills required to understand and implement change. Topics include organizational structures and the cultural context of schooling, moral and ethical leadership skills needed to guide, build consensus, resolve conflict, support risk-taking, and lead an entire school community in pursuit of a shared vision of educational excellence for all students.

## EDPL 624 HUMAN RESOURCE MANAGEMENT IN EDUCATION SEITINGS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Principals Leadership Program
Leadership knowledge and skills needed to manage a Human Resource Program including personnel administration, supervision, assignment monitoring, negotiation and administration of contracts, supervision of risk management programs and all legal aspects of Human Resources administration.

## EDPL 625 BUILDING COLLABORATIVE, INCLUSIVE LEARNING COMMUNITIES (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Principals Leadership Program
Understanding and applying the skills needed to build an inclusive learning community. Topics include roles and relationships among students, staff, adults and families, professional development, shared decision making, teacher leadership, supporting special populations within the school, designing and implementing strategic plans focused on improved student achievement for all learners.

## EDPL 631 PROFESSIONAL DEVELOPMENT/FIELDWORK I (1)

Three three-hour seminars per semester and 20 hours of field experience
Prerequisite: Admission to the Principals Leadership Program
Collaborative assessment (student, university instructor, and mentor) of each candidate's competence for meeting CCTC standards and development of professional induction plan. Integration of fieldwork and application of knowledge and skills of entry level administrative position in local school or program settings. May be repeated for a maximum of two units.

## EDPL 632 PROFESSIONAL

DEVELOPMENT/FIELDWORK II (2)
Six Three-hour seminars per semester and 40 hours of field experience
Prerequisite: Admission to the Principals Leadership Program
Continuing assessment of candidate competence for meeting CCTC standards integration of fieldwork, and application of knowledge and skills of entry level administrative position in local school or program settings. May be repeated for a maximum of four units.

EDUCATION SINGLE SUBJECT PROGRAM

## EDSS 530 GENERAL SECONDARY SCHOOL METHODS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 570 (1-2 units) or EDSS 575
Students learn and apply teaching strategies, assessment practices, lesson planning, and universal instructional design as appropriate for secondary classrooms. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms. Places special emphasis on middle school teaching and the middle school concept. Students will be placed in middle schools for the field placement/student teaching.

## EDSS 531 TEACHING MATHEMATICS IN MIDDLE SCHOOLS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 570 (1-2 units) or EDSS 575
A study of content, methodology, materials and current research in teaching middle school mathematics. Focuses on the state curricular mathematics frameworks appropriate for middle school classrooms. Emphasizes reflective practice based on California Standards for the Teaching Profession and the use and alignment of curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 532 TEACHING SCIENCE IN MIDDLE SCHOOLS (3)

Three hours lecture/discussion per week
Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 570 (1-2 units) or EDSS 575
A study of content, methodology, materials and current research in middle school science teaching. Focuses on developing science process skills in middle school students. Emphasizes reflective practice based on California Standards for the Teaching Profession and the use and alignment of curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 533 TEACHING WRITING AND LITERATURE IN SECONDARY SCHOOLS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 570 (1-2 units) or EDSS 575
A study of content and methods in teaching critical expository writing, including methods of research and documentation and content and methods in teaching literature to secondary students. Focuses on the teaching of major literary genres. Emphasizes reflective practice based on California Standards for the Teaching Profession and the use and alignment of
curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 540 LITERACY IN SECONDARY SCHOOLS (3)

Three hours lecture/discussion per week
Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 570 (1-2 units) or EDSS 575 Secondary students will learn methods and techniques for reading, writing, language and literacy across the secondary curriculum including students with varied language backgrounds. Emphasis on how language and literacy issues and processes are crucial to successful student learning and successful teaching across contexts and content areas. This course addresses the special needs of proficient readers and adolescents who struggle as readers. Includes approaches and methods that are consistent with a comprehensive, systematic program, and are aligned with the state adopted academic content standards for students in English language arts and the reading/language arts framework. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 541 TEACHING MATHEMATICS IN SECONDARY SCHOOLS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 580 (1-2 units) or EDSS 585 A study of content, methodology, materials and current research in teaching secondary mathematics courses. Focuses on the curricular framework of mathematics as appropriate for high school courses. Emphasizes reflective practice based on California Standards for the Teaching Profession and the use and alignment of curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 542 TEACHING LIFE/PHYSICAL/GEOSCIENCE IN SECONDARY SCHOOLS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 580 (1-2 units) or EDSS 585 A study of the content, methodology, materials and current research in teaching high school science courses. Focuses on methods, curriculum design, and technology use specific to teaching science courses in grades 9-12. Emphasizes reflective practice based on California Standards for the Teaching Profession and the use and alignment of curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 543 TEACHING LANGUAGE SKILLS IN SECONDARY SCHOOLS (3)

Three hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 580 (1-2 units) or EDSS 585 A study of content and methods in teaching the essentials of English language study, including the history of the English language, key models of English grammar, and a variety of applied topics ranging from semantics and dialect study to current research in the teaching of English. Emphasizes reflective practice based on California Standards for the Teaching Profession and the use and alignment of curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

## EDSS 550 ACCESS TO LEARNING: ENGLISH LANGUAGE LEARNERS (2)

Two hours lecture/discussion per week Prerequisite: Admission to the Single Subject Credential Program
Various curricula and instructional programs designed for English language learners, including placement, grouping, methods of language and content assessment, English language development and specially designed academic instruction in English. Examination and application of theoretical and methodological issues in designing instruction for ELLs in classroom settings through reflective and critical practice.

## EDSS 560 ACCESS TO LEARNING: SPECIAL NEEDS LEARNERS (2)

Two hours lecture/discussion per week
Prerequisite: Admission to the Single Subject Credential Program.
This course focuses on methods and techniques for identifying and teaching students with special needs, culturally diverse, and gifted and talented students, and the unique issues associated with integrating students with special needs in secondary settings.

## EDSS 570 FIELD EXPERIENCE MIDDLE SCHOOL (PART-TIME PROGRAM) (1)

Four hours per week in a middle school setting Prerequisite: Admission to the Single Subject Credential Program.
Co-requisite: One of the following: EDSS 530, 531, 532, 533, or 540
Participatory observation in selected middle schools under the supervision of a classroom teacher and University supervisor. May be repeated to a maximum of four units.

## EDSS 571 STUDENT TEACHING SEMINAR-MIDDLE SCHOOL (1)

Bi-weekly two hours of discussion
Prerequisite: Admission to the Single Subject Credential Program

Co-requisite: EDSS 575
Bi-weekly meetings to discuss observations and teaching practice during student teaching. Discussion and seminar with University supervisor to discuss practical issues relevant to the student teaching experience.

## EDSS 575 STUDENT TEACHING MIDDLE SCHOOL

 (6)Equivalent of eight weeks of full-time student teaching
Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 571
Participatory observation and teaching in selected middle level secondary schools under the supervision of a classroom teacher and University supervisor, with a student teaching seminar.

## EDSS 580 FIELD EXPERIENCE HIGH SCHOOL (PART-TIME PROGRAM) (1)

Four hours per week in a high school setting
Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 540, 541, 542, or 543
Participatory observation in selected high schools under the supervision of a classroom teacher and University supervisor. May be repeated to a maximum of three units.

## EDSS 581 STUDENT TEACHING SEMINAR-HIGH SCHOOL (1)

Bi-weekly two hour discussions
Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 585
Discussion and seminar with University supervisor to discuss practical issues relevant to the student teaching experience.

## EDSS 585 STUDENT TEACHING HIGH SCHOOL (6)

Equivalent of eight weeks of full-time student teaching
Prerequisite: Admission to the Single Subject Credential Program
Co-requisite: EDSS 581
Participatory observation and teaching in selected high school level secondary schools under the supervision of classroom teacher and University supervisor, with a student teaching seminar.

## EDUCATION

## EDUC 101 INTRODUCTION TO ELEMENTARY SCHOOLING (3)

Two hours lecture and two hours activity per week This service learning course provides structured observation and tutoring experiences which reflect a rich array of student diversity in local schools. Emphasis is placed on gaining awareness of connections between discipline knowledge and teaching and learning. This course will help students decide if a career in the elementary teaching profession is the right choice for them. Thirty hours of field experience in elementary schools is required. GenEd: D

## EDUC 320 EDUCATION IN MODERN SOCIETY (3)

Three hours lecture per week
Survey of educational institutions and practices used in different sectors of society. Topics include: historical and philosophical foundations of American education.
GenEd: D

## EDUC 330 INTRODUCTION TO SECONDARY SCHOOLING (3)

Two hours lecture/discussion and two hours field observations per week
Through this course students are introduced to secondary school concepts and issues. Topics include middle school and high school organization and structures, the roles of school personnel, and teaching in specific content areas. Students will be placed in local middle and high schools classrooms in their content major and have seminars with university educators and content specialists to discuss subject matter coverage and teaching at various grade levels. It is recommended that students be concurrently enrolled in a core content course in their major. Field experience in secondary schools required.
GenEd: D

## EDUC 342 THE ZOO: CONSERVATION, EDUCATION AND RECREATION (3)

## Three hours lecture per week

An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo. Field trips to local zoos will be required. Same as BIOL 342, BUS 342 and ECON 342
GenEd: D and Interdisciplinary

## EDUC 345 MEDIA LITERACY AND YOUTH CULTURE (3)

Three hours lecture per week
This interdisciplinary course examines the relationship between mass communication, mass media, and youth culture. Topics include: the theories and effects of mass communication, in particular the effects of mass media on children and adolescents. To develop media literacy, students will apply these concepts to their own experiences with popular media, including television, print, and film. Same as COMM 345 GenEd: A1, D, and Interdisciplinary

## EDUC 434 THE MUSEUM: CULTURE, BUSINESS AND EDUCATION (3)

Three hours lecture per week
This course is an interdisciplinary, in-depth study of a museum from the perspective of art, business, and education. Analyzes how artistic values, business and management issues and educational projects are linked within museum practices. Each term this course is offered it will focus on a specific museum in the area. May be repeated to a maximum of 9 units. Same as ART 434 and BUS 434
GenEd: C1, D, and Interdisciplinary

## EDUC 490 SPECIAL TOPICS IN EDUCATION (1-3)

Prerequisite: Consent of instructor
In-depth analysis of current topics in Education. Topics vary each semester. Repeatable by topic.
EDUC 494 INDEPENDENT RESEARCH (1-3)
Students design and implement a study project in conjunction with a faculty member. Repeatable.

## EDUC 497 DIRECTED STUDIES (1-3)

Provides student credit for curricular activities under the direction of an Education faculty member. Repeatable.

## EDUC 499 SENIOR CAPSTONE PROJECT/SEMINAR IN EDUCATION (1-3)

Prerequisite: Upper division standing and consent of instructor
Students work on research or community-based projects in the field of education. A written report of the project is required.

## EDUC 510 LEARNING THEORY AND DEVELOPMENT APPLIED IN MULTICULTURAL CONTEXTS (3)

Three hours lecture/discussion per week and participation/observation in the public schools. 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. Students 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 lecture/discussion per week 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 student's self-examination of his/her stated and implied beliefs, attitudes and expectations related to these areas of diversity and implications for daily classroom practice.
GenEd: C3b

## EDUC 520 OBSERVING AND GUIDING BEHAVIOR IN MULTILINGUAL/MULTICULTURAL AND INCLUSIVE CLASSROOMS (3)

Three hours lecture/discussion per a week Co-requisite: EDUC 521
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 lesson plans for instruction.

## EDUC 521 FIELD EXPERIENCE (1)

Three hours per week in local public schools. Co-requisite: EDUC 520
Participatory observation in selected schools under the supervision of classroom teacher and university supervisor.

## EDUC 605 EDUCATION IN A DIVERSE SOCIETY (3)

Three hours lecture/discussion per week Prerequisite: Completion of Baccalaureate Degree This course focuses on effective leadership in working with diverse communities of teachers, students, and families and strategies for effectively involving families of diverse cultures in support of their child's educational achievement. Issues of gender, ethnicity, race, language, culture and disability are addressed in the context of promoting equity and excellence in learning opportunities and social interaction.

## EDUC 615 PRINCIPLES OF EDUCATIONAL RESEARCH (3)

Three hours lecture/discussion per week Prerequisite: Completion of Baccalaureate Degree This course provides foundational knowledge about the principles of educational research in order to prepare students to conduct independent, disciplined inquiry and applied research in education.

## EDUC 616 MASTERS RESEARCH THESIS/PROJECT

 (1)Prerequisite: Admission to Masters of Education Program
Independent research on topic of choice with advisor approval. May be repeated.

## ENGLISH

ENGL 102 STRETCH COMPOSITION I (3)
Three hours lecture per week Focuses not on finished "products" but rather on helping students develop strategies for using writing to construct meaning - which in turn assists in generating thought-provoking discourse for the intended reader. Upon completing this course, students will have learned that all writing involves a recursive process of thinking and writing strategies often referred to as peer review, invention, prewriting, drafting, revising, and editing. This is the first in a two-course sequence ENGL 102 and ENGL 103.

## ENGL 103 STRETCH COMPOSITION II (3)

Three hours lecture per week
Prerequisite: ENGL 102
Focuses not on finished "products" but rather on helping students to develop strategies for using writing to construct meaning - which in turn assists in generating thought-provoking discourse for the intended reader. Students/Writers will become wellversed in a variety of approaches to constructing the types of genres required in their college courses and in the workplace. Completion of ENGL 103 fulfills the general education requirement for undergraduate writing and prepares students for success in their courses across the curriculum.
GenEd: A2

## ENGL 105 COMPOSITION AND RHETORIC I (3)

Three hours lecture per week Instruction and practice in writing university-level expository and persuasive 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. Substantial writing is required. This course may be linked with another lower division course, in which case the student will enroll in both courses. GenEd: A2

## ENGL 106 COMPOSITION AND RHETORIC IISERVICE LEARNING (3)

Two hours lecture and one hour activity per week Prerequisite: A grade of "C" or better in ENGL 103 or ENGL 105
Designed to help students develop sophisticated, situation-sensitive reading and writing strategies. Students make arguments in formal and informal settings. Special attention is given to evidence discovery, claim support, argument response, and their applications to academic debate, public decision making, and written argument. Requires significant elements of service learning, including producing written work for not-for-profit organizations. A substantial amount of writing is required.
GenEd: A2

## ENGL 107 ADVANCED COMPOSITION AND RHETORIC (3)

Three hours lecture per week
Prerequisite: A grade of "C" or better in ENGL 103 or ENGL 105 or ENGL 106
An intensive, one-semester writing course that emphasizes research as a heuristic for learning, writing as an intellectual dialogue with the authorities represented in the evidence found, and which engages students in judging the merit and appropriateness of discovered evidence. A substantial amount of writing is required.
GenEd: A1, A2
ENGL 120 AMERICAN LITERATURE I (3)
Three hours lecture/discussion per week Prerequisite: ENGL 103 or 105 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: 103 or 105 or equivalent Survey of major authors in British 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 120 or equivalent or consent of instructor
Study of major works of American Literature from 1850 through 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 <br> (3)

Three hours lecture/discussion per week
Prerequisite: ENGL 150 or equivalent or consent of instructor
Study of major works of British 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 103 or 105 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 103 or 105 or equivalent An inquiry into children's literature. Students analyze works representative of several cultures and genres, including fiction, poetry, picture books, non-fiction, and traditional literature. Focus will be on critical reading of materials appropriate for grades K-6 as well as analysis of literary elements and structural features. The course will foster appreciation for and understanding of the author's craft through analytical papers, investigatory projects, and creative responses to children's literature.

## ENGL 315 INTRODUCTION TO LANGUAGE STRUCTURE AND LINGUISTICS (3)

Three hours lecture/discussion per week Prerequisite: ENGL 103 or 105 or equivalent An examination of the basic components of human language, including phonology, morphology, syntax and semantics, and the differences/similarities among languages. Students will identify examples of speech parts and their functions, morphologies, and syntax.

## ENGL 326 MAJOR BRITISH AND EUROPEAN AUTHORS (3)

Three hours lecture/discussion per week Prerequisite: ENGL 250 or equivalent 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 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 103 or 105 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 Individual and collaborative writing in a variety of styles and forms. Students will learn a variety of writing and research techniques, with special emphasis on writing for their chosen majors. Oral presentations form a portion of the course. GenEd: A1, A2 and Interdisciplinary

## ENGL 333 MULTICULTURAL DRAMA IN PERFORMANCE/PRODUCTION (3)

Three hours lecture/discussion per week 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: C2, C3b and Interdisciplinary

## ENGL 334 NARRATIVES OF SOUTHERN CALIFORNIA (3)

Three hours lecture/discussion per week 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: C2, D and Interdisciplinary

## ENGL 335 AMERICAN ETHNIC IMAGES IN NOVELS, FILM AND ART (3)

Three hours lecture/discussion per week Examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological 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: C2, C3b and Interdisciplinary

## ENGL 337 LITERATURE OF THE ENVIRONMENT (3)

Three hours lecture/discussion per week
Involves 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 and its needs. Emphasis will be placed on writing in modes appropriate to the interdisciplinary field of Environmental Science and Resource Management.
GenEd: C2, D and Interdisciplinary
ENGL 338 SCIENCE AND CONSCIENCE (3)
Three hours lecture/discussion per week
This course is a team-taught, interdisciplinary course that examines various ethical issues within the sciences using case studies. The scientific, historical and social aspects of each case study will be examined from different perspectives. Students will learn scientific concepts which will facilitate an informed understanding of the ethical issues involved. Same as PHYS 338.
GenEd: B1, C2 and Interdisciplinary

## ENGL 339 PSYCHOLOGY AND LITERATURE (3)

Three hours lecture per week
This course looks at the ways in which human psychology manifests in literature and the ways literature instructs us about human psychology. Through reading, writing about, and discussing texts with particularly rich psychological content, issues related to mental health and the human condition will be explored. The course will also cover some theoretical and technical aspects of psychology relevant to the readings. Same as PSY 339 GenEd: C2, E, and Interdisciplinary

## ENGL 340 BUSINESS AND ECONOMICS IN AMERICAN LITERATURE (3)

Three hours lecture/discussion per week Explores the ways in which business and economics have been represented in American literature. Employs critical methodologies from the fields of Business, Economics, and Literary studies. BUS 340 and ENGL 340
GenEd: C2, D and Interdisciplinary

## ENGL 378 CONTEMPORARY NATIVE AMERICAN AUTHORS: TELECOURSE (3)

Contemporary Native American Authors is an introduction to the fiction and poetry produced by contemporary Native Americans. Authors of the works studied join the discussion of their work and concepts important to their work. Modes of discourse and the impact of Native American cultures, concerns and philosophy on the fiction and poetry of these authors are the primary foci of the course. Students will meet with the course instructor three times during the semester; otherwise, students will view the telecourse tapes, read the assigned books, read the essays in the workbook, and do the assigned activities explained in the workbook on their own.

## ENGL 400 CONTEMPORARY LITERATURE (3)

Three hours lecture/discussion per week
Prerequisite: ENGL 103 or 105 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. Repeatable by topic.

## ENGL 410 SHAKESPEARE'S PLAYS (3)

Three hours lecture per week
Prerequisite: ENGL 103, 105 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 412 DRAMA OF ANCIENT GREECE (3)

Three hours lecture/discussion per week Prerequisite: ENGL 103 or 105 or equivalent and one upper division literature course
A survey of ancient Greek drama and the culture/society that produced it. The course will examine a representative sample of the major plays. Among the topics considered will be: the tragic and comic festivals, tragedy's relationship with Athenian democracy, the nature of Greek theaters and ancient theatrical production techniques, religion and drama, women and tragedy, tragic and comic heroism, myth and tragedy, and the legacy of Greek tragedy in the modern world. Same as TH 412

## ENGL 420 LITERARY THEORY (3)

Three hours lecture/discussion per week Prerequisite: ENGL 103 or 105 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. Critical analysis by "literary" scholars encompasses 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 103 or 105 or equivalent
Examination of the literature and art of the
Renaissance of the 15th and 16th centuries in Europe and England, focusing on the "re-birth" of the human spirit and the legacies of the Renaissance artists and writers. Same as ART 431
GenEd: C1, C2 and Interdisciplinary
ENGL 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 ART 432 and MUS 432
GenEd: C1, C2 and Interdisciplinary

## ENGL 433 GAY/LESBIAN/BISEXUAL/ TRANSGENDER STUDIES (3)

Three hours lecture per week
Prerequisite: English 103 or 105 or equivalent Introduction to the field of gay/lesbian/bisexual/ transgender studies through the reading of literature and theory. Same as GEND 433
GenEd: C2, D and Interdisciplinary

## ENGL 449 PERSPECTIVES ON MULTICULTURAL LITERATURE (3)

Three hours lecture/discussion per week Prerequisite: ENGL 220
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, C3b and Interdisciplinary

## ENGL 450 NATIVE AMERICAN LITERATURE (3)

Three hours lecture/discussion per week Prerequisite: ENGL 449
Study of 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
Study of 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
Study of 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
Study of 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/Chicano/a/Latino/a 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)

Three hours lecture/discussion per week Prerequisite: Consent of instructor and completion of ENGL 449 and 9 units drawn from 450, 451, 452, 453 As the culmination of the Multicultural Literature Emphasis, the purpose of this independent study course is to produce a significant work on a topic of the student's choice, chosen in consultation with his or her instructor.

## ENGL 455 BILINGUAL LITERARY STUDIES/ESTUDIOS LITERARIOS BILINGUES (3)

Three hours lecture per week
Prerequisite: ENGL 103 or 105 and SPAN 202 or 212 or consent of instructor
This course explores the literatures of the Americas written in two languages: English and Spanish. Course texts will include works written by bilingual U.S. authors and Latin American authors writing primarily in Spanish; genres may include novels, with a special focus on Magical Realism/el realismo magico, short stories/cuentas, and poetry. Readings will be in the original language; class discussions will be bilingual. Same as SPAN 455

## ENGL 456 WOMEN'S FICTION (3)

Three hours lecture/discussion per week Prerequisite: ENGL 220 or ENGL 250 This course examines the development of contemporary fiction by women and its relationship to fiction by men. It compares style and theme across social class and ethnicities, analyzing the historical context of each novel or short story. The course will raise critical questions about a female literary tradition.

## ENGL 460 PERSPECTIVES IN CREATIVE WRITING (3)

Three hours lecture/discussion per week Prerequisite: ENGL 330 or consent of instructor Writing intensive with a focus on 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. May be repeated to a maximum of 6 units.

## ENGL 462 POETRY WRITING (3)

Three hours lecture/discussion per week Prerequisite: ENGL 460 or consent of instructor 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. May be repeated to a maximum of 6 units.

## ENGL 463 WRITING FOR THE STAGE AND SCREEN (3)

Three hours lecture/discussion per week Prerequisite: ENGL 460 or consent of instructor The writing of stage plays and/or screenplays 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. May be repeated to a maximum of 6 units.
ENGL 464 CREATIVE NON-FICTION (3)
Three hours lecture/discussion per week Prerequisite: ENGL 460 or consent of instructor 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. May be repeated to a maximum of 6 units.

## ENGL 465 CREATIVE WRITING PROJECT (3)

Three hours activity per week
Prerequisite: Consent of instructor and completion of ENGL 449 and 9 units drawn from 461, 462, 463, 464 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 474 APPROACHES TO ENGLISH GRAMMAR (3)

Three hours lecture per week
Prerequisite: ENGL 315
This course uses various approaches to analyze the form, function, and meaning of English grammar, including alternative ways to understand grammar in the context of real language tasks. Particular attention is paid to cultural and social assumptions about grammar and how they have shaped our attitudes toward language use.

## ENGL 475 LANGUAGE IN SOCIAL CONTEXT (3)

Three hours lecture/discussion per week Prerequisite: ENGL 103 or ENGL 105 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 477 ADOLESCENT LITERATURE (3)
Three hours lecture/discussion per week Prerequisite: ENGL 103 or 105 and one upperdivision literature course
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 matter preparation. Specific works studied will be representative of several genres, cultures, and periods of literature.

## ENGL 478 WRITING AND METACOGNITION (3)

Three hours lecture per week
Prerequisite: ENGL 103 or 105 and 330 or consent of instructor
This course will develop thinking and recognition of the thought process within writing tasks. The focus will be on identifying, planning, and monitoring the thinking processes that develop while writing and selecting strategies that will improve the writing product. Writing will include expository and creative genres as well as multi-genre papers. Critical theory on language play and development will be introduced.

## 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: For Technical Writing Certificate students only, ENGL 482
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.

## ENGL 484 TECHNICAL WRITING FOR THE SCIENCES (3)

Three hours lecture/discussion per week Prerequisite: For Technical Writing Certificate students only, 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 <br> PROJECT/SEMINAR (3)

Three hours activity per week
Prerequisite: ENGL 310, 330, 482, 483, and 484, and a passing evaluation on the 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)

Three hours activity per week
Prerequisite: Senior standing 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 standing, a passing evaluation of the cumulative portfolio, and consent of instructor 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 100 INTRODUCTION TO ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT (3)

Three hours lecture per week
This course covers a broad spectrum of environmental science topics including: biogeochemical cycles, biological diversity, world food supply, effects of agricultural production on the environment, energy, water and air environments, and societies' impacts on the environment. Current environmental issues such as loss of biological diversity, global climate change, ozone depletion, and natural resource management will be discussed.
GenEd: B2, D

## ESRM 313 CONSERVATION BIOLOGY (4)

Three hours lecture and three hours laboratory per week
Prerequisite: ESRM 100; BIOL 200
This course explores issues surrounding the conservation of biodiversity. Topics to be covered include: species-, population-, and ecosystem-level issues, biodiversity, extinction, sustained yield, exotic species, and reserve design. Management implications and the ecology of issues are integrated throughout the course. Lab fee required. Same as BIOL 313

## ESRM 328 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (3)

Two hours lecture and three hour laboratory per week Prerequisite: ESRM 100 or consent of the instructor Introduction to fundamental concepts and techniques of geographic information systems, including the collection, manipulation, analysis, interpretation, display, and communication of spatial information for environmental decision-making.

## ESRM 329 ENVIRONMENTAL LAW AND POLICY (3)

Three hours lecture per week
Prerequisite: ESRM 100 or consent of the instructor The purpose of this course is to introduce the fundamental concepts of environmental law and policy and familiarize students with the various types legal of mechanisms used to protect the environment. A practical grounding in the basic legal concepts central to environmental law and how laws have been applied at the local, state, national, and international level will be gained. Students will also explore the purpose and function of some of the larger environmental institutions and their relationships with the public, business, and the environmental community.

## ESRM 332 HUMAN ECOLOGY (3)

Three hours lecture per week
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 among 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: D and Interdisciplinary

## ESRM 410 ENVIRONMENTAL IMPACT ASSESSMENT (3)

Three hours lecture per week Prerequisite: BIOL 433, ECON 362, ESRM 328 and 329
This course will introduce students to methods and procedures designed to assess and minimize human impacts on natural systems. Topics to be covered include the components of environmental impact reports and assessments, and the processes involved in preparation and approval. Also addressed will be the issues related to mitigating environmental impacts.

## ESRM 462 COASTAL AND MARINE MANAGEMENT (3)

Three hours lecture per week
Prerequisite: BIOL 433, ECON 362 and ESRM 329 This course provides an introduction to physical and biological oceanography, threats to the marine environment, and various policies and programs which have been or are being developed to establish how humans manage coastal and marine environments.

## ESRM 463 WATER RESOURCES MANAGEMENT (3)

Three hours lecture per week
Prerequisite: BIOL 433, ECON 362 and ESRM 329
Water management principles focusing on irrigation and drainage, soil and water conservation, and watershed development. Topics to be covered include the hydrologic cycle; runoff; erosion control; soil-water-plant relationships; surface and subsurface drainage; surface, sprinkler, and micro irrigation; vegetated waterways and open channel flow; impoundments; wetlands; water quality and supply; water rights.

## ESRM 464 LAND USE PLANNING AND AGRICULTURAL MANAGEMENT (3)

Three hours lecture per week
Prerequisite: BIOL 433, ECON 362 and ESRM 329 This course will examine various approaches to land use planning at the municipal, county, state, national, and international level focusing on the role of land use planning in managing agricultural lands within and adjacent to urban areas. Students will use case studies from Ventura County and related areas.

## ESRM 481 TOPICS IN ENVIRONMENTAL POLLUTION (3)

Three hours seminar per week Prerequisite: BIOL 433 and 432, CHEM 250 and 251 Topics may include: analysis of pollution transformation and transport; impacts on human and natural systems; and examples from tropospheric air pollution, water pollution, soil pollution, climate change. Repeatable by topic.

## ESRM 482 ISSUES IN ENVIRONMENTAL PLANNING AND RESOURCE MANAGEMENT (3)

Three hours seminar per week
Prerequisite: BIOL 433, ECON 362 and ESRM 329
Selected issues in resource development derived from current resource policy changes, or other emerging topics of interest.

## ESRM 483 ISSUES IN GLOBAL RESOURCE MANAGEMENT (3)

Three hours seminar per week
Prerequisite: BIOL 433, ECON 362 and ESRM 329
Selected issues in global resource management.
Topics may include climate change, ocean management, desertification, air pollution, ozone depletion, patterns of consumption, water pollution, water allocation, international policy or legislative instruments, or other topics as appropriate.

## ESRM 490 SPECIAL TOPICS (3)

Three hours seminar per week
Prerequisite: Consent of the instructor
In-depth analysis of current topics in environmental science and resource management. Topics vary each semester. Repeatable by topic.

## ESRM 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor
Individual internship through service learning. Graded Credit/No Credit

## ESRM 494 INDEPENDENT RESEARCH (1-3)

Variable hours per week
Prerequisite: Consent of instructor
Individual research on topic selected by the student and faculty mentor. Repeatable for up to nine units. Graded Credit/No Credit

## ESRM 499 CAPSTONE (3)

Three hours of lecture / discussion per week Prerequisite: Upper division required courses in ESRM major (may be completed concurrently) 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. Topics 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 provide results to appropriate national, state, or local agencies for consideration and deliberation in administrative decisions.

## FINANCE

## FIN 300 BUSINESS FINANCE (3)

Three hours lecture per week
Prerequisite: ACCT 220, MATH 140 or 150
Principles of planning, procuring, controlling short term and long-term financial resources of business organizations. Topics include cash and capital budgeting, debt and equity markets, security evaluations, cost and structure of capital.
FIN 343 CAPITAL THEORY (3)
Three hours lecture per week Intertemporal choice and decision-making under uncertainty in our financial lives. Topics include: multi-period consumption, multi-period production, capital budgeting, modern portfolio theory and financial management. Same as ECON 343
GenEd: D and Interdisciplinary

## FIN 421 PUBLIC FINANCIAL MANAGEMENT (3)

Three hours lecture per week
Prerequisite: FIN 300
Examines principles, methods and concepts of financial management used in non-profit sector. Disciplines of accounting, budgeting, operations control, auditing and management are integrated into comprehensive financial systems. Theoretical design and practical implementation issues are explored.
FIN 490 SPECIAL TOPICS (3)
Three hours seminar per week Prerequisite: Consent of instructor In-depth analysis of current topics in finance. Topics vary each semester. Repeatable by topic.

## FIN 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor Individual internship through service learning. Graded Credit/No Credit

## FIN 497 DIRECTED STUDY (1-3)

Variable hours per week
Prerequisite: Consent of instructor
Individual contracted study on topics or research selected by the student and faculty mentor. Repeatable for up to nine units. Graded Credit/No Credit

## GENDER STUDIES

## GEND 433 GAY/LESBIAN/BISEXUAL/ TRANSGENDER STUDIES (3)

Three hours lecture per week
Prerequisite: English 103 or 105 or equivalent Introduction to the field of gay/lesbian/bisexual/transgender studies through the reading of literature and theory. Same as ENGL 433
GenEd: C2, D and Interdisciplinary

## GEOLOGY

## GEOL 121 PHYSICAL GEOLOGY (4)

Three hours lecture per week and three hours laboratory per week
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 understand the immense processes affecting their environment. GenEd: B1

## GEOL 122 HISTORICAL GEOLOGY (3)

Three hours lecture per week
This course focuses upon the geological history of the Earth and the Solar System from the origin of the cosmos to the present, tracing the evolution of the continents and ocean basins, and the evolution of plants and animals through time. Surveys events in Earth's past of relevance to present environmental issues.
GenEd: B1
GEOL 300 FOUNDATIONS OF EARTH SCIENCE (4)
Three hours lecture and three hours laboratory per week
Prerequisite: PHSC 170
Principles of geology, hydrology, oceanography, meteorology, and astronomy for the elementary school teacher.

GEOL 321 ENVIRONMENTAL GEOLOGY (4)
Three hours lecture and three hours laboratory per week
Interrelationships between human and natural geologic hazards: tsunami, earthquakes, landslides, subsidence, volcanoes. Explores environmental impact of resource extraction and usage, the importance of understanding the geologic processes and landscape in land use planning, and the means of using geology to minimize conflicts in resource management and disaster preparation.
GenEd: B1

## HISTORY

HIST 211 WORLD CIVLIZATIONS: ORGINS TO 1500 (3)
Three hours lecture per week
This survey examines world civilizations from the Neolithic era to the European colonization of the Western Hemisphere. Topics may include, but are not limited to, the development and growth of religions, commerce, and other cultural institutions.
GenEd: D
HIST 212 WORLD CIVILIZATIONS: SINCE 1500 (3)
Three hours lecture per week
This survey examines world civilizations from both regional and global perspectives. Topics may include, but are not limited to, the development and growth of religions, commerce, and other cultural institutions. GenEd: D

HIST 270 THE UNITED STATES TO 1877 (3)
Three hours lecture per week
Survey of the political, social, economic as well as cultural institutions of the United States from the precolonial era to reconstruction. Meets Title V U.S. History and Constitution requirement.

## HIST 271 THE UNITED STATES SINCE 1877 (3)

Three hours lecture per week
Survey of the political, social, economic as well as cultural institutions of the United States from reconstruction to the present. Meets Title V U.S History and Constitution requirement.
HIST 272 CONSTITUTIONAL HISTORY OF THE U.S. (3)
Three hours lecture per week
Examines the origins of American constitutional thought and practice, the framing and adoption of the Constitution and the Bill of Rights, the establishment of the U.S. Supreme Court and of its power of judicial review. Topics include: a series of critical tests to the constitutional framework in the context of a continuous social change, major decisions by the Supreme Court in history and their impacts on society. Meets Title V U.S. History and Constitution requirement.
HIST 275 THE UNITED STATES TO 1900 (3)
Three hours lecture per week
This course is specially designed for students in the Teaching and Learning Option of the of Liberal Studies Program. Examines the history of the United States from the colonial origins to the emergence of a modern industrial system. Emphasis is given to the major social, political, and cultural events during the period from the early 1600 s to 1900 , such as the encounters between Native Americans and European explorers, the growth of English colonies, the American Revolution, the transformation of American society after Independence, slavery, abolition, the Civil War, and the development of mass immigration and industrialization. Meets Title V U.S. History and Constitution requirement.

HIST 275(a) THE UNITED STATES FROM 1865 TO 1900 (1)
One hour lecture per week
Prerequisite: US History to 1865 or 1877
Specially designed for students of Liberal
Studies/Teaching Learning Option who have taken American history to 1865 or 1877 but need to expand their knowledge to 1900 according to the History Content Specifications adopted by the California Commission on Teacher Credentialing in 2002. This course examines those major political, economic, and social events that transformed America into a modern industrial society during the second half of the nineteenth century.

## HIST 280 THE HISTORIAN'S CRAFT (3)

Three hours lecture per week
This is a survey course on the writing of history. Utilizes and analyzes library resources, oral interviews, and other material in the writing of history.
GenEd: D

## HIST 310 HISTORY OF THE MEDITERRANEAN (3)

Three hours lecture per week
Examines the history of the Mediterranean over the last 3000 years. Special attention will be paid to the Greco-Roman heritage, the impact of Christianity and Islam, the rise of Italian merchants, and the tangle between Spain and the Ottoman Empire over the control of the sea.

## HIST 319 HISTORY OF EUROPE, 1871-1945 (3)

Three hours lecture per week
Examines the development of European history from the unification of Germany to the end of the Second World War. Special attention will be paid to the development of powerful ideologies (e.g., communism, fascism), socio-economic change, and imperial expansion.
HIST 320 HISTORY OF EUROPE, 1945-PRESENT (3) Three hours lecture per week
Examines the development of European history to the present day. Special attention will be paid to the reconstruction of the continent following the war, the implications of the cold war and the collapse of the Soviet Union, and the emergence of the European Union.

## HIST 333 HISTORY OF SOUTHERN CALIFORNIA CHICANA/O ART (3)

Three hours lecture per week
An exploration of the Southern California Chicano/a culture focusing on 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: C3b, D and Interdisciplinary

## HIST 334 NARRATIVES OF SOUTHERN CALIFORNIA (3)

Three hours lecture/discussion per week 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 ENGL 334
GenEd: C2, D and Interdisciplinary

## HIST 335 AMERICAN ETHNIC IMAGES IN NOVELS, FILM AND ART (3)

Three hours lecture/discussion per week Examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological 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 ENGL 335
GenEd: C2, C3b and Interdisciplinary
HIST 340 HISTORY AND PSYCHOLOGY OF NAZI GERMANY (3)
Three hours lecture per week
Prerequisite: Upper Division standing
Examines the historical and psychological roots of the Nazi movement in Germany. Areas covered will include the mass psychology of fascism, the psychopathology of Nazi leaders, and the psychological impact of the holocaust. Same as PSY 340
GenEd: D, E and Interdisciplinary
HIST 349 HISTORY OF BUSINESS AND ECONOMICS IN NORTH AMERICA (3)

## Three hours of lecture per week

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 and ECON 349 GenEd: D and Interdisciplinary

## HIST 350 CHICANO HISTORY AND CULTURE (3)

Three hours lecture per week
Examines 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 OF WORLD HISTORY (3)

Three hours lecture per week
Explores the major trends in global approaches to history. These include anthropological, diaspora, environmental, and world systems approaches. GenEd: D

## HIST 366 OCEANS OF WORLD HISTORY (3)

Three hours lecture per week
Discusses the main approaches to world history through the lens of the earth's three major oceans: Atlantic, Indian, and Pacific.

## HIST 367 ENVIRONMENTAL HISTORY (3)

Three hours lecture per week
Examines the historical interaction between humans and their environment. Special attention will be paid to the transformations of environments in the Americas and Europe.

## HIST 369 CALIFORNIA HISTORY AND CULTURE (3)

Three hours lecture per week
Examines the cultural and institutional development of California prior to the 16 th century and since.

## HIST 372 UNITED STATES INDUSTRIALIZATION AND PROGRESSIVISM (3)

Three hours lecture per week
Examines the nation's geographic and industrial expansion. Social and political problems up to the end of WWI will also be examined.

## HIST 373 AMERICAN LABOR HISTORY (3)

Three hours lecture per week
This is an in-depth study of the individual, group, and organized experience of the American working people from colonial time to the twentieth century.

## HIST 374 UNITED STATES SINCE 1945 (3)

Three hours lecture per week
Examines the cultural, social, and political transformation of the nation after World War II. Among the various topics of the course, specific attention is given to how international affairs influenced domestic life and society.

## HIST 380 HISTORY OF THE PACIFIC ISLANDS (3)

Three hours lecture per week
Examines the history of the Pacific from human settlement to the present. Special attention will be paid to cross-cultural encounters, religious conversion, imperialism, and post-colonial realities in the region. The course employs interdisciplinary methods borrowed from anthropology, archaeology, and linguistics.

## HIST 391 TRADITIONAL CHINA (3)

Three hours lecture per week
This course studies the social, political, economic, and cultural traditions in China from ancient times to the end of the Ming Dynasty.

## HIST 392 MODERN CHINA (3)

Three hours lecture per week
This course explores the social, political, economic, and cultural changes in China from to the rise of the Ch'ing Dynasty to 1949.

## HIST 393 CONTEMPORARY CHINA (3)

Three hours lecture per week
This course examines the social, political, economic, and cultural developments in China since 1949.

## HIST 394 TRADITIONAL JAPAN (3)

Three hours lecture per week
This course studies the social, political, economic, and cultural traditions in Japan from ancient times to the fall of the Tokugawa regime.

## HIST 395 MODERN JAPAN (3)

Three hours lecture per week
This course studies the social, political, economic, and cultural changes in Japan from the Meiji Restoration to the present.

## HIST 396 EAST ASIA: THEN AND NOW (3)

Three hours lecture per week
This course examines of the social, political, economic, and cultural foundations in China, Korea, and Japan. Emphasis is
given to the profound political, economic, and other transformations taking place in these countries in the twentieth century.

## HIST 401 UNITED STATES IMMIGRATION HISTORY, 1840-1945 (3)

Three hours lecture per week
Examines the experiences and contributions of immigrant groups in the United States. Constitutional, political, and social considerations of United States immigration history frame the content study of this course.

## HIST 402 SOUTHERN CALIFORNIA CHICANO HISTORY AND CULTURE (3)

Three hours lecture per week
Examines the cultural, economic, political, and social experience of Mexicanos of the region from the U.S 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 Chicano/as.
GenEd: D

## HIST 403 THE AMERICAN INTELLECTUAL TRADITION (3)

Three hours lecture per week
This course explores American thought from Puritanism, transcendentalism, and pragmatism to contemporary trends represented in thinkers from Richard Mather, Jonathan Edwards, Ralph Emerson, William James, and John Dewey to Reinhold Hiebuhr. It also addresses those dissenting voices resonantly expressed in American life from Ann Hutchinson, Roger Williams, Henry David Thoreau, Frederick Douglass, Susan B. Anthony, and W. E. B. Du Bois to Martin Luther King, Jr.

## HIST 412 LAW AND SOCIETY (3)

Three hours lecture per week
Prerequisite: ENGL 330
This course investigates a wide range of issues including, but not limited to, the origins of the law in classical civilizations, the interplays between/among law, religion, government, and morality, evolutions of diverse legal systems in different societies and
traditions, legal and ethical challenges of modern sciences, the rule of law in an international environment, and the debate over the extent and limits of the laws in coping with social and technological problems of modern life.
GenEd: D

## HIST 413 WORLD RELIGIONS AND CLASSICAL PHILOSOPHIES (3)

Three hours lecture per week
Prerequisite: ENGL 330
This course studies and compares some major religions and philosophical schools in the ancient world. It examines how different societies and peoples have formed their basic assumptions concerning the universe, faith, human nature and society, and how those fundamental assumptions have affected their chosen modes of thinking, ways of life, organizations of society, forms of government, and approaches to knowledge.
GenEd: D

## HIST 414 WOMEN IN HISTORY (3)

Three hours lecture per week
This course examines the role of women and gender in human experience. Topics may vary. They include, but are not limited to, gender and work, gender and religion, gender in literature, gender and race, gender and sexuality, gender and family, and gender and social change.

## HIST 415 SOCIETY AND RADICALISM (3)

Three hours lecture per week
This course studies the emergence of different styles of protests and radicalism in the modern world. Topics include, but are not limited to, radical thinkers, theories, philosophies, organizations, strategies, movements, as well as the roles and influences they had in society.

## HIST 420 HISTORY OF MEXICO (3)

Three hours lecture per week Examines the social and political history of Mexico from the period of European contact to the present. The modern phase of Mexico's history is examined in relation to the overall development of North America.

## HIST 421 REVOLUTIONARY MEXICO, 1876-1930 (3)

Three hours lecture per week
Evaluates the social and political causes and consequences of the Mexican Revolution. Particular attention is also given to the influence and intervention of the United States of America in Mexico's economic and domestic affairs.

## HIST 436 PSYCHOLOGY AND HISTORY OF EAST ASIAN WARRIOR CULTURES (3)

Three hours lecture per week
Prerequisite: Upper division standing or consent of instructor
Examines the psychological and historical roots of warrior cultures in East Asia. Characteristics such as duty, enlightenment, honor, loyalty, and discipline will be examined in the context of the individual and
group psychology of warrior cultures throughout history. Psychological and historical conceptions of violence, aggression, and strategy will also be explored. Students will be encouraged to relate values derived from Asian warrior cultures to their own lives, while reflecting on the applicability of these ideas to modern life. Same as PSY 436
GenEd: D, E, and Interdisciplinary

## HIST 442 THE AFRICAN DIASPORA (3)

Three hours lecture per week
Examines the dispersal of Africans to other continents over the last two thousand years. Special attention will be paid to the African slave trade, identity formation, and nationalism. The course employs interdisciplinary methods borrowed from anthropology, art history, linguistics, and literature. Same as ANTH 442 GenEd: D and Interdisciplinary

## HIST 470 PEOPLE AND EVERYDAY LIFE IN EARLY AMERICA (3)

Three hours lecture per week
The course focuses on those ordinary men and women whose daily works and activities made what American society was. It covers the time span from the 1600s to the early 1800 s; topics include, but are limited to, popular religion, work ethics and labor systems, family and marriage, festivities, leisure, and games, law and order, mass-control policies on crime and punishment, trades and craftsmanship, farming and industries, issues of gender, race, and ethnicities, and early popular unrest, collective actions, and protests.

## HIST 490 SPECIAL TOPICS (3)

Three hours lecture per week
Investigates a prominent topic of historical interest. Topics vary by semester. Repeatable by topic.

## HIST 491 HISTORIOGRAPHY (3)

Three hours lecture per week
This course surveys major historians and their theoretical and methodological approaches to the discipline from the nineteenth century to the present day. The course is designed to update students to the most influential theories in the study of history. Included in this survey are theoretical approaches based on the writings of Braudel, Foucault, Freud, and Marx.

## HIST 492 INTERNSHIP (3)

This course is designed to provide students with some "hands-on" experience in the historical field. Students will work in a museum or a historical society and acquire important information about such activities as archiving documents, historical preservation, and dissemination of historical information.

## HEALTH

## HLTH 322 HEALTH ISSUES IN EDUCATION (2)

Two hours lecture per week
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.

## GenEd: E

## HLTH 434 INTRODUCTION TO BIOMEDICAL IMAGING (4)

Three hours lecture and two hours lab activity per week
Prerequisite: BIOL 210 or PHYS 200
The course will present an overview of biomedical images and imaging systems. The fundamental concepts used in several imaging modalities (such as projection radiography, mammography, DEXA, computed tomography, ultrasonography and magnetic resonance imaging) will be examined: the emphasis will be on an intuitive and descriptive presentation of the main components of these systems. Image formation and reconstruction will be addressed. The resulting clinical images will be correlated with the underlying structure and function of the organs, and the diagnostic utility and limitations of the images will be considered. Same as BIOL 434 and PHYS 434 GenEd: B2, E and Interdisciplinary

## LIBRARY

## LIB 101 INTRODUCTION TO INFORMATION RESOURCES (2)

Two hours lecture per week
Overview of information resources and services provided by the University Library for undergraduate students. Students will learn how to find, evaluate, and apply information to scholarly research and everyday life situations. Use of online catalogs, databases, and web search engines to find print and non-print resources. Properly citing information to prevent plagiarism.

## LIB 490 SPECIAL TOPICS (1-3)

Topics include: finding, evaluating, and applying information within a specific discipline or related group of disciplines; use of online and print sources to find books, articles, web sites, government publications, and non-print sources relevant to a discipline(s); use of appropriate discipline style manual; use of appropriate applications. Repeatable by topic.

## LIBERAL STUDIES

LS 492 INTERNSHIP/ SERVICE LEARNING (1-3)
Upper-division standing
Students design a community project, individually or in a small group, related to the areas studied in the 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. Repeatable.

## LS 494 INDEPENDENT RESEARCH (1-3)

Prerequisite: Upper-division standing Students design and implement a study project in conjunction with a faculty member. Repeatable

## LS 497 DIRECTED STUDIES (1-3)

Prerequisite: Upper-division standing
Provides student credit for curricular activities under the direction of a Liberal Studies faculty member. Repeatable.

## LS 499 CAPSTONE PROJECT (1-3)

## Prerequisite: Senior standing

Students design and complete a project that integrates prior course work in conjunction with a faculty advisor and disseminate the project to the campus community. Repeatable.

## MATHEMATICS

## MATH 094 INTRODUCTION TO ALGEBRA (5)

Four hours lecture and one hour activity per week A review of fundamental concepts of arithmetic, geometry and elementary algebra. Students who earn Credit in this course and in MATH 095 satisfy the Entry Level Mathematics (ELM) requirement. This course is offered Credit/No Credit only. Credit will not apply toward the baccalaureate degree but will apply as 5 units of University Credit.

## MATH 095 INTERMEDIATE ALGEBRA (5)

Four hours lecture and one hour activity per week Prerequisite: MATH 094 or an appropriate ELM Score A review of concepts of geometry and intermediate algebra with applications. Students who earn Credit in this course satisfy the Entry Level Mathematics (ELM) requirement. This course is offered Credit/No Credit only. Credit will not apply toward the baccalaureate degree but will apply as 5 units of University Credit.

## MATH 101 COLLEGE ALGEBRA (3)

Three hours lecture per week
Prerequisite: A passing score on the Entry Level Mathematics Examination
Topic include: basic set theory, number systems and their algebraic properties; systems of equations and inequalities; basic analytic geometry, matrix algebra and elementary functions; and problem solving.

## MATH 105 PRE-CALCULUS (4

Four hours lecture per week
Prerequisite: A passing score on the Entry Level Mathematics Examination
Topics include: 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 lecture per week
Prerequisite: A passing score on the Entry Level Mathematics examination or MATH 095
Presents the diversity of mathematics and the spirit, in which it is employed in various situations, including different problem solving strategies, inductivedeductive reasoning, paradoxes, puzzles and mathematical modeling. The contributions of various cultures and influences of other disciplines to mathematical thinking are studied.
GenEd: B3

## MATH 140 CALCULUS FOR BUSINESS APPLICATIONS (3)

Three hours lecture per week
Prerequisite: A passing score on the Calculus Placement Examination or MATH 101 or 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)

Four hours lecture per week
Prerequisite: Passing scores on the Calculus
Placement Examination or MATH 105
A course in analytic geometry and calculus. Topics include: elementary and transcendental functions, their properties, limits, derivatives, integrals and mathematical modeling.
GenEd: B3

## MATH 151 CALCULUS II (4)

Four hours lecture per week
Prerequisite: MATH 150
Topics include: differentiation, integration, sequences, infinite series, and power series.

## MATH 201 ELEMENTARY STATISTICS (3)

Three-hour lecture/laboratory per week Prerequisite: A passing score on the Entry Level Mathematics Exam (ELM) or Math 105 or Math 101 Critical reasoning using a quantitative and statistical problem-solving approach to solving real-world problems. Topics include: probability and statistics, sample data, probability and empirical data distributions, sampling techniques, estimation and hypothesis testing, ANOVA, and correlation and regression analysis. Students will use standard statistical software to analyze real world and simulated data.
GenEd: B3
MATH 202 BIOSTATISTICS (3)
Three hours lecture/laboratory per week Prerequisite: A passing score on the Entry Level Mathematics Exam (ELM) or MATH 105 or equivalent
Critical reasoning using a quantitative and statistical problem-solving approach to solve real-world problems. Uses probability and statistics to describe and analyze biological data collected from laboratory or field experiments. Course will cover descriptions of sample data, probability and empirical data distributions, sampling techniques, estimation and hypothesis testing, ANOVA, and correlation and regression analysis. Students will use standard statistical software to analyze real world and simulated data. Same as BIOL 202 and PSY 202 GenEd: B3

## MATH 208 MODERN MATH FOR ELEMENTARY TEACHING I-NUMBERS AND PROBLEM SOLVING (3)

Three hours lecture per week
Prerequisite: A passing score on the Entry Level Mathematics Examination or Math 095 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 AND MATHEMATICAL REASONING (3)

Three hours lecture per week
Introduction to modern deductive logic. Critical thinking and abstract approaches to common language. Includes abstract sets and number sets, relations, prepositional logic, common language cases, and theory of quantification.
GenEd: A3, B3

## MATH 240 LINEAR ALGEBRA (3)

Three hours lecture per week Prerequisite: MATH 151
Topics include: matrices, linear systems of equations, determinants, vectors in 2 and 3 dimensions, eigenvalues, the vector space Rn , linear transformations, introduction to general vector spaces and applications.

## MATH 250 CALCULUS III (3)

Three hours lecture per week
Prerequisite: MATH 151 with a grade of C or better Topics include: functions of several variables, solid analytic geometry, partial differentiation, multiple integrals with applications; vector analysis, and line and surface integrals.

## MATH 300 DISCRETE MATHEMATICS (3)

Three hours lecture per week
Prerequisite: MATH 151 and MATH 230
Topics include: 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 TEACHING II-GEOMETRY, PROBABILITY AND STATISTICS (3)

Three hours lecture per week
Prerequisite: MATH 208 or consent of the instructor 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 become elementary school teachers.

## MATH 318 MATHEMATICS FOR SECONDARY SCHOOL TEACHERS (3)

Three hours lecture in the computer lab per week Prerequisite: MATH 150
Current issues of modern secondary school math curriculum including abstract thinking, technology use and problem solving approaches to teaching. content is geometry based, but selected topics from algebra, precalculus, and calculus will be discussed. designed for students intending to teach. service learning project required.

## MATH 320 MATHEMATICS AND FINE ARTS (3)

Three hours lecture per week
Prerequisite: A passing score on the Entry Level Mathematics examination, or Math 095
The course is specially designed for students interested in fine arts, with the emphasis on understanding geometric patterns and concepts by self-explorations. 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

## MATH 329 STATISTICS FOR BUSINESS AND ECONOMICS (3)

Three hours lecture in the lab per week Introduction to modern statistical methods used in business and economic analysis. Topics include: sampling, probability, various distributions, correlation and regression, statistical inferences, hypothesis testing, problem solving and the consequences to underlying economical systems. GenEd: B3

## MATH 331 HISTORY OF MATHEMATICS (3)

Three hours lecture per week
Study of breakthrough mathematical ideas and their creators within historical and scientific context. Topics include: inception, development, obstacles of mathematical ideas.
GenEd: B3, D and Interdisciplinary

## MATH 345 DIGITAL IMAGE PROCESSING (3)

Three hours lecture in the lab per week
Prerequisite: Consent of instructor
An introduction to the basic concepts and techniques for digital image restoration and enhancement, analysis, coding and compression. The emphasis is on processes which analyze primarily two-dimensional discrete images represented at the pixel level, including filtering, noise reduction and segmentation. Fourier analysis techniques will be explored. Programming exercises will be used to implement the various processes, and their performance on synthetic and real images will be studied. Same as COMP 345 and PHYS 345
GenEd: B1, B4 and Interdisciplinary

## MATH 350 DIFFERENTIAL EQUATIONS AND DYNAMICAL SYSTEMS (3) <br> Three hours lecture per week <br> Prerequisite: MATH 250 (may be taken concurrently) <br> Topics include: 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 lecture per week
Prerequisite: MATH 250
Topics include: real number system, metric spaces, norms, function spaces, continuity, differentiability, integrability of functions, sequences and series.

## MATH 352 PROBABILITY AND STATISTICS (3)

Three hours lecture per week
Prerequisite: MATH 151
Topic include: 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.

## MATH 354 ANALYSIS OF ALGORITHMS (3)

Three hours lecture per week
Prerequisite: MATH 300 and some computer programming experience
Computer-oriented study of semi numerical and nonnumerical algorithms. Topics include: sorting, tree searching, generation of combinatorial structures, algorithm proof techniques, best algorithms, programming complexity, and string matching.

## MATH 393 ABSTRACT ALGEBRA (3)

Three hours lecture per week
Prerequisite: MATH 300
Topics include: groups, rings, modules, fields and their extensions, Galois Theory.

## MATH 429 OPERATIONS RESEARCH (3)

Three hours lecture per week
Prerequisite: MATH 329 or MATH 352 or equivalent 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. Topics of parametric programming, large-scale methods, generalized programming.

## MATH 430 RESEARCH DESIGN AND DATA ANALYSIS (3)

Three hours laboratory per week
Prerequisite: BIOL 202 with a grade of C or better or MATH 352
Discussion of experimental design, sampling methods, data collection, and methods of data analysis related to scientific fields.
GenEd: B2, B3 and Interdisciplinary

## MATH 445 IMAGE ANALYSIS AND PATTERN RECOGNITION (3)

Three hours lecture in the lab per week
Prerequisite: PHYS/COMP/MATH 345 or consent of instructor
The course addresses the issue of analyzing the pattern content within an image. Pattern recognition consists of image segmentation, feature extraction and classification. The principles and concepts underpinning pattern recognition, and the evolution, utility and limitations of various techniques (including neural networks) will be studied. Programming exercises will be used to implement examples and applications of pattern recognition processes, and their performance on a variety of diverse synthetic and real images will be studied. Same as COMP 445 and PHYS 445
GenEd: B1, B4 and Interdisciplinary

## MATH 448 SCIENTIFIC COMPUTING (3)

Three hours lecture in the lab per week Prerequisite: MATH 151 and MATH 350 or COMP 151
Topics include: techniques of applied mathematics, solution of equations, finite differences, and wavelets. GenEd: B3, B4, and Interdisciplinary

## MATH 450 PARTIAL DIFFERENTIAL EQUATIONS AND MATHEMATICAL PHYSICS (3)

Three hours lecture per week
Prerequisite: MATH 350 or consent of instructor Topics include: vector field theory and Fourier analysis.

## MATH 451 COMPLEX ANALYSIS (3)

Three hours lecture per week
Prerequisite: MATH 250
Topics include: complex variable, analytic functions, complex integration, power series and conformal mappings.

## MATH 452 COMPUTATIONAL BIOINFORMATICS (4)

Four hours lecture in the lab per week
Prerequisite: programming skills, statistics, or consent of the instructor
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 COMP 452

## MATH 480 DIFFERENTIAL AND RIEMANNIAN GEOMETRY (3)

Three hours lecture per week
Prerequisite: MATH 351
Topics include: Implicit Function theorem. Differentials, Riemannian manifolds, curvature, local isometries. Gauss-Bonnet Theorem.

## MATH 482 NUMBER THEORY AND CRYPTOGRAPHY

 (3)Three hours lecture per week
Prerequisite: MATH 300
Divisibility, Prime Numbers, Unique factorization theorem, congruencies, solutions of linear congruencies, solutions of quadratic congruencies, Fermat's Little Theorem, Wilson's Theorem, Euler's phi function. Cryptography.

## MATH 484 ALGEBRAIC GEOMETRY AND CODING THEORY (3)

Three hours lecture 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)

Three hours lecture per week
Prerequisite: Upper-division standing
New developments in mathematics. Repeatable by topic.

## MATH 492 INTERNSHIP (1-3)

Prerequisite: Upper division standing and Program approval of written proposal
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.

## MATH 494 INDEPENDENT RESEARCH (1-3)

Prerequisite: Senior standing and Program approval of written proposal
Supervised project involving theoretical research in the field of mathematics or its applications. All students are required to present their projects at the Senior Colloquium.

## MATH 497 DIRECTED STUDIES (3)

Prerequisite: Program approval of written proposal Supervised project involving library research in the field of mathematics or its applications. All students are required to present their projects at the Senior Colloquium..

## MATH 499 SENIOR COLLOQUIUM (1)

One hour of seminar per week
Prerequisite: Senior standing
Oral presentations of current advancement in the field, and reports on students' projects. Repeatable.

## MANAGEMENT

MGT 307 MANAGEMENT OF ORGANIZATIONS (3)
Three hours lecture per week Principles, methods and procedures planning, organizing, leading, and controlling people within organizations. Topics include the history of management thought, organizational culture and design, decision-making, managerial communication, and strategic management

## MGT 310 MANAGEMENT OF INTERNATIONAL BUSINESS (3)

Three hours lecture per week Identification and analysis of management systems in cross-border environments. Explores the impact of economic, social, cultural, and political variables on the conduct of profit-making business. Extensive use of case analysis, and performance of a 'country study' project.

## MGT 325 ENTREPRENEURIAL MANAGEMENT (3)

Three hours lecture per week
Explores the management of start-up and small businesses. Concentrates on initial strategy, location, financing, staffing, daily activities, controls and taxes. Students develop a business plan for a small business.

## MGT 326 SCIENTIFIC AND PROFESSIONAL ETHICS (3)

Three hours lecture per week
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. Same as BIOL 326 and CHEM 326 (formally MGT 326)
GenEd: D

## MGT 421 HUMAN RESOURCE MANAGEMENT (3)

Three hours lecture per week Prerequisite: MGT 307
Examines 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 422 STRATEGIC PLANNING (3)

Three hours lecture per week
Prerequisite: MGT 307
Examines principles, methods and procedures for strategic planning for all types of organizations. Topics include developing missions, strategies, tactics, goals/objectives, strategic divisions, internal and external environmental analysis, strategic implementation and monitoring/control mechanisms. Strategic planning is explored for both non-profit and for-profit organizations. Special emphasis will be given to the development of realistic strategic plans that can be implemented, measured and controlled in a real world environment.

## MGT 426 MANAGEMENT OF HEALTHCARE ORGANIZATIONS (3)

Three hours lecture 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 428 CONTRACT MANAGEMENT (3)

Three hours lecture per week
Prerequisite: MGT 307
Explores the study of procurement planning, negotiation, and contract administration, including the determination of need, basic contract law, methods of procurement and fundamentals of management techniques. Topics include procurement organizations, acquisition planning, source selection, pricing, types of contracts, negotiating techniques, structuring incentives, the terms and conditions of contracts, and managing contract progress.

## MGT 429 PROGRAM MANAGEMENT (3)

Three hours lecture per week
Prerequisite: MGT 307
Examines principles, methods, and procedures in the management of programs in public organizations. Topics include government acquisition policies, strategies, plans, and procedures, risk management, program planning, scheduling, managing, and monitoring, cost and performance evaluation, and program policy development and implementation.

## MGT 471 PROJECT MANAGEMENT (3)

Three hours lecture per week
Prerequisite: MGT 307
Presents the principles of project management, which is a special form of work organization that focuses on a one-time objective. Discusses all aspects of project management: definition of objectives, selection of team and other resources, establishing of timing and sequences, creation of monitoring and control processes, and development of analysis and reporting mechanisms.

## MGT 490 SPECIAL TOPICS (3)

Three hours seminar per week Prerequisite: Consent of instructor In-depth analysis of current topics in management. Topics vary each semester. Repeatable by topic.

## MGT 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor Individual internship through service learning. Credit/No Credit.

## MGT 497 DIRECTED STUDY (1-3)

Variable hours per week
Prerequisite: Consent of instructor Individual contracted study on topics or research selected by the student and faculty mentor. Repeatable for up to nine units. Credit/No Credit.

## MARKETING

## MKT 310 PRINCIPLES OF MARKETING (3)

Three hours lecture per week
Presents and analyzes the fundamental principles, methods and procedures in modern marketing: planning, pricing, distribution, and promotion. Topics include creating customer value and satisfaction, strategic planning, marketing process and environment, research and information systems, consumer markets and consumer buyer behavior, business markets and business buyer behavior, segmentation, product and services strategy, newproduct development and product life cycle strategies, pricing, communications, direct and on-line marketing, and social responsibility and marketing ethics.

## MKT 410 INTERNATIONAL MARKETING MANAGEMENT (3)

Three hours lecture per week
Prerequisite: MKT 310
Develops a knowledge of culture, environment, and world market potential. The focus is developing an environmental/cultural approach to global marketing. Topics covered include: cultural and social forces, political and regulatory climate, global buyer behavior, and global marketing strategies. Cases, research, and marketing plans are used to apply marketing concepts to global opportunities and environments.

## MKT 411 NEW PRODUCT DEVELOPMENT AND MANAGEMENT (3)

Three hours seminar per week
Prerequisite: MKT 310
Develops the managerial skills and perspectives that contribute to innovative and entrepreneurial new product development and management. Topics include analysis of consumer needs, market analysis, paradigmatic limits to thinking, new product design and development, creativity, innovation, forecasting, resource requirements, product liability issues, and managing new ventures. Managerial roles, team building, team facilitation will be emphasized.
MKT 490 SPECIAL TOPICS (3)
Three hours seminar per week
Prerequisite: Consent of instructor
In-depth analysis of current topics in marketing.
Topics vary each semester. Repeatable by topic.

## MKT 492 SERVICE LEARNING/INTERNSHIP (3)

Six hours per week
Prerequisite: Consent of the instructor
Individual internship through service learning. Credit/No Credit.

## MKT 497 DIRECTED STUDY (1-3)

Variable hours per week
Prerequisite: Consent of instructor
Individual contracted study on topics or research selected by the student and faculty mentor. Repeatable for up to nine units. Credit/No Credit.

## MUSIC

## MUS 100 MUSIC APPRECIATION (3)

Three hours lecture per week
A survey of musical masterpieces of the Western Tradition from the Middle Ages to the present. Emphasis on composers from Bach to Bartok. Includes units on jazz and the music of other cultures. GenEd: C1

## MUS 109 PRIVATE LESSONS (1)

One half-hour lesson per week
Private music lessons in voice or on an instrument. Repeatable for up to a total of 8 units.

## MUS 307 UNIVERSITY CHORUS (1)

Three hours of rehearsal per week Prerequisite: Consent of instructor Rehearsal and performance of the masterworks of choral literature from the Renaissance through the Modern period. Repeatable for up to 8 units. GenEd: C1

## MUS 308 UNIVERSITY ORCHESTRA (1)

Three hours rehearsal per week
Rehearsal and performance of the masterworks of orchestral literature from the Baroque through the Modern period. Repeatable for up to 8 units.
GenEd: C1

## MUS 309 PRIVATE LESSONS (1)

One half-hour lesson per week
Private music lessons in voice or on an instrument. Study of more advanced techniques.
Repeatable for up to 8 units.

## MUS 330 JAZZ IN AMERICA (3)

Three hours lecture per week
The study of jazz as a uniquely American musical art form, principally through the development of jazz styles. From its roots in Africa and later in New Orleans, jazz will be studied as both a musical and a social phenomenon that originated and was nurtured in the African-American community. The course will explore issues of community, ethnicity, class, and gender in relationship to jazz as a vehicle for both personal and cultural expression. Through recordings, videos, lectures, demonstrations and live performances, students will study jazz and its forerunners, ragtime and blues, from their beginnings to the present day.
GenEd: C1, C3b, and Interdisciplinary

## MUS 333 THE VARIETIES OF MUSICAL EXPERIENCE

 (3)Three hours lecture per week
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.
GenEd: C1 and Interdisciplinary

## MUS 335 THE PHYSICS OF MUSIC (3)

Two hours lecture and two hours lab activity per week Provides an understanding of music and sound for students interested in music, speech, and language. Extensive use of demonstrations and sound analysis computer programs will be used. The format will include lectures, demonstrations, and hands-on use of the computer programs. Same as PHYS 335
GenEd: B1, C1 and Interdisciplinary

## MUS 336 ART AND MUSIC: DISSONANCE, DIVERSITY AND CONTINUITY (3)

Three hours lecture per week
An interdisciplinary analysis of the essential elements defining modern and contemporary art and music. Discusses how artistic characteristics and music issues of the period are connected and intertwined within specific historic and cultural environments. Same as ART 336
GenEd: C1, D and Interdisciplinary

## MUS 343 TEACHING MUSIC TO CHILDREN (3)

Three hours lecture per week
An introduction to musical experiences appropriate for children in grades K-6. Consisting of instruction in music fundamentals, general music, vocal music and instrumental music for the classroom teacher, the course also incorporates movement and improvisation in the form of dance and theater. Kodaly, Orff and Dalcroze techniques will be emphasized. Includes music technology in the classroom.
GenEd: C1 and Interdisciplinary

## 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 ART 432 and ENGL 432
GenEd: C1, C2 and Interdisciplinary

## PHYSICAL EDUCATION

## PHED 102 SEMINAR IN TRADITIONAL MARTIAL ARTS: TAI JI (1)

Two hours activity per week
This course provides instruction in the traditional Chinese art of Tai Ji. In addition to learning to perform the movements, students will learn about Daoist philosophy, and history of Chinese martial arts. Traditional Chinese health principles will also be covered. Repeatable.
GenEd: E

## PHED 105 ZEN OF SURFING (1)

Three hours activity per week
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 is explored through weekly surfing activities.
GenEd: E

## PHED 110 WELLNESS (2)

Two hours lecture per week
Examines the interrelationship of the mind and body as it relates to the concept of Wellness. Covers physical fitness, sport selection, and differing types of exercise. This is not an activity/ performance course. GenEd: E

## PHED 208 INTRODUCTION TO KINESIOLOGY (3)

Three hours lecture per week
Examines the field of human movement, introduces biomechanics, anatomy, exercise physiology, and motor learning. Basic anatomy, function of the musculoskeletal system, laws of motion, principles of force, equilibrium concepts, and laws governing projectiles will be introduced and applied to various sports activities. The student will develop the ability to analyze skill movements in specific sport activities. This is not an activity/ performance course.
GenEd: E

## PHED 302 MOTOR LEARNING, FITNESS, AND DEVELOPMENT IN CHILDREN (2)

Two hours lecture per week
Physical education for children, fundamentals of motor learning, health, fitness and age-appropriate activities for elementary school age children. Teaching, planning and implementing an effective physical education program. May be taken concurrently with PHED 303. This is not an activity/ performance course.
GenEd: E

## PHED 310 ADAPTED PHYSICAL EDUCATION (3)

Three hours lecture per week
Basic concepts of Adapted Physical Education and an examination of trends in schools and communities. Particular attention given to inclusion as a teaching model. This is not an activity/ performance course GenEd: E

## PHYSICAL SCIENCE

## PHSC 170 FOUNDATIONS IN PHYSICAL SCIENCE (4)

Three hours lecture and three hours laboratory per week
The areas covered 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. GenEd: B1


## PHYSICS

## PHYS 100 INTRODUCTION TO PHYSICS I (4)

Three hours lecture and three hours laboratory per week
A non-calculus based introduction to the concepts and principles of physics. The areas covered include classical mechanics, wave motion and thermal physics. Practical examples will be used to illustrate the relationship between physics and other disciplines, especially the life sciences, and to develop problemsolving skills. Laboratory sessions will include computer-simulated experiments. Lab fee required. GenEd: B1

## PHYS 101 INTRODUCTION TO PHYSICS II (4)

Three hours lecture and three hours laboratory per week
Prerequisite: PHYS 100
A non-calculus based introduction to the concepts and principles of physics. The areas covered include electromagnetic theory, light, and atomic and nuclear physics. Practical examples will be used to illustrate the relationship between physics and other disciplines, especially the life sciences, and to develop problemsolving skills. Laboratory sessions will include computer-simulated experiments. Lab fee required. GenEd: B1
PHYS 105 INTRODUCTION TO THE SOLAR SYSTEM (4)
Three hours lecture and two hours activities per week Descriptive introduction to the astronomical properties of the Solar System. Topics include: the historical development of astronomy, the laws that govern the behavior of the Universe, the properties of the stars and galaxies, including their origin and evolution and the Big Bang theory. Activity sessions will include computer-simulated exercises, and two field trips. Same as ASTR 105.
GenEd: B1

## PHYS 200 GENERAL PHYSICS I (4)

Three hours lecture and three hours laboratory per week
Prerequisite: MATH 150
A calculus-based introduction to the concepts and principles of physics. The areas covered include classical mechanics, wave motion and thermal physics. Practical examples will be used to illustrate the relationship between physics and other disciplines, including the life sciences, and to develop problemsolving skills. Laboratory sessions will focus on computer-simulated experiments. Lab fee required. GenEd: B1

## PHYS 201 GENERAL PHYSICS II (4)

Three hours lecture and three hours laboratory per week
Prerequisite: PHYS 200
A calculus-based introduction to the concepts and principles of physics. The areas covered include electromagnetic theory, light, and atomic and nuclear physics. Practical examples will be used to illustrate the relationship between physics and other disciplines, including the life sciences, and to develop problemsolving skills. Laboratory sessions will focus on computer-simulated experiments. Lab fee required.
GenEd: B1

## PHYS 208 THE PHYSICS OF ART AND VISUAL PERCEPTION (3)

Two hours lecture and two hours lab per week A course on the physics of light, color, art and visual perception. The course will cover the nature of light and optical phenomena, the perception and psychology of color, the reproduction of color in different media, and the analysis of art from a science perspective. The emphasis is on factors which permit the artist and observer to understand and more fully control the design and interpretation of images of all kinds. Demonstrations, experiments, and video/computer simulations are used to analyze signals received by the eyes or instruments. Same as ART 208
GenEd: B1, C1

## PHYS 315 INTRODUCTION TO BIOPHYSICS (3)

Three hours lecture and two hours activity per week Prerequisite: PHYS 200
Co-requisite: BIOL 300
This course applies physical methods to the study of biological systems, including transport processes and membrane phenomena, bioelectric phenomena, photosynthetic systems and visual systems.
Biophysical methods will include the techniques of patch clamping and optical tweezers, and the measurement of action potentials and evoked responses. There will be an emphasis on modeling and on problem solving, with appropriate mathematics when necessary. The practical activity session will include computer modeling and simulation, and laboratory demonstrations and exercises. Same as BIOL 315

## PHYS 335 THE PHYSICS OF MUSIC (3)

Two hours lecture and two hours lab activity per week Provides an understanding of music and sound for students interested in music, speech, and language. Extensive use of demonstrations and sound analysis computer programs will be used. The format will include lectures, demonstrations, and hands-on use of the computer programs. Same as MUS 335
GenEd: B1, C1 and Interdisciplinary

## PHYS 338 SCIENCE AND CONSCIENCE (3)

Three hours lecture/discussion per week This course is a team-taught interdisciplinary course that examines various ethical issues within the sciences, using several case studies. The scientific, historical and social aspects of each case study will be examined from different perspectives. Students will learn scientific concepts which will facilitate an informed understanding of the ethical issues involved. Same as ENGL 338.
GenEd: B1, C2 and Interdisciplinary

## PHYS 344 ENERGY AND SOCIETY (3)

Three hours lecture per week
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 included: energy conservation, efficient usage and transportation of energy, energy resources, fossil fuels, active and passive solar energy, biomass, fuel cells, nuclear (fission and fusion) processes, and hydroelectric, tidal, geothermal, and wind power.
Same as CHEM 344
GenEd: B1 and Interdisciplinary

## PHYS 345 DIGITAL IMAGE PROCESSING (3)

Three hours lecture in the lab per week Prerequisite: Consent of instructor An introduction to the basic concepts and techniques for digital image restoration and enhancement, analysis, coding and compression. The emphasis is on processes which analyze primarily two-dimensional discrete images represented at the pixel level, including filtering, noise reduction and segmentation. Fourier analysis techniques will be explored. Programming exercises will be used to implement the various processes, and their performance on synthetic and real images will be studied. Same as COMP 345 and MATH 345
GenEd: B1, B4 and Interdisciplinary

## PHYS 416 RADIOBIOLOGY AND RADIONUCLIDES (3)

Three hours lecture per week
Prerequisite: BIOL 300 and PHYS 201
Topics include: nature and effects of ionizing radiation on biomolecular structures and living cells; applied radiobiology and radionuclides; genetic effects of ionizing radiation and methods of protection and dosimetry. Same as BIOL 416

## PHYS 434 INTRODUCTION TO BIOMEDICAL IMAGING (4)

Three hours lecture and two hours lab activity per week
Prerequisite: BIOL 210 or PHYS 200
The course will present an overview of biomedical images and imaging systems. The fundamental concepts used in several imaging modalities (such as projection radiography, mammography, DEXA, computed tomography, ultrasonography and magnetic resonance imaging) will be examined: the emphasis will be on an intuitive and descriptive presentation of the main components of these systems. Image formation and reconstruction will be addressed. The resulting clinical images will be correlated with the underlying structure and function of the organs, and the diagnostic utility and limitations of the images will be considered. Same as BIOL 434 and HLTH 434 GenEd: B2, E and Interdisciplinary

## PHYS 445 IMAGE ANALYSIS AND PATTERN RECOGNITION (3)

Three hours lecture in the lab per week
Prerequisite: PHYS/COMP/MATH 345 or consent of instructor
The course addresses the issue of analyzing the pattern content within an image. Pattern recognition consists of image segmentation, feature extraction and classification. The principles and concepts underpinning pattern recognition, and the evolution, utility and limitations of various techniques (including neural networks) will be studied. Programming exercises will be used to implement examples and applications of pattern recognition processes, and their performance on a variety of diverse synthetic and real images will be studied. Same as COMP 445 and MATH 445
GenEd: B1, B4 and Interdisciplinary

## PHYS 464 MEDICAL INSTRUMENTATION (4)

Three hours lecture and two hours lab activity per week
Prerequisite: PHYS/BIOL/HLTH 434
The detection, acquisition, processing and display of diagnostic clinical images. The course will concentrate on the fundamentals of the design of the instruments and the use of appropriate reconstruction algorithms in (computed) radiography, (digital) fluoroscopy, computed tomography, ultrasound, magnetic resonance imaging and radionuclide imaging. Activities will include image reconstruction examples, investigation of recent innovations, and two trips to local Radiology departments. Same as BIOL 464

## PHYS 490 TOPICS IN PHYSICS (3)

Three hours seminar per week
Prerequisite: Upper division standing and consent of instructor
In-depth analysis of topics in physics. Topics vary each semester. Repeatable by topic.

## PHYS 492 INTERNSHIP (3)

Six hours activity per week
Prerequisite: Upper division standing and consent of instructor
Supervised work and study in industrial or scientific setting involving development of skills related to applied physics. All students are required to present their projects at the Senior Colloquium. Graded Credit/No Credit

## PHYS 494 INDEPENDENT RESEARCH (1-3)

Variable hours per week
Prerequisite: Senior standing and consent of instructor Contracted laboratory and/or library research in selected areas within physics conducted under the supervision of a faculty member. All students are required to present their projects at the Senior Colloquium.

## PHYS 497 DIRECTED STUDIES (1-3)

Variable hours per week
Prerequisite: Senior standing and program approval Supervised project involving reading and library research in the field of physics. All students are required to present their projects at the Senior Colloquium.
PHYS 499 SENIOR COLLOQUIUM (1)
One hour seminar per week
Prerequisite: Senior standing
Oral presentations of current advances in the field, reports on students' projects in PHYS 492, 494 or 497 courses, and invited lectures.

## POLITICAL SCIENCE

## POLS 102 COMPARATIVE GOVERNMENT (3)

Three hours lecture/discussion per week This course is introduces the student to the contemporary study of comparative politics. The theme for the course will be democratization and democracy. Topics will include political institutions (constitutions, executives, legislatures, courts, and political parties), political behavior (voting, group activism, and other modes of political participation), and political ideas (political culture, socialization, status of women, and political economy).
GenEd: D

## POLS 103 INTRODUCTION TO INTERNATIONAL POLITICS (3)

Three hours lecture/discussion per week This course offers an overview of current theory, topics, and research in the Political Science subfield of International Relations. Emphasis will be placed on the role of power in international affairs, the structure of the international system, the meaning of security, and the importance of economic relations between nations and regions.
GenEd: D
POLS 150 AMERICAN POLITICAL INSTITUTIONS (3)
Three hours lecture per week
Examines the major American national and state political institutions and processes, including the presidency, congress, the federal court system, political parties, and the electoral system, and major institutions of state government. This course emphasizes how these institutions and processes function within changing American Constitutional principles of the role of law, federalism, shared power, and individual and civil rights. Meets Title V national and state government requirement.

## POLS 301 POLITICAL THEORY (3)

Three hours lecture/discussion per week Political Theory is devoted to assessing the authority, legitimacy, and justification of various kinds of political arrangements. How should people live together in society? Is democracy really the best form of government? Can a society "legislate morality"? What do individuals owe their government? What does their government owe them? This course will consider these and related questions through an introductory survey of works by major political philosophers such as Plato, Hobbes, Locke, Mill, and Marx. Ramifications for issues such as freedom of speech, religious liberty, affirmative action, women's rights, economic inequality, criminal punishment, civil disobedience, and revolution will also be explored.

## POLS 315 CONGRESS AND THE PRESIDENCY (3)

Three hours lecture/discussion per week This course will examine the ongoing struggle between the President and Congress to enact public policy. Students will study the two institutions singly and in their interaction. Particular attention will be placed on the electoral incentives of members of each institution and the inherent difficulties of cooperation in a system of separation of powers.

## POLS 320 PUBLIC ADMINISTRATION (3)

Three hours lecture/discussion per week This course is an introduction to public administration in the United States at the national, state and local levels of government. It will explore the various trends in American public administration, examine the unique circumstances involved in administering public organizations and look at different techniques of public management. Topics of study include: the structure and function of the American system of federalism, organizational theory and behavior, public budgeting and finance, public human resources management and the role of women in public administration.

## POLS 325 AMERICAN PUBLIC POLICY (3)

Three hours lecture per week
A study of how public policy is formulated and implemented, using several policy areas such as health, transportation, housing, energy, and welfare policy as areas for specific examination. The course will review several contemporary perspectives on policy making.

## POLS 494 INDEPENDENT RESEARCH (1-3)

Prerequisite: Senior standing or consent of the instructor
Independent research in Political Science conducted under the supervision of a faculty member

## PSYCHOLOGY

## PSY 100 INTRODUCTION TO PSYCHOLOGY (3)

Three hours lecture per week
An introduction to the theories, research and applications that constitute the field of psychology. Emerging issues in the field of psychology, what different types of psychologists do, and how to critically evaluate psychological literature will be covered.
GenEd: D, E

## PSY 202 BIOSTATISTICS (3)

Three hours lecture/laboratory per week Prerequisite: A passing score on the Entry Level Mathematics Exam (ELM) or MATH 105 or equivalent
Critical reasoning using a quantitative and statistical problem-solving approach to solve real-world problems. Uses probability and statistics to describe and analyze biological data collected from laboratory or field experiments. Course will cover descriptions of sample data, probability and empirical data distributions, sampling techniques, estimation and hypothesis testing, ANOVA, and correlation and regression analysis. Students will use standard statistical software to analyze real world and simulated data. Same as BIOL 202 and MATH 202 GenEd: B3

## PSY 210 LEARNING, COGNITION AND DEVELOPMENT (3)

Three hours lecture per week
This course presents an overview of the theories of learning, cognition, and human development. Major theories of learning and of psychological, emotional, ethical and physical development will be covered with emphasis on the application of these theories in real life settings such as schools and other organizations. GenEd: E

## PSY 211 COGNITION AND LEARNING (3)

Three hours lecture per week
Examines psychological theories as they apply to learning. Theories introduced will seek to explain learning phenomenon 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 212 NEUROBIOLOGY AND COGNITIVE SCIENCE (3)

Three hours lecture per week
Prerequisite: BIOL 100 or BIOL 200 or BIOL 201
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: B2, E

## PSY 213 DEVELOPMENTAL PSYCHOLOGY (3)

Three hours lecture per week
Prerequisite: PSY 100
This course represents an in-depth survey of theory and research in developmental psychology throughout the life span. The course introduces students to the biological, cognitive, emotional, social, and linguistic development from the prenatal period to adulthood. GenEd: D and E

## PSY 217 THEORIES OF PERSONALITY (3)

Three hours lecture per week
This course considers the major theoretical, application, research, and assessment issues in the study of personality. Emphasis will be placed on the theoretical aspects of personality and the different ways in which these theories are validated. The course will also explore some of the more commonly used personality assessment measures, cultural influences on personality theory, as well as at least one nonWestern theory of personality.

## PSY 220 HUMAN SEXUAL BEHAVIOR (3)

Three hours lecture per week
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 300 PSYCHOLOGICAL RESEARCH AND STATISTICAL METHODS I (3)

Two hours lecture and two hours laboratory per week Prerequisite: PSY 202, 212, 213, 217 and Upper Division standing, or consent of the instructor Introduction to research methodology and a basic framework to evaluate social and behavioral science research. Topics include how to apply the scientific method within the field of psychology and the social sciences, ethical guidelines and issues related to the research in, and practice of, psychology, how to evaluate research and popular claims in psychology with a critical eye, and computer applications related to statistics and research. Coursework on inferential and descriptive statistical methods will build on material from PSY 202.

## PSY 301 PSYCHOLOGICAL RESEARCH AND STATISTICAL METHODS II (3)

Two hours lecture and two hours laboratory per week Prerequisite: PSY 300 with grade C or better A continuation of PSY 300. Advanced research methodology and within the empirical framework in the behavioral sciences. Topics include how to apply the scientific method within the field of psychology and the social sciences, ethical guidelines and issues related to the research in, and practice of, psychology, how to evaluate research and popular claims in psychology with a critical eye, and computer applications related to statistics and research. Coursework on inferential and descriptive statistical methods will build on material from PSY 300.

PSY 310 HISTORY AND SYSTEMS OF PSYCHOLOGY
(3)

Three hours lecture per week
Prerequisite: Upper Division standing or consent of instructor
This course examines the historical development of psychological thought and methodology, from its origins in philosophy, its attempts to emulate the natural sciences, through the Diaspora of contemporary psychological thought. The major schools of psychology, will be explored in context of their philosophical, cultural and ethical influences.

## PSY 312 SOCIAL PSYCHOLOGY (3)

Three hours lecture per week
Prerequisite: Upper Division standing or consent of instructor
This course is an in-depth survey of the major areas of social psychology. Emphasizes an understanding of the important methods, terms, theories, and findings in the field of social psychology.

## PSY 313 CLINICAL AND ABNORMAL PSYCHOLOGY (3)

Three hours lecture per week
Examines the major diagnostic, etiologic, and treatment options for a variety of psychopathologies and psychological disorders. Areas to be covered include how psychologists diagnose, assess, understand the etiology, and treat psychological illness and problems. Topics include: disorders related to anxiety, stress \& trauma, mood, schizophrenia and psychosis, eating and substance abuse, memory \& organic dysfunctions, personality; social, cultural, and legal issues related to psychopathology.

## PSY 314 BEHAVIORAL NEUROSCIENCE (4)

Three hours lecture and two hours laboratory per week
Neuroanatomy, physiology, pharmacology and their application to cognition, emotion, language, learning, motivation, perception and memory.

## PSY 316 SENSATION AND PERCEPTION (3)

Three hours lecture per week
Prerequisite: Upper division standing This course will examine the psychological and physiological mechanisms underlying sensation and perception. Topics include the measurement of sensation and the physiological basis of sensation and perception.

## PSY 333 MEASUREMENT AND TESTING OF GROUPS AND INDIVIDUALS (3)

Three hours lecture per week
Prerequisite: Upper Division standing
Covers the principles of measurement as applied to group standardized measures of achievement, special aptitude, intelligence, personality, and interest for use in educational settings. Survey the administering, scoring, and interpreting of these measures. Language and culture issues related to testing will be explored. GenEd: D, E and interdisciplinary

## PSY 337 PSYCHOLOGICAL ETHICS AND MORAL PHILOSOPHY (3)

Three hours lecture per week Prerequisite: Upper Division standing Provides students with a broad overview of some of the main philosophical and moral ideas that are used as a basis for resolving debates in psychology, the mental health fields and public health.
GenEd: D and Interdisciplinary

## PSY 338 PSYCHOLOGY OF ART AND ARTISTS (3)

Three hours lecture per week
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 genre in painting, sculpture, film and music. The self-image of the artist will be examined from private and public point of view. Same as ART 338
GenEd: C1, E and Interdisciplinary

## PSY 339 PSYCHOLOGY AND LITERATURE (3)

Three hours lecture per week
This course looks at the ways in which human psychology manifests in literature and the ways literature instructs us about human psychology. Through reading, writing about, and discussing texts with particularly rich psychological content issues related to mental health and the human condition will be explored. The course will also cover some theoretical and technical aspects of psychology relevant to the readings. Same as ENGL 339
GenEd: C2, E, and Interdisciplinary

## PSY 340 HISTORY AND PSYCHOLOGY OF NAZI GERMANY (3)

Three hours lecture per week
Prerequisite: Upper Division standing
Examines the historical and psychological roots of the Nazi movement in Germany. Areas covered will include the mass psychology of fascism, the psychopathology of Nazi leaders, and the psychological impact of the holocaust. Same as HIST 340
GenEd: D, E and Interdisciplinary

## PSY 344 PSYCHOLOGY AND TRADITIONAL ASIAN THOUGHT (3)

Three hours lecture per week
Prerequisite: Upper Division standing or consent of instructor
This course examines the differences and similarities between the Western practice of psychology and traditional Asian systems of philosophy and religion. Topics include: health, well-being and enlightenment, pathology, Buddhism, Daoism, and depth psychologies.
GenEd: C3b, E and Interdisciplinary

## PSY 345 INDIVIDUALS WITH DISABILITIES IN SOCIETY (3)

Three hours lecture per week
Major types of disabilities and giftedness, including definitions, causes, characteristics, and educational implications. Topics include: disability perspectives and social, legal, and educational considerations of disability issues. Same as SPED 345
GenEd: D, E and Interdisciplinary

## PSY 346 HUMAN MOTIVATION (3)

Three hours lecture per week
Examines different biological, social, learning and cognitive approaches to the topic of motivation. The key theories of motivation will be reviewed and applied. Topics include: contemporary, psychological, biological and sociocultural principles issues including drug addiction and gang affiliation. GenEd: E and Interdisciplinary

## PSY 400 CASE STUDIES IN PSYCHOPATHOLOGY AND CLINICAL PSYCHOLOGY (3) <br> Three hours lecture per week <br> Prerequisite: PSY 313 or consent of instructor <br> An advanced undergraduate course on the etiology, classification, and treatment of human psychopathology.

## PSY 410 PSYCHOLOGICAL TESTING (3)

Three hours lecture per week
Prerequisite: PSY/MATH/BIOL 202 or consent of the instructor
Surveys the administration and interpretation of objective and projective personality and educational assessment instruments. Basic assessment issues will be discussed as well as ethical and cultural issues related to testing.

## PSY 415 ASSESSMENT OF CHILDREN (3)

Three hours lecture per week
Prerequisite: PSY 333 or PSY 410
An intensive study in the cognitive-intellectual, emotional, and developmental assessment of children. Topics include: testing instruments, concepts of intelligence, cognition, emotional development, and specific developmental disorders in children, issues of language and culture related to the assessment of children.

## PSY 436 PSYCHOLOGY AND HISTORY OF EAST ASIAN WARRIOR CULTURES (3)

Three hours lecture per week
Prerequisite: Upper division standing or consent of instructor
Examines the psychological and historical roots of warrior cultures in East Asia. Characteristics such as duty, enlightenment, honor, loyalty, and discipline will be examined in the context of the individual and group psychology of warrior cultures throughout history. Psychological and historical conceptions of violence, aggression, and strategy will also be explored. Students will be encouraged to relate values
derived from Asian warrior cultures to their own lives, while reflecting on the applicability of these ideas to modern life. Same as HIST 346
GenEd: D, E, and Interdisciplinary

## PSY 441 THE PSYCHOLOGY OF SPACE (3)

Three hours lecture per week
Prerequisite: Upper division standing Examines different psychological views of space and time, including how we define, and organize space and place. The course will examine the idea of psycho-geography as represented in the works of Yi Fu Tuan, Gaston Bachelard's The Poetics of Space, and Mircea Eliade's concept of sacred space, and James Hillman's concept of the anima mundi. The course will also look at how different cultures understand space through an examination of traditional philosophies, religions, myths and rituals. GenEd: D, E, and Interdisciplinary

## PSY 445 ADOLESCENT DEVELOPMENT (3)

Three hours lecture per week
Prerequisite: Upper Division Standing, PSY 213 or consent of instructor
Psychosocial dynamics of adolescents and young adults. Topics include physical and maturational development, theories of adolescence, family and peer group influences, sexuality, cognitive and vocational development, schooling and youth culture.
GenEd: D, E, and interdisciplinary

## PSY 449 HUMAN-COMPUTER INTERACTION (3)

Three hours lecture in the lab per week Prerequisite: Programming experience or consent of the instructor
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. Same as COMP 449
GenEd: B4, E and Interdisciplinary

## PSY 450 ADVANCES IN NEURAL SCIENCE (3)

Three hours lecture per week
Prerequisite: PSY 212 and PSY 314
Surveys current research on the nervous system, its development, and its control of behavior. The course also describes some neurological and behavioral disorders that are both instructive scientifically and important clinically. Includes inferences that can be made about human brain functions from the effects of neurological trauma and clinical tests.

## PSY 457 CRIMINAL BEHAVIOR (3)

Three hours lecture per week
Prerequisite: PSY 313 or consent of the instructor An introduction 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.

## PSY 461 ADVANCED TOPICS IN CHILD AND ADOLESCENT DEVELOPMENT (3)

Three hours lecture per week
Prerequisite: PSY 210 or PSY 313 or consent of instructor
Represents an in-depth study of aspects of growth and development which influence behavior of school-age children and adolescents. Topics include: research methods in child development, practice of child psychology and cross-cultural perspectives in child development.

## PSY 470 SEMINAR IN FREUD AND OBJECT RELATIONS THEORY (3)

Three hours lecture per week
Prerequisite: PSY 313 or consent of instructor An overview of the works of Freud and neo-Freudian schools of thought. Emphasis on both structural and developmental models in psychoanalytic thought as applied to the individual and to society at large. Feminist and non-Western cultural interpretations of these theories will also be discussed.

## PSY 471 SEMINAR IN JUNGIAN AND ARCHETYPAL PSYCHOLOGY (3)

Three hours lecture per week
Prerequisite: PSY 313 or consent of instructor An overview of the works of Jung and neo-Jungian schools of thought. Emphasis on both structural and phenomenological views of Jung's work as applied to the individual and to society at large. Structural theories of mythology both Eastern and Western will be discussed in context of Jung's work.

## PSY 473 BIZARRE BEHAVIOR AND CULTURE BOUND SYNDROMES (3)

Three hours lecture per week
Prerequisite: PSY 313 or consent of instructor Examines bizarre behaviors and culture bound syndromes. Such behaviors and syndromes are at the extreme edge of the human repertoire. This course will examine such behaviors and syndromes while explaining how so-called normal behaviors in our own culture could be construed as abnormal in other parts of the world.

## PSY 483 APPLIED MULTIVARIATE ANALYSES (4)

Three hours lecture and two hours laboratory per week
Prerequisite: PSY 202 and PSY 301 or consent of instructor
An applied overview of multivariate data analysis. Topics include multiple regression, discriminant analysis, canonical correlation analysis, factor analysis, cluster analysis, conjoint analysis, multivariate analysis of variance and an introduction to structural equation modeling.

## PSY 490 TOPICS IN PSYCHOLOGY (1-3)

Up to Three hours lecture per week
Prerequisite: PSY 301 or consent of instructor Provides an in-depth study of some aspect of psychology. Repeatable by topic.

## PSY 492 INTERNSHIP OR SERVICE LEARNING (1-3)

Prerequisite: Upper Division standing and consent of instructor
Supervised work/volunteer experience in an appropriate setting. Includes 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)

Prerequisite: Upper Division standing and consent of instructor
An independent research project for undergraduate students supervised by a faculty member. A written report of the research is required.

PSY 497 DIRECTED STUDY IN PSYCHOLOGY (1-3)
Prerequisite: Upper Division standing in Psychology and 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. This course can be used as preparations for the Psychology Subject Area GRE Exam. A written report or GRE Psychology Subject Test score is required.

## PSY 499 CAPSTONE IN PSYCHOLOGY (1-3)

Prerequisite: Upper Division standing in Psychology and consent of instructor
This course is an interdisciplinary experience in which students work in teams, contributing their expertise to a community-based project group. A written report of the research is required.

## SPANISH

## SPAN 101 ELEMENTARY SPANISH I (4)

Four hours lecture per week
This course addresses the development of basic functional proficiency in the Spanish language. As students develop their listening, speaking, reading and writing skills, they acquire knowledge about cultural similarities and differences between the U.S. and the Spanish-speaking world. Not intended for students with two or more years of high school Spanish taken within the last three years or with credit in college level Spanish.
NOTE: Not available for general education (C3a) credit to students with two or more years of high school Spanish taken within the last three years. GenEd: C3a

## SPAN 102 ELEMENTARY SPANISH II (4)

Four hours lecture per week
Prerequisite: SPAN 101 or equivalent
Addresses the development of basic functional proficiency in the Spanish language. Students develop their listening, speaking, reading and writing skills, as they acquire knowledge about cultural similarities and differences between the U.S. and the Spanishspeaking world.
GenEd: C3a

## SPAN 105 ELEMENTARY SPANISH FOR K-12 TEACHERS (3)

Three hours of lecture per week
Prerequisite: SPAN 101 or equivalent
Fosters the development of basic functional proficiency in the Spanish language, with emphasis on terminology and interactions related to school settings. The course is designed for those interested in learning to better communicate with Spanish-speaking members of the school population. Topics will include: Spanish Alphabet, classroom vocabulary, and communication with parents.

## SPAN 201 INTERMEDIATE SPANISH I (4)

Four hours lecture per week
Prerequisite: SPAN 102 or equivalent
Through the study of the culture and civilization of the Hispanic world, students continue to develop their listening, speaking, reading and writing skills in Spanish.
GenEd: C3a and C3b

## SPAN 202 INTERMEDIATE SPANISH II (4)

Four hours lecture per week
Prerequisite: SPAN 201 or equivalent
Through the study of the culture and civilization of the Hispanic world, students further develop their listening, speaking, reading and writing skills in Spanish.
GenEd: C3a and C3b

## SPAN 211 SPANISH FOR HERITAGE SPEAKERS I (4)

Four hours lecture per week
Prerequisite: Consent of instructor
This course is designed for students accustomed to hearing Spanish and English at home who are able to understand much of what they hear as well as speak some Spanish, and who are interested in further developing their language skills, particularly in speaking, reading and writing. Course content will include the culture and civilization of the Hispanic world, with emphasis on the U.S.
GenEd: C3a and C3b

## SPAN 212 SPANISH FOR HERITAGE SPEAKERS II

Four hours lecture per week
Prerequisite: SPAN 211 or equivalent or consent of instructor
This course is designed for students accustomed to hearing Spanish and English at home who are able to understand much of what they hear as well as speak some Spanish, and who are interested in further developing their language skills, particularly in speaking, reading and writing. Course content will include the culture and civilization of the Hispanic world, with emphasis on the U.S.
GenEd: C3a and C3b

## SPAN 301 ADVANCED SPANISH I (3)

Three hours lecture per week Prerequisite: SPAN 202 or SPAN 212 or consent of instructor
Enhancement of communicative abilities in listening, speaking, reading and writing through the examination of topics of interest in the Hispanic world. Student projects to include presentations, service activities and cultural portfolio.

## SPAN 302 ADVANCED SPANISH II (3)

Three hours lecture per week Prerequisite: SPAN 301 or consent of instructor Further enhancement of communicative abilities in listening, speaking, reading and writing through the examination of topics of interest in the Hispanic world. Student projects to include presentations, service activities and cultural portfolio.

## SPAN 304 SPANISH FOR CAREERS AND

 PROFESSIONS (3)Three hours lecture per week
Prerequisite: SPAN 301 or SPAN 302 (may be taken concurrently) or consent of instructor Interactive study of Spanish as applied to the fields of business, education, health professions and social services. Students will learn the basic vocabulary and expressions pertaining to these fields.

SPAN 310 INTRODUCTION TO PROSE AND POETRY (3)
Three hours lecture per week
Prerequisite: SPAN 301 or SPAN 302 (may be taken concurrently) or consent of instructor
This is an introductory literature course designed to develop students' ability to read, discuss and write about literary texts. Selections of poetry and prose from among Spanish, Latin American and U.S. Latino authors will be explored.

## SPAN 320 INTRODUCTION TO SPANISH TRANSLATION (3)

Three hours lecture per week
Prerequisite: SPAN 202 or SPAN 212 or consent of instructor
This course is designed to increase students' proficiency in Spanish through translation. The class as a whole will identify translation needs in the community. In the process of translating texts, students will learn strategies, techniques and principles of translation.

## SPAN 401 CONTRASTIVE FEATURES OF SPANISH AND ENGLISH (3)

Three hours lecture per week
Prerequisite: SPAN 302 or consent of instructor Exploration of the linguistic similarities and differences of Spanish and English regarding their sound systems as well as their grammatical systems. Through this exploration of phonology, morphology and syntax, students will gain an understanding of the features of each language implicated in Second Language Acquisition.

## SPAN 410 CIVILIZATIONS AND CULTURES OF SPAIN (3)

Three hours lecture per week
Prerequisite: SPAN 302 or consent of instructor Explores the history of Spain, from the formation of Hispania to the present. Major geographical, political, religious and literary aspects of Spain will be discussed major points of Spanish culture. Oral presentations will be required.

## SPAN 411 CIVILIZATIONS AND CULTURES OF LATIN AMERICA (3)

Three hours lecture per week
Prerequisite: SPAN 302 or consent of instructor Explores the history of the Spanish-speaking regions of Latin America, from pre-Columbian civilizations to the Spanish conquest to the present. Major geographical, political, religious and literary aspects of Latin American culture will be discussed. Oral presentations will be required.

## SPAN 421 SPANISH FOR EDUCATORS I (3)

Three hours lecture per week Prerequisite: SPAN 302 or consent of instructor Prepares students to function effectively in Spanish within a school setting. Emphasis is placed on developing the Spanish fluency and vocabulary necessary for classroom and school-related community situations. Course content emphasizes the K-6 school setting. The topics include: General school-related vocabulary, Parent-teacher conferences, writing letters, Language arts and reading vocabulary, Examples of Spanish-language children's literature, Social studies and Mathematics.

## SPAN 422 SPANISH FOR EDUCATORS II (3)

Three hours lecture per week
Prerequisite: SPAN 302 or consent of instructor Prepare students to function effectively in Spanish within a school setting. Emphasis is placed on developing the Spanish fluency and vocabulary necessary for classroom and school-related community situations. Course content emphasizes the K-6 school setting. The topics include: 1) General science vocabulary (parts of the body, illnesses, foods and nutrition, animals, plants, minerals, weather, solar system), 2) General art vocabulary and brief introduction to several Hispanic artists and their work, 3) General music vocabulary and brief introduction to several Spanish-language songs, including children's songs.

## SPAN 455 BILINGUAL LITERARY STUDIES/ESTUDIOS LITERARIOS BILINGUES (3)

Three hours lecture per week
Prerequisite: ENGL 103 or 105 and SPAN 202 or 212 or consent of instructor
This course explores the literatures of the Americas written in two languages: English and Spanish. Course texts will include works written by bilingual U.S. authors and Latin American authors writing primarily in Spanish; genres may include novels, with a special focus on Magical Realism/el realismo magico, short stories/cuentas, and poetry. Readings will be in the original language; class discussions will be bilingual. Same as ENGL 455

## SPECIAL EDUCATION

## SPED 345 INDIVIDUALS WITH DISABILITIES IN SOCIETY (3)

Three hours lecture per week Major types of disabilities and giftedness, including definitions, causes, characteristics, and educational implications. Topics include: disability perspectives and social, legal, and educational considerations of disability issues. Same as PSY 345
GenEd: D, E and Interdisciplinary

## SPED 490 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3)

Prerequisite: Upper division standing and consent of instructor
In-depth analysis of current topics in special education. Topics vary each semester. Repeatable by topic.

## SPED 494 INDEPENDENT RESEARCH IN SPECIAL EDUCATION (1-3)

Prerequisite: Upper division standing and consent of

## instructor

Students design and implement an independent research project in special education in conjunction with a faculty member. Repeatable.

## SPED 497 DIRECTED STUDIES IN SPECIAL EDUCATION (1-3)

Prerequisite: Upper Division standing and consent of instructor
An intensive directed study of some aspect of field of special education under the direction of a faculty member. Repeatable.

## SPED 499 SENIOR CAPSTONE PROJECT/SEMINAR IN SPECIAL EDUCATION (1-3)

Prerequisite: Upper division standing and consent of instructor
Students work on research or community-based projects in the field of special education. A written report of the project is required

## SPED 541 FOUNDATIONS OF SPECIAL EDUCATION (2)

Two hours lecture/discussion per week
Prerequisite: Admission to Education Specialist Credential Program and SPED 345, ENGL 475, EDUC 510, EDUC 512
Ethical standards, professional practices, laws, regulations and policies related to the provision of services to individuals with disabilities and their families. Models, theories and practices that form the basis for special education practice. History of special education and contributions of culturally diverse groups. Development of professional perspective that reflects status of special education services in society.

## SPED 542 MANAGING LEARNING ENVIRONMENTS (3)

Three hours lecture/discussion per week
Prerequisite: Admission to Education Specialist Credential Program and SPED 345, ENGL 475, EDUC 510, EDUC 512

Functional assessment of behavior, behavior management strategies, communication styles and their impact on learning; laws, regulations, and strategies for promoting positive and self-regulatory behavior in students. Designing and implementing positive behavioral support plans.

## SPED 543 EDUCATING DIVERSE LEARNERS WITH MILD TO MODERATE DISABILITIES (3)

Three hours lecture/discussion per week Prerequisite: Admission to Education Specialist Credential Program and SPED 345, ENGL 475, EDUC 510, EDUC 512
Characteristics and needs of individuals with mild to moderate disabilities. Use of environmental, curricula and instructional strategies to meet the needs of students with mild to moderate disabilities across a variety of environments. Designing and implementing individual instructional plans that reflect appropriate cultural and linguistic sensitivity.

## SPED 544 INCLUSIONARY TEACHING METHODS (2)

Two hours lecture per week
Prerequisite: EDUC 510, EDUC 512, ENGL 475, SPED 345 and Admission to Education Specialist: Mild / Moderate Disabilities Credential Program Co-requisite: SPED 570
This course prepares students to teach collaboratively with general education teachers. Students explore the advantages and disadvantages of inclusion service delivery models used in schools for students with disabilities. Students learn how to modify curriculum, use teaching techniques and design and implement individual instructional plans for students with disabilities in general education settings. They learn models and strategies for collaborating and consulting with general education teachers.

## SPED 545 ASSESSMENT OF STUDENTS WITH DISABILITIES (3)

Three hours lecture/discussion per week Prerequisite: Admission to Education Specialist Credential Program and SPED 541, SPED 542, SPED 543, SPED 570
Basic principles, processes and strategies for assessment. Use of effective assessment techniques, tools and approaches for individuals who are culturally, linguistically, ethnically, socioeconomically and ability diverse in general education and special education settings to make educational decisions.

## SPED 546 CONSULTATION AND COMMUNICATION WITH FAMILIES AND PROFESSIONALS (3)

Three hours of lecture/discussion per week Prerequisite: Admission to Education Specialist Credential Program and SPED 541, SPED 542, SPED 543, SPED 570
Strategies for effectively collaborating, communicating and working in partnership with
individuals with disabilities and their families, other caregivers, school administrators, general and special education teachers, specialists and paraprofessionals and community agency and related service personnel. Planning for transition across the life span for learners with special needs.

## SPED 570 FIELD EXPERIENCE IN GENERAL EDUCATION (3)

Prerequisite: Admission to Education Specialist Credential Program and SPED 345, ENGL 475, EDUC 510, EDUC 512
Individuals holding valid teaching credentials will complete field experience with a resource teacher in a grade level different from their current teaching credential.
The first field experience providing teaching opportunities with the broad array of age and grade placements appropriate for special education teachers. Experience teaching individuals from a variety of cultural and linguistic groups.

## SPED 580 STUDENT TEACHING IN SPECIAL EDUCATION (8)

Prerequisite: Admission to Education Specialist Credential Program and SPED 541, SPED 542, SPED 543, SPED 570
Opportunity to gradually assume the responsibilities of a special education teacher in a public school including teaching, assessing students, IEP development, collaborating with parents, teachers and special services personnel.

## SPED 581 STUDENT TEACHING SEMINAR (1)

Two hours seminar bi-weekly
Co-requisite: SPED 580
Guided discussion of experience during student teaching, reflective feedback on student teaching experiences, preparation for securing a teaching position.


## THEATRE

## TH 333 MULTICULTURAL DRAMA IN PERFORMANCE/PRODUCTION (3)

Three hours lecture/discussion per week 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: C2, C3b and Interdisciplinary

## TH 412 DRAMA OF ANCIENT GREECE (3)

Three hours lecture per week
Prerequisite: ENGL 103 or 105 or equivalent and one upper division literature course A survey of ancient Greek drama and the culture/society that produced it. The course will examine a representative sample of the major plays. Among the topics considered will be: the tragic and comic festivals, tragedy's relationship with Athenian democracy, the nature of Greek theaters and ancient theatrical production techniques, religion and drama, women and tragedy, tragic and comic heroism, myth and tragedy, and the legacy of Greek tragedy in the modern world. Same as ENGL 412

## UNIVERSITY

## UNIV 100 UNIVERSITY LIFE AND COLLEGE SUCCESS (1)

One hour seminar per week
This course introduces first-year students to university life, the structure and policies of the University and development of strategies and skills to help insure success in college. Through self-evaluation, lecture, activities and class discussion, students will develop an individualized plan for personal, social, academic and professional success.

## UNIV 110 CRITICAL THINKING IN AN INTERDISCIPLINARY CONTEXT (3)

Two hours lecture and one hour seminar per week This course explores the language and logic of academic disciplines and teaches critical thinking skills. The working of logic, including inductive and deductive reasoning, form a major part of the course content. Professors from each discipline will participate in lectures and discussions to provide exposure to methods and ways of knowing across the curriculum. Through lecture and class discussion, students learn to form various types of argument, apply rhetorical methodologies, and comprehend the relationship of language to logic. Through written assignments, oral presentations, and group work, students learn to express their ideas and accept constructive criticism from peers. The class exercises and lectures will also provide students with means to acquire or improve their academic and professional skills.
GenEd: A3

## UNIV 392 INTERNATIONAL EXPERIENCE (1-3)

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 culture. With faculty advisor approval, students may participate in a university-sponsored trip abroad or a personal trip abroad. Requires an approved plan of study by the faculty advisor prior to the experience.
GenEd: C3b


how to contact us
EMERGENCY OR FIRE, DIAL 911 FOR CAMPUS PHONES OR USE BLUE LIGHT PHONES CSUCI MAIN OPERATOR, DIAL 8400

| TOPIC | CONTACT OFFICE | LOCATION | $\begin{aligned} & \text { PHONE } \\ & (805) \text { 437- } \end{aligned}$ | WEBSITE ADDRESS (if applicable) |
| :---: | :---: | :---: | :---: | :---: |
| Academic Advising (Current Students) | Advising Center | Bell Tower | 8571 | http://www.csuci.edu/academics/advising/index.htm |
| Admissions | Admission \& Records | Professional Building | 8500 | http://www.csuci.edu/students/prospective/admissions.htm |
| Billing or Account Balances | University Cashier | Professional Building | 8533 | http://www.csuci.edu/campserv/finance/university_cashier.htm |
| Bookstore | Student Bookstore | Bell Tower | 8833 | http://www.csuci.bkstr.com |
| Campus Tours | Recruitment Office | Professional Building | 8520 |  |
| Career Counseling | C.H.A.P.s | Bell Tower | 8510 | http://www.csuci.edu/students/enrolled/service/careerdevelop.htm |
| Clubs and Organizations | Student Development | Bell Tower | 8998 | http://www.csuci.edu/students/enrolled/life/cluborg.htm |
| Commencement (Graduation) | University Advancement | Administration Building | 8400 | http://www.csuci.edu/students/enrolled/commencement.htm |
| Credentials | Credentialing | Bell Tower | 8953 | http://education.csuci.edu |
| Dean of the Faculty | Office of the Dean | Bell Tower | 8540 |  |
| Disability Accommodation Services | C.H.A.P.s | Bell Tower | 8510 | http://www.csuci.edu/students/enrolled/service/disableaccomodate.htm |
| Employment Information, Students | C.H.A.P.s | Bell Tower | 8510 | http://www.csuci.edu/students/enrolled/service/careerdevelop.htm |
| EOP (Educational Opportunity Program) | Student Development | Bell Tower | 8923 | http://www.csuci.edu/students/enrolled/life/eop.htm |
| Fees -- Paying for Registration | University Cashier | Professional Building | 8533 | http://www.csuci.edu/campserv/finance/university_cashier.htm |
| Financial Aid and Scholarships | Financial Aid | Professional Building | 8530 | http://www.csuci.edu/students/enrolled/enrollserv/financeaid.htm |
| Graduation (Commencement) | University Advancement | Administration Building | 8400 | http://www.csuci.edu/students/enrolled/commencement.htm |
| Graduation Requirements | Advising Center | Bell Tower | 8571 | http://www.csuci.edu/academics/advising/index.htm |
| Health Services | Student Health Services | Student Health Center | 8828 | http://www.csuci.edu/students/enrolled/service/studenthealth.htm |
| Housing | Housing \& Residence Life | Bell Tower | 2733 | http://www.csuci.edu/students/enrolled/housereslife.htm |
| The Hub | Student Development | The Hub | 8932 | http://www.csuci.edu/students/enrolled/life/hub.htm |

how to contact us
Emergency or fire, dial 911 for campus phones or use blue light phones CSUCI MAIN OPERATOR, DIAL 8400

## -moneman

http://www.csuci.edu/campserv/finance/university_cashier.htm
http://www.csuci.edu/library
http://www.csuci.edu/students/enrolled/life/orientation.htm
http://www.csuci.edu/campserv/parking/index.htm
http://www.csuci.edu/campserv/directory.htm
http://www.csuci.edu/students/enrolled/service/personalcounsel.htm
http://www.csuci.edu/campserv/police/index.htm
http://www.csuci.edu/students/prospective/admissions.htm
http://www.csuci.edu/students/enrolled/life/recreation.htm http://my.csuci.edu
http://www.csuci.edu/academics/scheduleandcatalog.htm
http://www.csuci.edu/students/enrolled/life/associatedstu.htm
http://www.csuci.edu/its/index.htm
http://www.csuci.edu/students/enrolled/affairs/offofvp.htm

# Professional Building 

 University LibraryPublic Safety Building Website
Bell Tower
Public Safety Building Administration Building
Bell Tower
Professional Building
Gym \& Fitness Center
Professional Building
Professional Building Bell Tower Bell Tower
Bell Tower IT Building
Professional Building Bell Tower
University Cashier
University Library
Student Development
Transportation \& Parking
Campus Online Directory
C.H.A.P.s
Police Department
Office of the President
Office of the Vice President
Admission \& Records
Student Development
Recruitment Office
Admission \& Records
Office of the Dean
Student Gov't (ASI Inc.)
Information Technology
Admission \& Records
Office of the Vice President

$\stackrel{\varrho}{2}$
ID Card
Library
Orientation
Parking
PeopleFinder
Personal Counseling
Services
Police (Campus)
President's Office
Provost \& Vice President
for Academic Affairs
Records (Registration/
Grades/Transcripts)
Recreation \& Leisure
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[^0]:    ${ }^{1}$ Note that feedback forms related to the service learning experience are explicitly distinct from and not related to the Student Evaluations of Teaching Effectiveness.

[^1]:    Second Semester:
    EDMS 523 Literacy 2: Multicultural/Multilingual (4)
    EDMS 529 Science, Health and PE (4)
    EDMS 575 Advanced Student Teaching (7)
    EDMS 576 Advanced Student Teaching Seminar (1)

