



Welcome to California State University Channel Islands. This is truly an historic time as we prepare to admit our first freshman class in the fall of 2003.

When you arrive on campus your first impression will most likely derive from the breathtaking surroundings. Located just minutes from the ocean, our campus covers 670 lush acres nestled among rich agricultural fields that produce bountiful harvests for our state.

As you travel up University Drive, you'll see the majestic Bell Tower Building. The historic grandeur of the beautiful Mission-style architecture is surrounded by the progress of construction as we continue to build out our campus to provide a 21st century college experience.

As the campus continues to grow, so do our efforts to provide each of our students with an excellent academic experience. Our focus on a cross-disciplinary curriculum coupled with the recruitment of leading faculty from across the country and around the world ensures that our graduates are prepared with the skills and experiences that will enable them to reach their full potential in today's global community.

We look forward to having you join us as together we make history here at CSU Channel Islands.

**Richard R. Rush**  
President

# TABLE OF CONTENTS - 2003/2004 CATALOG

## CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

**General Information Telephone:** (805) 437-8400

**Web site:** www.csuci.edu

**Address:** One University Drive, Camarillo, CA 93012

Message from the President . . . . .	1
Table of Contents. . . . .	2-3
Academic Calendar 2003/2004 . . . . .	4

### Introduction to CSU Channel Islands

Five Ways to Find Information About CSU Channel Islands. . . . .	7
Availability of Institutional and Financial Assistance. . . . .	7
Changes in Rules and Policies . . . . .	7-8
Catalog Production Team. . . . .	8
History of the University . . . . .	8-9
University Mascot. . . . .	9
University Colors . . . . .	9
President's Cabinet. . . . .	9
Mission. . . . .	9
Human Resources . . . . .	10
Information Technology Services . . . . .	10
Open Lab. . . . .	10
PC Lab . . . . .	10
MAC Lab . . . . .	10
Student Webmail . . . . .	10
Blackboard . . . . .	10
Public Safety . . . . .	10-13
Police Services. . . . .	10-13
Transportation and Parking Services. . . . .	13
Telephone Directory . . . . .	14-15
Alphabetical Listing for Faculty and Staff . . . . .	14-15
Campus Map and Legend . . . . .	16

### About the California State University System (CSU)

The California State University System. . . . .	19
Trustees of the California State University. . . . .	19
Ex-Officio Trustees. . . . .	19
Officers of the Trustees . . . . .	19
Appointed Trustees . . . . .	19
Office of the Chancellor. . . . .	20
CSU Campuses Map and Contact Information . . . . .	20-21
International Programs . . . . .	22

### Policies and Regulations

Nondiscrimination Policy . . . . .	25
Use of Social Security Number . . . . .	25
Career Placement . . . . .	25
Immigration Requirements for Licensure . . . . .	25

Determination of Residence for Nonresident Tuition Purposes. . . . .	26
Military Selective Service Act . . . . .	27
Systemwide Placement Test Requirements . . . . .	27
English Placement Test (EPT) . . . . .	27
Directed Self Placement (DSP) . . . . .	27
Entry Level Mathematics Placement Examination (ELM). . . . .	27
Student Discipline. . . . .	28-29
Student Academic Policies . . . . .	29-33
Declaration of Majors . . . . .	29
Double-Counting of Course Requirements. . . . .	29
Multiple Majors . . . . .	29
Double Degrees . . . . .	29
Adding Courses During the First Two Weeks of Instruction. . . . .	29
Adding Courses After the First Two Weeks of Instruction. . . . .	29
Withdrawal from Courses . . . . .	30
Class Attendance . . . . .	30
Grades . . . . .	30
Changing Basis for Grading . . . . .	31
Course Grade Appeals. . . . .	31
Forgiveness of Previously Earned Grade (Repeat and Delete) . . . . .	31
Semester Honors . . . . .	31
Program Honors . . . . .	31
University Honors . . . . .	31
Participating in Commencement Ceremonies. . . . .	31
Academic Dishonesty. . . . .	31-32
Academic Probation & Disqualification . . . . .	32
Acceleration of University Studies. . . . .	32
Advanced Placement . . . . .	32
Unit Credit by Examination. . . . .	33
Substitution of Courses . . . . .	33
Waiver of Course Requirement . . . . .	33
Credit Toward Graduation for Courses Taken Outside CSU Channel Islands . . . . .	33
High School Students . . . . .	33
Extension Courses . . . . .	33
Open University. . . . .	33
International Program Credit . . . . .	33

### Academic Affairs

Vice President for Academic Affairs. . . . .	37
Dean of the Faculty . . . . .	37
Academic Programs . . . . .	37
Faculty Affairs and Academic Resources . . . . .	37
Advising Center . . . . .	37
Math Tutoring Lab . . . . .	38
University Writing Center . . . . .	38
Credentials Office. . . . .	38
Extended Education . . . . .	38
Open University. . . . .	38
Library. . . . .	39
Library Services . . . . .	39
The Robert J. Lagomarsino Collection. . . . .	39
Faculty Biographies. . . . .	40-48

## Admissions and Records

Admission Procedures and Policies . . . . .	51
Undergraduate Application Procedures. . . . .	51
Impacted Programs . . . . .	51
Graduate and Post-Baccalaureate Application Procedures . . . . .	52
Application Filing Periods . . . . .	52
Hardship Petitions . . . . .	52
Undergraduate Admission Requirements . . . . .	52-54
Eligibility Index. . . . .	53
Evaluation of Foreign Baccalaureate-Level Coursework . . . . .	53
Provisional Admission . . . . .	53
TOEFL Requirement . . . . .	55
Graduate and Post-Baccalaureate Admission Requirements . . . . .	55-56
Evaluation of Foreign Degrees. . . . .	56
Graduate-Postbaccalaureate TOEFL Requirement . . . . .	56
International (Foreign) Student Admission Requirements . . . . .	56
Intrasystem and Intersystem Enrollment Programs . . . . .	56
Privacy Rights of Students in Education Records . . . . .	57
Cancellation of Registration or Withdrawal from the Institution. . . . .	57

## Financial Matters

Schedule of Fees. . . . .	61
Refund of Fees Including Nonresident Tuition . . . . .	61
Fees and Debts Owed to the Institution . . . . .	62
Fee Waivers. . . . .	62
Average Annual Cost of Education and Sources of Funds Per Full-Time Equivalent Student. . . . .	62
Procedure for the Establishment or Abolishment of a Student Body Fee . . . . .	63
Scholarships . . . . .	63

## Student Affairs

Vice President for Student Affairs . . . . .	67
Admissions and Records . . . . .	67
Recruitment . . . . .	67
Veterans Affairs . . . . .	67
Career, Health, Accommodation and Personal Counseling (C.H.A.P.s). . . . .	67-68
Career Development Services . . . . .	68
Student Health Services. . . . .	68
Disability Accommodation Services . . . . .	69
Personal Counseling Services . . . . .	69
Financial Aid Office . . . . .	69
Grants. . . . .	69
Loans . . . . .	69
State Work-Study Program . . . . .	69
Scholarships. . . . .	69
Student Development . . . . .	70
Associated Students Incorporated. . . . .	70
Judicial Affairs . . . . .	70
New Student Orientation . . . . .	70
Outreach and Educational Opportunity Program (EOP). . . . .	70
Recreation and Leisure Services . . . . .	71
Student Activities, Clubs and Organizations . . . . .	71
Student Housing . . . . .	71
The University Hub . . . . .	71

## General Education Requirements

General Education . . . . .	75
General Education Categories and Courses . . . . .	76

## Graduation Requirements

Baccalaureate Degree Requirements . . . . .	83
Total Units . . . . .	83
Upper Division Units. . . . .	83
Major . . . . .	83
General Education. . . . .	83
Residence. . . . .	83
Grade Point Average . . . . .	83
U.S. History, State and Local Government Requirements . . . . .	83
Language and Multicultural Requirements. . . . .	83
Graduation Requirement in Writing Proficiency. . . . .	83
Graduation Information. . . . .	84
Graduation Information and Application Process for the Bachelor's Degree . . . . .	84
Application for Graduation . . . . .	84
Key Steps to Graduation . . . . .	84
Commencement and Honors Convocation . . . . .	84

## Majors, Minors & Credentials

Anthropology (Minor Only). . . . .	87
Applied Physics (Minor Only) . . . . .	88
Art. . . . .	89-91
Asian-Pacific Studies (Minor Only) . . . . .	92
Biology. . . . .	93-96
Business. . . . .	97-99
Chemistry (Minor Only). . . . .	100
Chicano/a Studies (Minor Only) . . . . .	101
Computer Science. . . . .	102-103
Economics (Minor Only) . . . . .	99
Education (Credentials). . . . .	104-110
English. . . . .	111-113
Environmental Science and Resource Management . . . . .	114-116
History. . . . .	117-118
Liberal Studies. . . . .	119-122
Mathematics . . . . .	123-125
Psychology. . . . .	126-128
Spanish (Minor Only) . . . . .	129

## Course Descriptions

Course Numbering. . . . .	133
Course Descriptions . . . . .	133-186

Index. . . . .	189-192
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# CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

## CALENDAR FOR 2003 – 2004 ACADEMIC YEAR

### Fall 2003 Semester

August 21 - 22, 2002	Thursday - Friday	Faculty Orientation/Late Student Registration
August 23	Saturday	Saturday classes begin
August 25	Monday	First official day of classes
September 1	Monday	Labor Day Holiday; all offices closed; no instruction
November 27 - 29	Thursday - Saturday	Thanksgiving Recess; all offices closed; no instruction
December 5	Friday	Last day of formal instruction except for Saturday classes meeting once weekly. Thursday and Friday may be used for review days.
December 8 - 14	Monday - Saturday	Final Examinations
December 15 - 16	Monday - Tuesday	Department meetings and conferences
December 17	Wednesday	Evaluation Day
December 18 - 19	Thursday - Friday	Instructors' grades due
December 19	Friday	Last day of Fall 2003 Semester
December 25 - January 2	Thursday - Friday	CAMPUS CLOSED

### Spring 2004 Semester

January 29 - 30, 2004	Thursday-Friday	Faculty Orientation/Late Student Registration
February 2	Monday	First official day of classes
February 7	Saturday	Saturday classes begin
March 31	Wednesday	Cesar Chavez Holiday; all offices closed; no instruction
April 5 - 10	Monday - Saturday	Spring Recess; no instruction
May 21	Friday	Last day of formal instruction, except for Saturday classes meeting once weekly. Thursday and Friday may be used for review days.
May 24 - 29	Monday - Saturday	Final Examinations
May 29	Saturday	Commencement Ceremony
May 31	Monday	Memorial Day Holiday; all offices closed
June 3 - 4	Thursday - Friday	Instructors' grades due
June 4	Friday	Last day of 2003-2004 academic year

### University Holiday Schedule

Labor Day	Monday, September 1, 2003
Thanksgiving Day	Thursday, November 27, 2003
Admission Day Observed	Friday, November 28, 2003
Christmas Day	Thursday, December 25, 2003
Columbus Day Observed	Friday, December 26, 2003
Veterans' Day Observed	Monday, December 29, 2003
Lincoln's Birthday Observed	Tuesday, December 30, 2003
Washington's Birthday Observed	Wednesday, December 31, 2003
New Year's Day	Thursday, January 1, 2004
Campus Closed	Friday, January 2, 2004
Martin Luther King Jr. Day	Monday, January 19, 2004
Cesar Chavez Day	Wednesday, March 31, 2004
Memorial Day	Monday, May 31, 2004
Independence Day Observed	Monday, July 5, 2004

### Fall 2003 Saturday Classes:

August 23, 30  
 September 6, 13, 20, 27  
 October 4, 11, 18, 25  
 November 1, 8, 15, 22  
 December 6

### Spring 2004 Saturday Classes:

February 7, 14, 21, 28  
 March 6, 13, 20, 27  
 April 3, 17, 24  
 May 3, 8, 15, 22





# **Introduction to CSUCI**

CSU

## INTRODUCTION TO CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

The California State University Channel Islands Catalog is published to help prospective and continuing students make decisions toward fulfillment of 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 CSU Channel Islands' home page at [www.csuci.edu](http://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](http://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](http://www.csuci.edu).
5. **Telephone numbers** are listed throughout this Catalog as well as in a campus telephone directory at the end of this section. 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. student financial assistance programs, including state grants, available to students who enroll at CSU Channel Islands;
2. the procedures and forms by which application for student financial assistance is made;
3. the student eligibility requirements for financial assistance and the criteria used in determining how financial assistance is distributed among eligible applicants who enroll at CSU Channel Islands; and
4. the rights and responsibilities of students receiving financial assistance including aid provided under federal Title IV student assistance programs.

Information 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 and board costs and typical

commuting 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, C.H.A.P.s office, Bell Tower Building, Room 1416, (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.H.A.P.s, Bell Tower Building Room 1415, (805) 437-8510.

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, Professional Building Room 227, (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 and women's teams may be obtained from Dr. Wm. Gregory Sawyer, Vice President for Student Affairs, Bell Tower Building Room 2300, (805) 437-8536.

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, 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.

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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 email your suggestions to Nancy Covarrubias Gill at nancy.c.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 the new California State University Channel Islands is truly dramatic. The main entrance to the campus cuts through agricultural fields, orchards, coastal scrub, and crag-topped 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 our new, 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 CSU Ventura Campus for over 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 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 (O'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 it 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 over 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 freshman class will be welcomed in fall 2003. When the first four-year class graduates, total enrollment is projected to be more than 4,000. 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 21st century.

## UNIVERSITY MASCOT

A petition was presented to CSU Channel Islands by local Chumash leaders that the dolphin be enlisted as the University's official mascot. The sacred story of why the Chumash cherish the dolphin is "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.

## PRESIDENT'S CABINET



### Richard R. Rush

President, 2001 – Present  
President of Minnesota State University, Mankato, 1992-2001  
Executive Vice President, California State University, San Marcos 1989-1992



### Theodore D. Lucas

Interim Vice President for Academic Affairs, 2003 - Present  
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



### Mary Ann L. Dase

Chief Information Officer, 2001 – Present  
Associate Vice President for Information Services, Loyola Marymount University, 1997-2001  
Executive Director of Information Resources, Pacific Lutheran University, 1996-1997

## 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.

## HUMAN RESOURCES PROGRAMS

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

## 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. – 10 p.m.; Friday: 8 a.m. – 5 p.m.; Saturday: 8 – 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 WEBMAIL

All registered students automatically have a Web-based CSU Channel Islands email account. Follow the proceeding steps to logon: Your email address is your username@dolphin.csuci.edu

➤ **Log on to:** <http://dolphin.csuci.edu>

➤ **User name:** First 5 letters of your last name followed by the last 3 numbers of your student ID #. For example: Cotton and 000123456 would result in a username as cotto345 and the password would be 000123456.

➤ **Password:** Student ID.

## 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 – no www). You will see a log-in screen. Your Username and Password are your SIMS number (9-digit student ID).

For additional assistance with any of our services, please drop by the Technology Center, call (805) 437-8552, or drop us an email at: [helpdesk@csuci.edu](mailto:helpdesk@csuci.edu).

## PUBLIC SAFETY

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 A-1. 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, by calling 911 or \*88 from any telephone. For non-emergencies please call (805) 437-8444.

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, enforcement of State 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 as 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/police](http://www.csuci.edu/police). The Department's Crime Prevention Program offers numerous programs and workshops that are presented several times each semester and 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 prevention of future crimes. CALL 911 or \*88.
- Report all suspicious persons and circumstances. This may prevent a crime from occurring. CALL 911 or \*88.
- 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 Student Affairs 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 (805) 437-8888, \*88 or 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/police](http://www.csuci.edu/police).

### **Important Telephone Numbers**

Public Safety

On Campus - ext. 8444

Off Campus - (805) 437-8444

Emergency

On Campus - 911, \*88 or ext. 8888

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 911, (805) 437-8888 or ext. 8888 to 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.

## Emergency Telephones

The pay phones, located in all parking lots, also serve as emergency phones that connect to the campus Police Department. Plans are underway to place distinctive emergency telephones throughout the campus.

## 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.

## 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 according to 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, CO2 powered bb or pellet guns, spring-type weapons and slingshots and firecrackers are among prohibited items. Any prohibited weapons needed for employment or recreation must be checked in with the Department of Public Safety 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 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 report 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 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/parking](http://www.csuci.edu/parking).

Parking permits are required for all vehicles on campus, 24 hours a day, 7 days a week. 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 \$25 per semester, with no cost during summer session. For your convenience, the shuttle operates from three (3) sites:

<b>Oxnard</b>	C Street and Channel Islands Blvd
<b>Near Oxnard College</b>	S.W. corner of Bard Road and Simpson Drive
<b>Camarillo</b>	Camarillo Metrolink Station, Lewis Road and Ventura Blvd

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. 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. Parking at the sites is free.

### 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 and scooters, both motorized and non-motorized, and Rollerblades is prohibited on campus, except in the University Glen area.



## ALPHABETICAL LISTING OF THE FACULTY AND STAFF

### A

Adalian	Paul	(805) 437-8577
Adams	William	(805) 437-8866
Allen	Lu Ann	(805) 437-8462
Allen	Bill	(805) 437-8466
Aloisio	Simone	(805) 437-8999
Anderson	Carol	(805) 437-8578
Aquino	Herb	(805) 437-8550
Arciniega	Lupe	(805) 437-8468
Arias	Richard	(805) 437-8461

### B

Baker	Harley E.	(805) 437-8997
Ballman	Terry L.	(805) 437-8996
Banuelos	Raudel	(805) 437-8464
Barajas	Frank	(805) 437-8862
Bartlett	Shawn	(805) 437-8444
Bastone	Jacinta	(805) 437-8487
Beck	Sharon	(805) 437-8915
Belote	Terry	(805) 437-8465
Beltranena	Juan	(805) 437-8496
Bennett	Colleen	(805) 437-8846
Berg	Gary	(805) 437-8580
Bleicher	Robert E.	(805) 437-8508
Blue	Damon	(805) 437-8531
Breckenridge	Lisa	(805) 437-8415
Buchanan	Merilyn C.	(805) 437-8579
Buena	Noel	(805) 437-8551
Buschmann	Rainer F.	(805) 437-8995

### C

Canchola	Christina	(805) 437-8941
Cantu	Veronica	(805) 437-8522
Carlson	David	(805) 437-8472
Christopher	Renny	(805) 437-8994
Clode	Julie	(805) 437-8955
Cochran	Jim	(805) 437-8412
Coles	Teresa	(805) 437-8454
Cordeiro	William	(805) 437-8860
Corelli	Julie	(805) 437-8815
Cormier	Jodie	(805) 437-8444
Costache	Irina D.	(805) 437-8993
Cotton	Trae	(805) 437-8961
Covarrubias	Linda	(805) 437-8960
Coville	Joanne	(805) 437-8877
Cowgill	Jeff	(805) 437-8444
Crawford	Shelley	(805) 437-8532
Cruz	Octavio	(805) 437-8527
Cuevas	Rosario	(805) 437-8570
Cunningham	Chanda	(805) 437-8449

### D

Darling	Bud	(805) 437-8474
Dase	MaryAnn	(805) 437-8452
de los Cobos	Marty	(805) 437-8803
de Oca	Beatrice M.	(805) 437-8992
Deakin	Emily	(805) 437-8593
Deleo	Tony	(805) 437-8432
Desoto-Teunis	Cecilia	(805) 437-8444
Diamantis	Nikolaos	(805) 437-8991
DiStefano	Lorene	(805) 437-8444

Doll	Caroline	(805) 437-8438
Doolittle	Lashanor	(805) 437-8433
Dorame	Francisco	(805) 437-8451
Dougherty	Geoffrey	(805) 437-8990
Downes	Kathy	(805) 437-8537
Dransart	Tim	(805) 437-8444
Duffin	Barbara	(805) 437-8571
Dunning	Laurie	(805) 437-8561
Dutra	George	(805) 437-8422

### E

Eaves	Cindy	(805) 437-8548
Edinger	Sonia	(805) 383-6273
Emens	Tom	(805) 437-8946
Enos	Diana	(805) 437-8426
Estrada	Rudolph	(805) 437-8983

### F

Farrar	Gina	(805) 437-8503
Finnerty	Tom	(805) 437-8444
Fleming	Don	(805) 437-8852
Flores	Maria de la luz	(805) 437-8515
Flores	Art	(805) 437-8423

### G

Garrett	Suzanne	(805) 437-8936
Gill	Nancy Covarrubias	(805) 437-8456
Gilmore	Jackie	(805) 437-8525
Glover	Laurie	(805) 437-8970
Goldstein	Terri	(805) 437-8528
Gonzales	Tanya	(805) 437-8894
Gonzalez	J. E.	(805) 437-8979
Grier	Jeanne M.	(805) 437-8987
Grzegorzczuk	Ivona	(805) 437-8868
Guillen	Arjelia	(805) 437-8510
Gutierrez	Ernesto	(805) 437-8800
Gutierrez	Robert	(805) 437-8507

### H

Hampton	Philip	(805) 437-8869
Hankinson	Seth	(805) 437-8552
Harrington	Kate	(805) 437-8890
Hernandez	Theresa	(805) 437-8479
Hesselbrock	Tom	(805) 437-8930
Hinz	Peggy	(805) 437-8947
Hirschhorn	Gretchen	(805) 437-8504
Holder	Carol	(805) 437-8948

### J

Jacquemin	Joy	(805) 437-8463
Johnson	Patricia	(805) 437-8561
Johnson	Diana	(805) 437-8444
Johnston	Steve	(805) 437-8442
Jones	Janice	(805) 437-8535

### K

Karacali	Effie	(805) 437-8490
Karp	Joan	(805) 437-8871
Kearney	Shannon	(805) 437-8929
Kersten	Vicky	(805) 437-8468
Khan	Munawwar	(805) 437-8452
Kilpatrick	Jacquelyn	(805) 437-8865

## ALPHABETICAL LISTING OF THE FACULTY AND STAFF

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Kirklin	Leah	(805) 437-8481
Kirks	Heather	(805) 437-8485
Kupfer	Bill	(805) 437-8847

### L

LaFrenz	Lisa	(805) 437-8998
Lai	Gene	(805) 437-8444
Le	Hai	(805) 437-8564
Le	Judi	(805) 437-8497
Lebioda	Ed	(805) 437-8547
Lefevre	Steve	(805) 437-8541
Lucas	Theodore D.	(805) 437-8483
Lutze-Mann	Louise	(805) 437-8873

### M

Mahoney	Michael	(805) 437-8853
Mansour	Nasser	(805) 437-8956
Miller	Melissa	(805) 437-8444
Mills	Roberta	(805) 437-8553
Mills	Don	(805) 437-8461
Mitchell	Colleen	(805) 437-8446
Morales	Sylvia	(805) 437-8432
Morten	George	(805) 437-8516
Mosinskis	Peter	(805) 437-8587
Mozingo	Nancy M.	(805) 437-8989
Muller	Kris	(805) 437-8418
Muraoka	Dennis	(805) 437-8861

### O

Ocampo	Hannah	(805) 437-8460
Olson	Wendy	(805) 437-8571
Ordonez	Shannon	(805) 437-8571

### P

Parra	Brian	(805) 437-8876
Paulson	Richard	(805) 437-8813
Pavin	Anna	(805) 437-8425
Pencoff	Nick	(805) 437-8518
Peterson	Tara	(805) 437-8559
Pettit	Callie	(805) 437-8967
Phillips	Joan	(805) 437-8935
Porras	Ray	(805) 437-8434
Pulido	Patricia	(805) 437-8953

### R

Ramirez	Daniela	(805) 437-8552
Reilly	Jack	(805) 437-8863
Remotti	Melissa	(805) 437-8420
Revard	Nathan	(805) 437-8561
Reyes	Ginger	(805) 437-8521
Reyes	Martha	(805) 437-8560
Rice	Toni	(805) 437-8962
Rivera	Paul A.	(805) 437-8988
Rodgers	Scott	(805) 437-8563
Roff	Donna	(805) 437-8561
Rush	Richard	(805) 437-8410

### S

Santana	Soupy	(805) 437-8461
Saunders	Sue	(805) 437-8571
Sawyer	Wm. Gregory	(805) 437-8536
Schoenwald	Ira	(805) 437-8482
Seeger	Jeffrey	(805) 437-8567
Sezzi	Peter	(805) 437-8561
Shehorn	Melinda	(805) 437-8410
Shonka	Michellyn	(805) 437-8892
Shuler	Michael	(805) 437-8444
Siefert	Louise	(805) 437-8492
Smith	Dawn	(805) 437-8444
Soczek	Shannon	(805) 437-8539
Somdal	Linda	(805) 437-8461
Stimpson	Ryan	(805) 437-8949
Strauch	Cathy	(805) 437-8478
Straus	Sarah	(805) 437-8806
Sula-Goff	Evan	(805) 437-8400
Sweetland	Jane	(805) 437-8517

### T

Tauber	Maria	(805) 437-8543
Taylor	Evelyn	(805) 437-8830
Thorpe	Barbara	(805) 437-8421
Torpey	Frank	(805) 437-8443
Torres	Tina	(805) 437-8573
Tyacke	Rhonda	(805) 437-8457

### U

Ulissee	Cynthia	(805) 437-8927
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### V

Vaidya	Ashish K.	(805) 437-8986
Vargas	Leticia	(805) 437-8533
Vea	Donna	(805) 437-8540
Vega-Castaneda	Lillian	(805) 437-8872
Velador	Dale	(805) 437-8467
Velasco	Elizabeth	(805) 437-8416
Volkan	Kevin	(805) 437-8867

### W

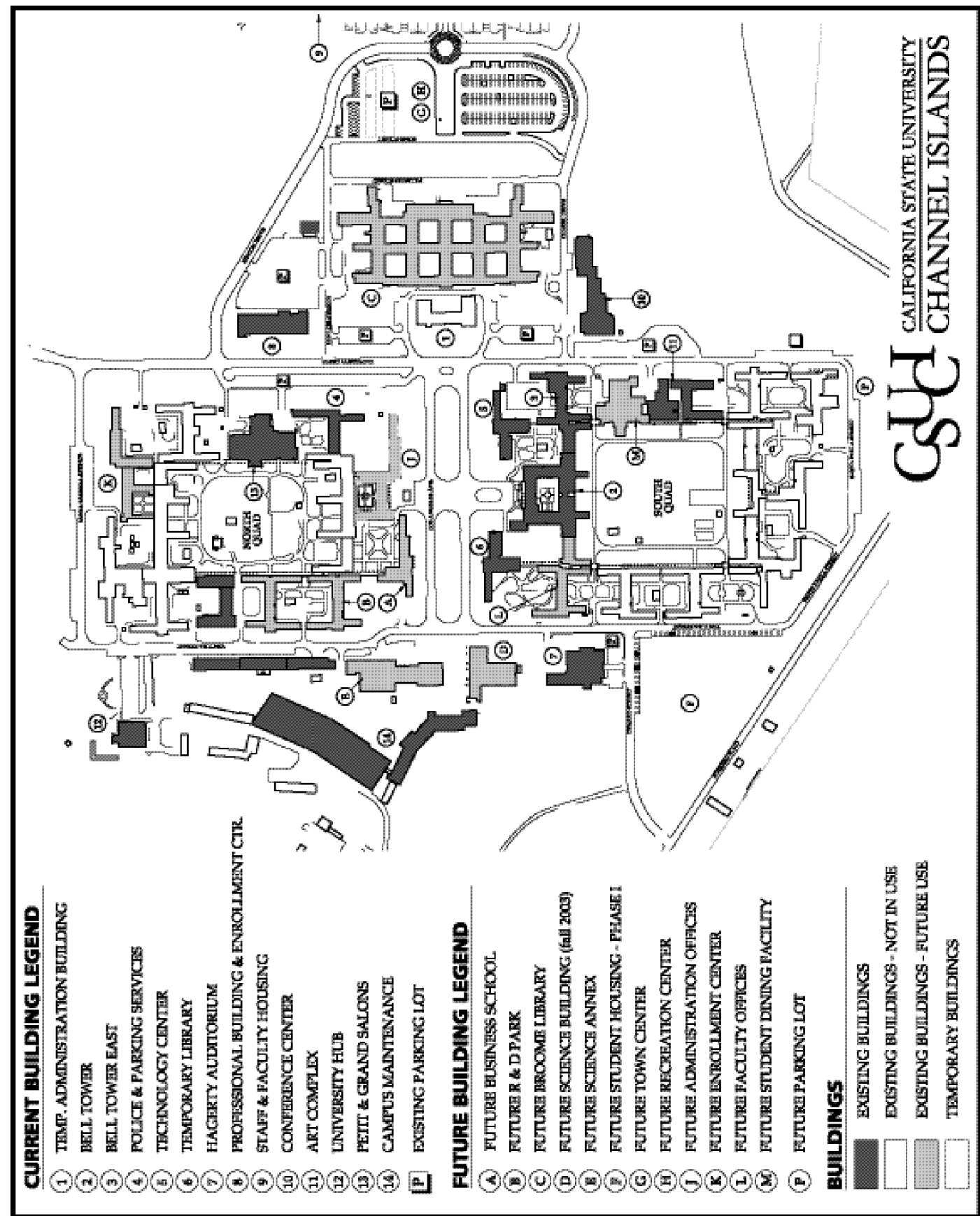
Wagoner	Loretta	(805) 437-8562
Wakelee	Dan	(805) 437-8542
Wanberg	Jane	(805) 437-8495
Wang	Ching-Hua	(805) 437-8870
West	Cathy	(805) 437-8420
Williams	Phyllis	(805) 437-8441
Wolfe	William J.	(805) 437-8985
Woodling	Melissa	(805) 437-8520

### Y

Young	Jeff	(805) 437-8447
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### Z

Zacharias	Mark	(805) 437-8984
Zendejas	Maria Elena	(805) 437-8530
Zuniga	Cesar	(805) 437-8444







# About the California State University System (CSU)

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 campus – 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 2002 totaled 406,896 students, who were taught by more than 21,225 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 Gray Davis Governor of California	State Capitol Sacramento 95814
The Honorable Cruz Bustamante Lieutenant Governor of California	State Capitol Sacramento 95814
The Honorable Herb Wesson Speaker of the Assembly	State Capitol Sacramento 95814
The Honorable Jack O’Connell State Superintendent of Public Instruction	721 Capitol Mall Sacramento 95814
Dr. Charles B. Reed Chancellor of the California State University	401 Golden Shore Long Beach 90802-4210

### OFFICERS OF THE TRUSTEES

The Honorable Gray Davis President	Murray Galinson Vice Chair
Debra S. Farar Chair	Christine Helwick 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)	William Hauck (2009)
William Campbell (2003)	Ricardo F. Icaza (2008)
Debra S. Farar (2006)	M. Alexander Lopez (2004)
Robert Foster (2006)	Shailesh J. Mehta (2005)
Murray L. Galinson (2007)	Dee Dee Myers (2004)
Harold Goldwhite (2003)	Ralph R. Pesquiera (2004)
Frederick W. Pierce IV (2004)	Anthony M. Vitti (2005)
Erene S. Thomas (2003)	Martha C. Walda (2003)
Kyriakos Tsakopoulos (2009)	

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

## OFFICE OF THE CHANCELLOR

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

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



## CAMPUSES – THE CALIFORNIA STATE UNIVERSITY



### California State University, Bakersfield

001 Stockdale Highway  
Bakersfield, CA 93311-1099  
Dr. Tomás A. Arciniega, President  
(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. Manuel A. Esteban, 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**

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. Bob Suzuki, President\*  
(909) 869-7659

### **California State University, Sacramento**

6000 J Street  
Sacramento, CA 95819  
Dr. Donald R. Gerth, 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**

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

### **San José State University**

One Washington Square  
San José, CA 95192-0001  
Dr. Robert L. Caret, 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. Alexander Gonzalez, 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

\* In July 2003, Dr. Michael Ortiz will be president at California State Polytechnic University, Pomona; and Dr. Alexander Gonzalez will be president at California State University, Sacramento.

## 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.

<b>Australia</b>	Griffith University University of Western Sydney Macquarie University Queensland University of Technology University of Queensland Victoria University of Technology
<b>Canada</b>	The universities of the Province of Quebec including: Université de Montréal Concordia University Université Laval McGill University Université du Québec system Bishop's University
<b>Chile</b>	Pontificia Universidad Católica de Chile (Santiago)
<b>China</b>	Peking University (Beijing)
<b>Denmark</b>	Denmark's International Study Program (the international education affiliate of the University of Copenhagen)
<b>France</b>	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, and the Institute of Oriental Languages and Civilizations, and Université Evry.
<b>Germany</b>	Universität Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg
<b>Israel</b>	Tel Aviv University The Hebrew University of Jerusalem University of Haifa

<b>Italy</b>	CSU Study Center (Florence) Università degli Studi di Firenze La Accademia di Belle Arti Firenze
<b>Japan</b>	Waseda University (Tokyo)
<b>Korea</b>	Yonsei University (Seoul)
<b>Mexico</b>	Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro
<b>New Zealand</b>	Lincoln University (Christchurch) Massey University (Palmerston North)
<b>Spain</b>	Universidad Complutense de Madrid Universidad de Granada
<b>Sweden</b>	Uppsala Universitet
<b>Taiwan</b>	National Taiwan University (Taipei) National Tsing Hua University
<b>United Kingdom</b>	Bradford University Bristol University Hull University Kingston University Sheffield University University of Wales, Swansea
<b>Zimbabwe</b>	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](http://www.gateway.calstate.edu/csuienet).



# **Policies and Regulations**

CSU



## **POLICIES AND REGULATIONS**

### **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 Career, Health, Accommodation and Personal Counseling (C.H.A.P.s) located in the Bell Tower, Room 1415, or by telephone or TDD at (805) 437-8510.

#### **Sex**

The California State University does not discriminate on the basis of sex 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 CSU Channel Islands may be referred to Art Flores, Associate Vice President for Human Resources Programs, the campus officer 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.

### **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 Internal Revenue Service (IRS) to help determine whether a student, or a person claiming a student as a dependent, may take a credit or a deduction to reduce federal income taxes.

### **CAREER PLACEMENT**

The office of Career, Health, Accommodation 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.

### **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.

## 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 Web site at [www.calstate.edu](http://www.calstate.edu).

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, has been both physically present in the state and has evidence of intent to remain in California indefinitely, may establish California residence for tuition purposes. Evidence demonstrating intent can vary from case to case and may include, but 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, 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 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

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 appeal must be submitted within 120 days of notification of the final campus decision. 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.

## 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 [www.sss.gov](http://www.sss.gov).

## 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 C.H.A.P.s office located in the Bell Tower Building, Room 1415, (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 completed by all entering undergraduates, with the exception of those who present proof of one of the following:

- A score of 550 or above on the 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 of 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 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, a member of the campus community.
- (l) Violation of any order of a campus President, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.
- (m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or probation pursuant to this Section.
- (n) For purposes of this Article, the following terms are defined:
  - (1) The term "member of the campus community" is defined as meaning California State University Trustees, academic, non-academic and administrative personnel, students, and other

persons while such other persons are on campus property or at a campus function.

- (2) The term "campus property" includes:
  - (A) real or personal property in the possession of, or under the control of, the Board of Trustees of the California State University, and
  - (B) all campus feeding, retail, or residence facilities whether operated by a campus or by a campus auxiliary organization.
- (3) The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, slingshot, billy, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.
- (4) The term "behavior" includes conduct and expression.
- (5) The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.
- (o) This Section is not adopted pursuant to Education Code Section 89031.
- (p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect 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.**

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. Upper-division transfer students are required to declare their intended major on their application for admission. (SR 14-02)

### **Double-Counting of Course Requirements**

A course may meet the requirements for two or more program areas (majors, minors, and other sub-programs) 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. (SR 34-01)

### **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.

(SR 15-02)

### **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.

(SR 9-03)

### **Adding Courses During the First Two Weeks of Instruction**

Beginning with the first day of instruction and through the first two weeks of instruction, a student may add a class with the approval of the instructor as indicated by the instructor's signature on the appropriate form(s).

(SR 5-02)

### **Adding Courses After the First Two Weeks of Instruction**

Beginning with the first day of the third week of instruction and through the last day of 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 form(s).

Adding a class after the fourth week of instruction is normally not permitted. Petitions to add classes after the fourth week of instruction will only be granted for serious and compelling reasons as judged by the Vice President for Academic Affairs (or designee). Students seeking to add classes after the fourth week of instruction must prepare a written justification and obtain approval of the instructor and the approval of the Vice President for Academic Affairs (or designee) as indicated by their signatures on the appropriate form(s). (SR 6-02)



## Withdrawal from Courses

### Student Initiated Course Withdrawals

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

### Instructor Initiated Course Withdrawal

1. An instructor may drop a student who does not attend class and has not made prior arrangements with the instructor. This may occur as early as after the first class meeting.
2. An instructor may drop a student who has enrolled in a course requiring "permission of the instructor" or completion of prerequisites if the student has not properly secured this permission or satisfactorily completed the prerequisites before enrolling.  
(SR 35-01)

### **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.  
(SR 7-02)

### **Grades**

1. "ABCD" 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.  
(SR 38-01)

## 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. (SR 4-02)

## Course Grade Appeals

1. Each student has the right to appeal the final course grade, but only the final course grade. A student may not appeal individual assignments and examinations.
2. Appeals are limited to situations in which the student believes the grade was "prejudicially," "capriciously," or "arbitrarily" assigned.
3. The appeal must be initiated within the first regular semester after assignment of the grade. It must first be directed to the instructor of the course, orally or in writing. If further action is necessary, the student should appeal in writing to the program coordinator. If further action is necessary, the issue may be appealed to the University Grade Appeals Committee.
4. The University Grade Appeals Committee shall consist of faculty and at least one student.
5. Individuals may not participate as a member of the University Grade Appeals Committee in the review of an appeal if they are a participant in an appeal.
6. The decision of the University Grade Appeals Committee is final. (SR 39-01)

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

A student may repeat a course at CSU Channel Islands for the purpose of improving his or her GPA. Courses in which the grade is C or above can be replaced up to a maximum of 24 units; however, there is no limit on the number of units that can be retaken for courses with grades of C- or lower. Only the higher grade in a course will be used in calculation of the grade point average if forgiveness is granted. (SR 40-01)

## Semester Honors

Undergraduate students completing 12 or more units in a single semester or completing 12 or more units in two consecutive semesters at CSU Channel Islands shall be named to the Semester Honors list if they earn a 3.75 or higher grade point average. (SR10-03)

## Program Honors

Program honors will be awarded based on criteria developed by individual programs. (SR 41-01)

## University Honors

The following honors are awarded to students graduating from CSU Channel Islands:

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

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

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

## Participating in Commencement Ceremonies

Students may participate in commencement ceremonies if they have no more than 10 units pending toward completion of their degrees. (SR 13-02)

## 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.  
(SR 8-02)

## 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 postbaccalaureate student will be subject to academic probation if, after attempting 12 or more graded units, his or her postbaccalaureate 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 administrative-academic 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 academic-administrative 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 administrative-academic 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.  
(SR 12-02)

## 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.

## 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. (SR 37-01)

## 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 Institution

Students who were in good standing at another accredited institution may, within maximums, transfer credit for baccalaureate or graduate degree course work. Course equivalency for major requirements is subject to the determination and discretion of the University; students are cautioned that 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 Colleges

A maximum of 70 semester units earned in a community college may be applied toward the baccalaureate degree, with the following limitations and stipulations:

1. No upper-division credit may be allowed for courses taken in a community college;
2. No credit may be allowed for professional courses in education taken in a community college, other than introduction to education courses;
3. Students who transfer general education certification are still required to complete at least 9 units of upper-division general education courses at 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.

## 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)

CSU



# **Academic Affairs**

CSU

## **DIVISION OF ACADEMIC AFFAIRS**

### **VICE PRESIDENT FOR ACADEMIC AFFAIRS**

**Location:** Professional Building, Room 250  
(805) 437-8441

The office of the 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 for directing 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 and Assessment and the University Library.

### **DEAN OF THE FACULTY**

**Location:** Professional Building, Room 229  
(805) 437-8540

The office of the Dean of the Faculty provides academic direction and support for the University faculty, meeting regularly with the faculty and academic coordinators 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 off-campus center of CSU Northridge.

### **ACADEMIC PROGRAMS**

**Location:** Professional Building, Room 202  
(805) 437-8441

The office of Academic Programs is responsible for program development and review, including relations with the Chancellor's Office, promotion of experiential and service-learning initiatives, learning communities, and community/business outreach. The office oversees a number of special projects including the University Preparatory School and the International Studies Academy, and serves as liaison with the Center for Excellence in Early Childhood Development. Academic Programs also directs the Extended Education, the Summer College, and cooperative programs with other CSU campuses, including the Master's in Social Work with CSU Long Beach.

## **FACULTY AFFAIRS AND ACADEMIC RESOURCES**

**Location:** Professional Building, Room 232  
(805) 437-8485

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 with assistance on funded projects, instructional and curriculum design, Web-based instructional efforts, and orientation for incoming faculty.

### **ADVISING CENTER**

**Location:** Bell Tower, Room 1301  
(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. In order 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 University Degree Audit, 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 for 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 a.m. – 6 p.m., Friday: 8 a.m. – 5 p.m.

## **MATH TUTORING LAB AND THE UNIVERSITY WRITING CENTER**

Please check the display in front of the Advising Center in Room 1301 for the current schedules and location of each center.

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**

At the Math Tutoring Lab, tutors are available to accommodate students' needs, whether it is with help completing homework, studying for a test, or just understanding a concept. Tutors are able to consult in virtually every Math course offered on this campus, and their specialties are posted in front of the lab.

### **University Writing Center**

In the Writing Center, 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 director. The center is also available to assist students with organizing their studies, taking notes, and using research materials.

## **CREDENTIALS OFFICE**

The Credentials Office located in Room 1327 of the Bell Tower Building, 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. For further information please stop by or call (805) 437-8953.

## **EXTENDED EDUCATION**

### **CONTACT INFORMATION**

Gary A. Berg, Ph.D.,  
Director of Extended Education and Distance Learning  
Professional Building, Room 254  
(805) 437-8580  
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 Extension Credit.

## 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.

Students may apply up to 24 units of Extension Credit toward a baccalaureate degree. At the option of the program coordinator, up to six units of Extension Credit may be applied to a graduate degree. Grades received through this program will be factored into your grade point average at CSU Channel Islands.

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) 437-8495).
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. Please do not ask instructors to sign forms before this day. 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. The fees per unit are:

Lecture unit: \$155

Activity unit: \$185

Lab unit: \$244

Full payment is required at the time of registration.

## Open University Registration Deadlines:

Regular Registration: 1st two weeks of session

Late Registration Dates (\$20 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) 437-8495.

## **LIBRARY**

### **CONTACT INFORMATION**

[www.csuci.edu/library](http://www.csuci.edu/library)

(805) 437-8561

The CSU Channel Islands 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 service-oriented 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 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



William Hampton Adams received an A.B. in anthropology from Indiana University in 1970, an M.A. in anthropology in 1972 and a Ph.D. in anthropology in 1976 from Washington State University. He has served on the faculties of Washington State University, University of Florida, Oregon State University, and

Flinders University of South Australia. He was also Senior Staff Archaeologist at Colonial Williamsburg. He is past president of the Society for Historical Archaeology and has served on the Board of Directors for the Society of Professional Archaeologists.

Dr. Adams has conducted oral histories and research on historical sites across the United States, as well as in Australia, Canada, the Middle East, the Republic of the Marshall Islands, the Republic of Palau, and the Federated States of Micronesia. In the latter three countries he has been working with indigenous peoples on preserving their cultural heritage while developing their economies. He is an internationally recognized scholar in historical archaeology and in cultural heritage management.

### Simone Aloisio Assistant Professor of Chemistry

Simone Aloisio was born in Highwood, Illinois. As a college student, he became interested in environmental issues, in particular in the application of science to understanding the environment. He went on to graduate school at Purdue University and studied Analytical Chemistry, with an emphasis on Atmospheric Chemistry.



Dr. Aloisio's research interests are in the sub-field of atmospheric chemistry. He is interested in laboratory measurements and theoretical calculations of chemical reactions that occur in the chemistry of the earth's atmosphere. Currently, he is interested in using spectroscopy to study the kinetics of chemical reactions and in getting students interested in science.

Dr. Aloisio graduated with a degree in chemistry from Bradley University in Peoria, Illinois. He received his Ph.D. from Purdue in 2000. As a graduate student, he was fortunate enough to work on a project in the Chemical Kinetics and Photochemistry group at the Jet Propulsion Laboratory in Pasadena, California. After graduate school, he went to the University of Colorado at Boulder as a Dreyfus Environmental Post-Doctoral Fellow and most recently to Kyoto University as a Post-Doctoral Fellow under the Japan Society for the Promotion of Science program.

### Harley Baker Assistant Professor of Psychology



Harley Baker has had a longstanding interest in and commitment to teaching and research. His teaching career has spanned every level of instruction from elementary school through doctoral study. Most recently, he taught at the University of San Francisco. He has held senior research

positions at the American Institutes for Research, in the Federal Government, and at the University of California. Dr. Baker's current teaching and research interests include adolescent development, psychoanalysis, the psychology of religion, statistics, psychometrics, and career development.

Dr. Baker completed his B.A. in psychology at CSU Stanislaus, the M.A. in psychology at San José State University, and the M.S. in developmental psychology at UC Santa Cruz. He received his Doctor of Education from the University of San Francisco.

Dr. Baker has been the recipient of awards and recognition both for his scholarship and his assistance to educational advocacy organizations. His dissertation, which focused on the relationship between attachment and career development, received the dissertation of the year award from the National Career Development Association.

Harley is part of a family that consists of his wife Connie, his grown children Juanita and Michael, and two demented kitties, Spike and Lacy.

### Terry Ballman Associate Professor of Spanish

Terry Ballman joined CSU Channel Islands in fall 2002. A native Californian, she earned her B.A. and M.A. degrees from California State University, Long Beach, and her Ph.D. in Hispanic Linguistics from the University of Texas at Austin. Throughout her career she has held positions of responsibility, including department chair, coordinator of lower-division language programs, undergraduate bilingual and ESL advisor, single-subject credential advisor, and supervisor of student teachers.



Dr. Ballman's research interests include the examination of the acquisition of Spanish by second language learners. Coauthor of two Spanish-language textbooks, she is also the coauthor of a volume for the American Association of Teachers of Spanish and Portuguese Professional Development Series. The recipient of several teaching awards, Dr. Ballman is a frequent presenter of papers and workshops and has published material on such topics as the acquisition of Spanish, lesson planning and student-centered instruction.



**Frank P. Barajas**  
**Assistant Professor of History**



Born and raised in Oxnard, Frank Barajas is a product of the city's public schools. He graduated from Oxnard High in 1983; he then went on to obtain an A.A. degree from Moorpark College. Along the way, Dr. Barajas earned All-America and Student-Athlete honors as a community college wrestler at

Moorpark College. He holds a B.A. and M.A. in history from California State University, Fresno and earned a Ph.D. from the Claremont Graduate University.

Before joining CSU Channel Islands, Dr. Barajas worked as a history instructor at Cypress College in Orange County. He taught courses in United States, California, Chicano/a, and Asian American history. Having been inspired by dedicated and challenging public school educators, Dr. Barajas's mission at CSU Channel Islands will be to assist students to develop into inquiring and contributing members of our community.

**Robert E. Bleicher**  
**Assistant Professor of Education-Science**

Robert E. Bleicher received a B.A. in Chemistry (with Honors) from the University of California Davis in 1972 and a Ph.D. in educational psychology from U.C. Santa Barbara in 1993. He taught elementary school children and high school science for many years. For the past nine years, he has been a teacher educator at universities in both Australia and the United States.



Dr. Bleicher's research focuses on how teachers and students communicate during classroom instruction. He has applied his research findings to improve science instruction in schools. Dr. Bleicher's vision for education in the new millennium embraces a hands-on minds-on curriculum. He passionately believes that the modern classroom must help students develop effective communication skills and multicultural sensitivity. He is looking forward to our incoming freshman class as this is an opportunity to encourage students to consider pursuing the noble career of teaching.

**Marilyn Buchanan**  
**Assistant Professor of Education**



Marilyn Buchanan joined CSU Channel Islands from the University of Cambridge and the Royal Institution of Great Britain. Prior to her appointment in the UK, Dr. Buchanan was a member of the Graduate School of Education at the University of California Los Angeles. She was awarded a Ph.D. from UCLA in

1991 in the area of Policy, Administration and the Study of Schooling. Her Master's degree and undergraduate work was completed at the University of Liverpool in England. Dr. Buchanan teaches mathematics methods in the Multiple Subject Teaching Credential Program and works extensively with student teachers during their field experiences in local elementary schools. Her interest in the function of professional development schools in the education and development of teachers led to her liaison role with the University Preparation School at CSU Channel Islands. Dr. Buchanan has two major areas of interest in the study of schooling: the impact of technology on the teaching and learning of mathematics at the elementary school level, and how schools identify and provide for children's special talents.

**Rainer F. Buschmann**  
**Assistant Professor of History**

Rainer F. Buschmann comes to CSU Channel Islands from Hawaii where he taught history at Hawaii Pacific University. While in the Aloha State, he contributed to the development of a world history curriculum and to graduate programs in diplomatic studies. His participation led to the inclusion of global and interdisciplinary emphases in the History and Humanities majors of his campus. Since 1998 his active university involvement promoted world history in the state's educational agenda.



His research centers on the intersection between European and Oceanic histories. He is particularly interested in the history of anthropological inquiry in the Pacific Islands. His ecumenical research furthered his growing concern with the writing and teaching of world history.

A native of Germany, Dr. Buschmann grew up in Barcelona, Spain. His training in anthropology (Basic Studies from the University of Bonn, B.A. from the University of Illinois) awoke a passion for isles that took him to Hawaii (where he obtained his M.A. in anthropology and his Ph.D. in history), Corsica, and now the Channel Islands.

## **Lillian Vega-Castaneda** **Professor of Education-Literacy**



Lillian Vega-Castaneda joins CSU Channel Islands as Professor of Elementary Education. She comes from CSU San Marcos where she was Professor of Multicultural/Multilingual Education for nine years. During her tenure at CSUSM she coordinated the (Bilingual) Cross-Cultural Language and Academic

Development Program. Dr. Vega-Castaneda led the development of the BCLAD credential and MA program in multicultural/ multilingual education at the CSU San Marcos campus. She coordinated the implementation of these programs throughout 1992-2001.

Dr. Vega-Castaneda has conducted research in language and literacy in mainstream and multilingual contexts, community based education, and second language acquisition for English Only and English Language learners. Current scholarship includes publications in multicultural teacher education; the use of narratives in teacher education with ethnic minority and mainstream pre-service and in-service teachers. Issues of equity and difference are central to her research agenda.

A lifelong commitment to social justice issues and equity and access to learning for all students underscores her teaching, scholarship and service.

Dr. Vega-Castaneda holds a doctorate in Teaching, Curriculum and Learning Environments from Harvard University.

## **Renny Christopher** **Associate Professor of English**

Renny Christopher earned her Ph.D. in American Literature from the University of California, Santa Cruz. Her book, *The Viet Nam War/The American War: Images and Representations in Euro-American and Vietnamese Exile Narratives* was named Outstanding Book on Human Rights by the Gustavas Myers Center. She has a M.A. in Linguistics from San José State University and a B.A. in English/Creative Writing from Mills College. She is working on an autobiography, *A Carpenter's Daughter: A Working-Class Woman in Higher Education*, which addresses her experiences as the first in her family to attend college. Before she earned her Ph.D., she worked as a printing press operator, typesetter, carpenter and horse wrangler. Her teaching and research interests focus on issues of race, class, and gender in U.S. literature and culture. A poet as well as a teacher and scholar, she has published in a number of venues. *My Name is Medea* won the New Spirit Press chapbook award in 1996; *Longing Fervently for Revolution* won the Slipstream Press chapbook competition in 1998; *Viet Nam and California*, a full-length collection, was published by Viet Nam Generation/Burning Cities Press in 1998.



## **William P. Cordeiro** **Professor of Management**



William P. Cordeiro was one of the initial faculty members hired in 2001 to plan the start-up of the University. He designed the Bachelor of Science in Business and is currently working on the design of an MBA. Dr. Cordeiro came to CSU Channel Islands from CSU Los Angeles where he was a Professor of Management.

At CSU Los Angeles between 1998-2001, Dr. Cordeiro offered courses in general management, strategic planning and management, and business ethics. He was Coordinator of the Capstone Course on Global Strategic Management required of all graduates; and helped develop a Masters in Healthcare Management.

Dr. Cordeiro received a Ph.D. in Executive Management from the Peter F. Drucker School of Management at the Claremont Graduate University in 1986. He also has an MBA (Finance) from the University of Southern California and a B.S. (Biology) from the University of San Francisco.

Dr. Cordeiro worked in industry for 14 years before beginning his academic career and has extensive consulting experience for government and private clients. Projects have included work for city, county, state, and federal organizations. He publishes in the areas of strategic planning and business ethics. He is a board member for several private and public organizations.



**Irina D. Costache**  
**Associate Professor of Art History**



Irina D. Costache specializes in 20th century art and critical theory. She received her Ph.D. in art history with minors in Critical Theory and Italian Literature from UCLA. She has taught art history, humanities, and film at UCLA, Loyola University, Cal State Northridge and Mount St. Mary's College.

Her extensive teaching experience and her innovative methodologies have been recognized with awards and grants. She has lectured nationally and internationally on topics related to modern and contemporary art and culture. Her presentations and publications include among many others *Art History; Criticism and Theory: A Group Portrait; Italian Futurism and the Decorative Arts; The Work of (Art) Historians in The Age of Electronic (Re)production; This is Not a Painting: Art History and the Internet; and Just What Makes Today's Art Education So Different, So Appealing?*

In 2001 she was elected to a four-year term to the Board of Directors of College Art Association and she has chaired its Professional Practices Committee (2000-2002). She is presently a member of the Intellectual Property Committee and since 1996 has been a mentor to graduate students and young scholars. She has also served as regional coordinator for the national organization FATE (Foundation in Art: Theory and Education).

**Beatrice de Oca**  
**Associate Professor of Psychology**

Beatrice de Oca is originally from Southern California where she graduated with a Ph.D. in Psychology from UCLA and a B.A. degree in Psychology from Cal State Los Angeles. Her training is in the areas of learning, behavior and behavioral neuroscience. She comes to CSU Channel Islands after spending several years at Western New Mexico University, located in Southwestern New Mexico, where she mentored the Psychology Club, developed several new courses and developed a psychophysiology laboratory. Her current research interests include the brain's involvement in emotions as well as the psychophysiological effects of emotions and stress. Dr. de Oca enjoys teaching behavioral neuroscience, human motivation and classes on learning and cognition.



**Nikolaos Diamantis**  
**Assistant Professor of Mathematics**



Nikolaos Diamantis received his Ph.D. from Columbia University in 1997 under the supervision of Professor Dorian Goldfeld. His field of research is Number Theory and, in particular, modular forms and their L-functions.

Dr. Diamantis has worked at Max-Planck-Institut (Bonn), McMaster University and Columbia University.

**Geoff Dougherty**  
**Professor of Physics**

Geoff Dougherty joins CSU Channel Islands as Professor of Physics after serving ten years as Professor of Medical Imaging at Kuwait University. Prior to this he was the Chair of Physical Sciences at Oxford Brookes University, where he led the development and accreditation of a new double major in electronics and supervised several Ph.D. projects in biomedical instrumentation.



Dr. Dougherty is actively pursuing research in medical image analysis, including the assessment of texture in clinical images of trabecular bone and the quantitation of tortuosity in blood vessels. He has published numerous articles in international journals and several books, and has won a variety of competitive research grants. He is on the Editorial Boards of several journals.

Dr. Dougherty holds a Postgraduate Certificate in Education, and is a Professional Engineer. He is a Senior Member of the I.E.E.E., and the Chair of the Engineering in Medicine and Biology chapter of the Ventura County section of the I.E.E.E.. He is committed to excellence in education and professional service, and is keen to promote interdisciplinary teaching and research incorporating science/engineering, biology and the medical sciences, and computer science. He is a keen photographer, and enjoys music.

**Jeanne Grier**  
**Assistant Professor of Education-Science**



Jeanne Grier is an Assistant Professor of Education at CSU Channel Islands. She received her Ph.D. in Teaching and Teacher Education with a minor in Ecology and Evolutionary Biology from the University of Arizona in 1998. She has a B.A. in Interdisciplinary Studies (Chemistry, Biology and Art)

and an M.Ed. in Curriculum and Instruction, Science Education from the University of Missouri-Columbia. As a science educator she is committed to teaching future science teachers and furthering the professional development of current teachers of science. A former high school biology teacher, Dr. Grier specializes in secondary science teacher education and has received several grants to study the effects and influences of content knowledge on the curricula of secondary biology teachers. She conducted workshops in the midwest that provided middle school and high school biology teachers an opportunity to update their content knowledge in genetics and to incorporate technology, inquiry teaching, and state standards into their curriculum. Since arriving at CSU Channel Islands, Dr. Grier has taught courses and supervised student teachers in the Multiple Subject Credential Program, authored the Single Subject Credential Program to begin in fall 2003, served on the Student Academic Policies Committee and co-chaired the General Education Committee.

**Ivona Grzegorzczuk**  
**Professor of Mathematics**

Ivona Grzegorzczuk received her Ph.D. from the University of California Berkeley in 1990 under the supervision of Professor Soshishi Kobayashi.



Dr. Grzegorzczuk's interests include the fields of Algebraic Geometry (especially vector bundles on algebraic curves), Bioinformatics and Mathematics Education (especially the connection between fine arts and mathematical reasoning). She is the author of the book *Mathematics and Fine Arts* (2000) and many research papers. She has received numerous research and educational grants.

Dr. Grzegorzczuk has worked at the University of California Berkeley, Stanford University, the Oregon State University, the University of Massachusetts, McGill University (Canada), Warsaw University (Poland), Henri Poincare Institute (France) and the University of Liverpool (England), among others. She has traveled widely and speaks several foreign languages.

**Philip Hampton**  
**Professor of Chemistry**



Philip Hampton joined CSU Channel Islands in the summer of 2001 after serving for ten years as a faculty member in the Chemistry Department at the University of New Mexico (UNM) in Albuquerque, NM. He was recognized for his outstanding teaching and service to students in 1996 with the

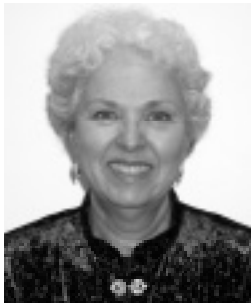
prestigious UNM Alumni Association Faculty Award. In addition to developing a Chemistry program at CSU Channel Islands, Dr. Hampton serves as the Academic Coordinator for the Liberal Studies major.

Dr. Hampton received his B.A. in Chemistry from St. Olaf College in 1984 and his Ph.D. in Organic Chemistry from Stanford University in 1989. In 1989, Dr. Hampton was awarded a California Institute of Technology Prize Postdoctoral Fellowship to perform postdoctoral research at Caltech for two years in the area of polymer/organometallic chemistry.

Dr. Hampton's research interests are in areas of inhibitor design and synthesis, sensor development, and polymer chemistry. Dr. Hampton is committed to excellence in undergraduate education and the use of learning communities and the Internet in his teaching.



**Joan M. Karp**  
**Professor of Special Education**



Joan M. Karp holds a Ph.D. in special education from the University of Connecticut, a M.S. in mental retardation from Syracuse University, and a B.S. in elementary and special education from Rhode Island College.

Prior to joining the initial faculty at CSU Channel Islands in 2001, she taught, conducted research and administered programs at Rhode Island College, University of Washington, University of California Santa Barbara, and University of Minnesota Duluth. In Minnesota she co-directed the Arrowhead Preparing Tomorrow's Teachers to Use Technology Project, a partnership with Duluth Public Schools, and Fond du Lac Ojibwe Schools. As professor of special education at University of Minnesota Duluth, she was instrumental in developing a number of innovative uses of technology with undergraduate and graduate students.

Strongly committed to diversity issues, Dr. Karp co-authored a textbook on preparing educators who have disabilities, titled *Enhancing Diversity: Educators with Disabilities*. She conducted research on the inclusion of young children with disabilities into general education, the preparation of graduate level professionals who work with young children with disabilities and their families, and the facilitation of interagency teams.

Early in her career, she taught primary and preschool children with special needs in inner-city schools in Providence, Rhode Island.

**Jacquelyn Kilpatrick**  
**Associate Professor of English**

Jacquelyn Kilpatrick received her B.A. and M.A. degrees from California State University Fresno and her Ph.D. in Literature from the University of California Santa Cruz. She has extensive experience teaching a broad range of literature, film and drama, and her major field of research is Native American Literature. Her other interests include environmental issues and cultural renewal and preservation. She comes to CSU Channel Islands from the Chicago area, where she taught English and directed the Integrative Studies program at Governors State University. She has also served as a Fulbright Senior Scholar in Spain.



**Louise Lutze-Mann**  
**Associate Professor of Biology**



Louise Lutze-Mann came to CSU Channel Islands from The University of New South Wales in Sydney, Australia, where she was a faculty member of the School of Biochemistry and Molecular Genetics for the last four years. In this time she has established/coordinated a number of courses in molecular

biology and life sciences. In recognition of her endeavors in this arena, she was recently awarded the Faculty of Life Sciences Teaching Award.

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

**Nancy Mozingo**  
**Assistant Professor of Biology**

Nancy Mozingo received her B.S. and Ph.D. in Zoology from Arizona State University. After receiving her Ph.D., she did postdoctoral research at the University of California at Davis, Carnegie Mellon University and Arizona State University and is the recipient of a Ford Foundation Postdoctoral Fellowship.



Dr. Mozingo joined the CSU Channel Islands faculty in 2002. Prior to that, she was an assistant professor of Zoology at Miami University in Ohio. She has taught courses in Cell and Developmental Biology and has obtained funding to improve the undergraduate curricula in these areas. Her research interests are in cell and developmental biology. She has conducted research on fertilization and early development in marine organisms, primarily sea urchins, and has expertise in various microscopic techniques.

Dr. Mozingo was born and raised in the Sonoran Desert and is married to Dr. Steven Norris, a fellow scientist with research interests in ichthyology. They have one young daughter and they currently share their lives with three inscrutable cats.

## Dennis D. Muraoka Professor of Economics



Dennis D. Muraoka is a native Californian and a lifelong resident of Santa Barbara where he received his primary and secondary education from the local public schools. He attended Santa Barbara City College and UC Santa Barbara, ultimately receiving his Ph.D. in economics from UCSB in 1981.

While in graduate school, Dr. Muraoka was employed by the City of Oxnard as an economic analyst. He also taught economics courses at Oxnard College, Ventura College, SBCC and UCSB.

Upon the completion of his Ph.D., Dr. Muraoka joined the faculty at CSU Long Beach. While at CSULB, Dr. Muraoka was honored by his peers with faculty awards for excellence in scholarship and teaching. He was also selected to receive the CSULB Outstanding Professor Award for excellence in teaching, scholarship and community service.

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

Dr. Muraoka's wife, Mimi, is a professor of nursing at SBCC. They, along with their one parrot, reside in Santa Barbara.

## Jack Reilly Professor of Art



Jack Reilly began studying art in France at the Paris American Academy. He received his B.F.A. and M.F.A. degrees from Florida State University in 1978. As Artist-in-Residence at Arizona Western College, he began teaching in 1980, followed by positions at Otis Institute of Art and Design in Los Angeles

(1985-1986), and California State University Northridge (1987-2001) where he developed the Video/Digital Art area of concentration. In 2001 Reilly joined the initial faculty at CSU Channel Islands to develop the Art program.

Throughout his career, Reilly's artistic explorations evolved beyond painting to include digital media, experimental video/film, and large-scale public art commissions. Articles on Reilly's work are published in periodicals including *Arts Magazine*, *Artweek*, *The Los Angeles Times*, *Los Angeles Magazine* and books including *American Art Now*, *An Introduction to Design* and *Inside the L.A. Artist*. He was the featured art expert in the *Discovery Network program*, *In Pursuit of the Shroud*. Reilly is a recipient of a National Endowment for the Arts grant and numerous awards for his painting, digital media and filmmaking. His work is featured in numerous public and private collections internationally and widely exhibited in galleries, museums, universities and film festivals throughout the world.

When not teaching or making art, Reilly – an avid surfer for more than 30 years – can usually be found surfing the breaks of Ventura County.



**Paul Rivera**  
**Assistant Professor of Economics**



Paul Rivera brings to CSU Channel Islands his expertise in Development Economics and a love of teaching. Dr. Rivera's research addresses issues as diverse as labor migration, rural and household economics, political economy and international economics. In his teaching, Dr. Rivera encourages

the integration of relevant empirical themes with economic theory in a high-energy environment.

In 1993, he received his B.A. in economics from Texas A & M University. After completing an M.A. in economics at CSU Long Beach in 1997, he went on to pursue a Ph.D. in economics at the University of Southern California. Dr. Rivera has augmented his academic training with industry experience in small business finance, marketing, management and inventory control, as well as participation in several natural resource and international business consulting projects.

Dr. Rivera speaks several languages and enjoys reading, traveling, jazz and classical guitar, playing with his daughter, Daniela, and learning about archaeology from his wife, Colleen.

**Ashish Vaidya**  
**Professor of Economics**

Ashish Vaidya joined CSU Channel Islands as Professor of Economics. He began his academic career at CSU Los Angeles in 1991 in the Department of Economics and Statistics. He was Director of the redesigned MBA program in the College of Business and Economics. Dr. Vaidya's research



interests lie in the areas of economic integration and globalization and the role of the government. He has published research articles in the area of strategic trade policy in leading economic journals, and is currently editing two volumes of the forthcoming "Encyclopedia of Globalization." Dr. Vaidya has taught a variety of courses including International Trade and Business, Economic Development, and Economics of E-Commerce. In fall 2001, Dr. Vaidya received the Excellence in Teaching Award from the College of Business and Economics at CSU Los Angeles. He is recognized in the 1996 edition of "Who's Who Among America's Teachers."

Dr. Vaidya received his B.A. in economics from St. Xavier's College in Bombay, his M.A. in economics from the University of Bombay, and his Ph.D. in economics from the University of California, Davis in 1990.

**Kevin Volkan**  
**Professor of Psychology**



Kevin Volkan comes to CSU Channel Islands from Harvard Medical School where he taught and conducted research on the assessment of professional performance among physicians and medical students. Prior to working at the medical school, Dr. Volkan did post-doctoral work at the Harvard School of

Public Health.

Dr. Volkan has been on the faculty of a number of universities, as well as serving as an administrator for the University of California and academic dean of a private college. He also worked for the Hewlett-Packard Company researching patterns of Internet use.

Dr. Volkan is a licensed psychologist who worked for the State of California and in private practice for many years. He is the author of a book on the psychology of drug addiction. He is also interested in culture-bound syndromes, the psychology of the unconscious, psychotherapy, and traditional Asian philosophy, religion, and practice.

Dr. Volkan grew up in California and is an alumnus of both the University of California and California State University systems. He lives in the foothills of the Conejo Mountains with his family, as well as various hawks, coyotes, birds and rabbits.

**Ching-Hua Wang,**  
**Professor of Immunology and Microbiology**

Ching-Hua Wang holds an M.D. degree from Beijing Medical College and a Ph.D. in immunology from Cornell University.



She became one of the initial faculty members at CSU Channel Islands after teaching in the Biology Department of CSU San Bernardino for over a decade. She has taught many lower- and upper-division and graduate level biology courses and is enthusiastic about teaching and dedicated to her students. Her teaching interests include immunology, microbiology, virology, and courses related to public health issues.

Dr. Wang's research interests are the study of mechanisms of immunological resistance to infectious diseases. She has supervised many undergraduate and graduate students in their research, published numerous articles in peer-reviewed journals, and won competitive grants.

Her personal philosophy is a blend of Confucianism and Daoism. The former helps to keep a healthy attitude toward learning and the latter helps to maintain a balanced view on life and its rewards and challenges.

**William J. Wolfe**  
**Associate Professor of Computer Science**



William J. Wolfe was born in New York City, attended city schools, and earned a Ph.D. in Mathematics, City University of New York, in 1976. His career took a sudden change when he became a commissioned officer in the United States Navy, on active duty from 1976 to 1981 (Naval Nuclear Power School,

Orlando, Florida). In 1981 he joined the Artificial Intelligence group at Martin Marietta (now Lockheed-Martin) in Denver. There, he worked on computer vision and software modeling of autonomous vehicles and manipulators for projects funded primarily by DARPA, NASA and JPL. In 1988 he accepted the position of associate professor of computer science at the University of Colorado at Denver. For the past 15 years his research focused on mathematical analysis of Neural Networks, Genetic Algorithms, and development of related software simulations. Recently, he has shifted his emphasis to online technology (e.g.: database-driven Web applications) and its impact on education.

Dr. Wolfe has been the Principal Investigator on many projects funded by industry, and has taught university courses in Software Engineering, Discrete Structures, Data Structures, Programming Languages, Automata Theory, Analysis of Algorithms, Database-Driven Web sites, Robotics, Artificial Intelligence, Computer Vision, Expert Systems, Neural Networks, Genetic Algorithms, Intelligent Agents, and Planning and Scheduling Systems.

**Mark A. Zacharias**  
**Assistant Professor of Environmental Science and Resource Management**



Mark A. Zacharias joins the CSU Channel Islands faculty as Assistant Professor in Environmental Studies and Resource Management. Prior to joining CSU Channel Islands, Dr. Zacharias was a Manager with the British Columbia provincial government involved with terrestrial and coastal land

and resource issues, as well as an Adjunct Professor at the University of Victoria. He has extensive government and industry experience with land and resource planning, resource policy, resource information systems, and coastal and marine management at a variety of spatial scales.

Dr. Zacharias' primary research areas are broadly related to coastal/marine resource management and conservation with an emphasis on developing an understanding of how regional scale oceanographic, physiographic, and biological processes affect efforts to conserve marine environments. Particular areas of interest include: the application of ecological frameworks and ecological classifications for marine conservation and management, the application and use of focal species in marine environments, methodologies to identify marine sensitive areas, species-habitat associations in terrestrial-marine interface environments, the establishment and operation of marine protected areas, and the development of oil spill response and countermeasures decision support tools.

Dr. Zacharias holds B.Sc. (1991) and M.Sc. (1993) degrees from the University of Victoria, British Columbia and a Ph.D. from the Department of Zoology, University of Guelph, Ontario.







# **Admissions and Records**

CSU

## 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 [www.csumentor.edu](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 full-time 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 [www.calstate.edu/AR/csureview](http://www.calstate.edu/AR/csureview). Information about the supplementary criteria also is sent to program applicants.

Students must file applications 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 campus-developed 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.



## APPLICATION FILING PERIODS

Terms in 2003-2004	Applications First Accepted	Initial Filing Period	Filing Period Duration
Summer Semester or Quarter 2003	February 1, 2003	February 1-28, 2003	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 admission office for current information.
Fall Semester or Quarter 2003	October 1, 2002	October 1-November 30, 2002	
Winter Quarter 2004	June 1, 2003	June 1-30, 2003	
Spring Semester or Quarter 2004	August 1, 2003	August 1-31, 2003	

### 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 Web at [www.csumentor.edu](http://www.csumentor.edu).

### 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 (see page 53) – 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 satisfy the comprehensive pattern of college preparatory 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; B, 4 points; and C, 3 points.

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT I. 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.

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

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

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 subjects, and, if applying to an impacted program, have met all supplementary criteria.

### Evaluation of Foreign Baccalaureate-Level Coursework

Evaluation of all foreign baccalaureate-level coursework must be completed by an approved International Evaluations company. A complete list of approved companies is available by contacting the CSU Channel Islands Office of Admissions and Records. The student is responsible for the completion of the official course by course evaluation prior to the submission of the undergraduate application. For information, please call (805) 437-8500.

### Provisional Admission

CSU Channel Islands may provisionally admit first-time 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. CSU Channel Islands may rescind admission decisions for students who are found not to be eligible after the final transcript has been evaluated.

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 56 transferable semester college units (fewer than 84 quarter units) are considered lower division transfer students. Student who have completed 56 or more transferable semester college units (84 or more quarter units) are considered upper division transfer students. Students who complete college units during high school or through the summer 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 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 Office of Admissions and Records to inquire about alternative admission programs.

\* CSU Channel Islands will not be admitting lower division transfer students during the 2003/2004 academic year.

## 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: they have a grade point average of at least 2.0 (C or better) in all transferable units attempted; and 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. CSU Channel Islands 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 than 56 semester or 84 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 contact:

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
<a href="http://www.collegeboard.org">www.collegeboard.org</a>	<a href="http://www.act.org">www.act.org</a>

## 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.

## 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.



## GRADUATE AND POSTBACCALAUREATE ADMISSION REQUIREMENTS

### 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 (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.

## Evaluation of Foreign Degrees

Evaluation of all foreign degrees must be completed by an approved International Evaluations company. A complete list of approved companies is available by contacting the CSU Channel Islands Office of Admissions and Records. The student is responsible for the completion of the official evaluation, indicating the equivalent to a U.S. degree, prior to the submission of the Graduate application. For more information, please call (805) 437-8500.

## 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 (Paper-Based) 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 (Computer-Based) or above. Some programs may require a higher score.

## International (Foreign) Student Admission Requirements

Listed below is general information on the admission of international students to the CSU. CSU Channel Islands is not authorized to admit international students for Fall 2003 or Spring 2004. However, we are committed to enrolling a diverse student body and intend to admit international students in future semesters.

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

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

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

## Intrasystem and Intersystem Enrollment Programs

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

There are two programs for enrollment within the CSU and one for enrollment between CSU and the University of California or California Community Colleges. Additional information about these programs is available from the Office of Admissions and Records.

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.

## 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.

## 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) 437-8828. (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 CSU.**

## **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 that 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 Enrollment Center.

Students who receive financial aid funds must consult with the 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.



CSU



# Financial Matters

CSU

## 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 Semester	Per Quarter	Per Academic Year
<b>Undergraduate</b>			
0.1 to 6.0	\$456	\$304	\$912
6.1 or more	\$786	\$524	\$1,572
<b>Graduate</b>			
0.1 to 6.0	\$504	\$336	\$1,008
6.1 or more	\$867	\$578	\$1,734

California State University, Stanislaus:

Units	Per Semester	Per Quarter	Per Academic Year
<b>Undergraduate</b>			
0.1 to 6.0	\$385	\$142	\$912
6.1 or more	\$789	\$142	\$1,734
<b>Graduate</b>			
0.1 to 6.0	\$426	\$156	\$1,008
6.1 or more	\$789	\$156	\$1,734

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 fee paid per term will be determined by the number of units taken, including those in excess of fifteen.

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 state-supported 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 non-standard 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 non-standard 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 – Students 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 and Records for further information and/or an eligibility determination.

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

The 23 campuses and the Chancellor's Office of the California State University are financed primarily through funding provided by the taxpayers of California. The 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 2002/03 state General Fund appropriation to the CSU (not including capital outlay funding in the amount of \$481,178,000) is \$2,680,280,000 and campus budgeted State University Fee Revenue is \$533,430,000 for a total of \$3,213,710,000. The \$3,213,710,000 total cost of education for CSU must provide support for a projected 321,132 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 2002/03 systemwide cost of education per full-time equivalent student is \$10,007. Of this amount, the average student fee support per FTE is \$1,926. (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 \$1,926, depending on the campus and whether student is attending part-time/full-time, or is a 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).

2002/2003	Average Cost per		
	Amount	FTE Student	%
Total Cost of Education	\$3,213,710,000	\$10,007	100.0
• State Appropriation	2,680,280,000	8,346	83
• Student Fee Support	533,430,000	1,661	17



## PROCEDURE FOR THE ESTABLISHMENT OR ABOLISHMENT OF A STUDENT BODY FEE

The law governing the California State University provides that fees defined as mandatory, such as a student body association fee and a student body center fee, may be established. A student body association fee must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). The student body fee was established at Cal State Channel Islands by a 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 campus-based 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 taken under advisement by the campus President. The President may also ask 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

### ***Bostwick Scholarship***

Awarded to deserving students as determined by the CSU Channel Islands Foundation Board of Trustees. Criteria for the scholarship are under development.

### ***Scott Family Scholarship***

Awarded to students with a minimum GPA of 3.0 from high school or community college who brings an entrepreneurial spirit to their fields of study and future professions. Individual initiative in community service, academic achievement 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.

### ***Martin V. Smith Scholarship***

Awarded to an outstanding undergraduate student who has demonstrated exceptional leadership abilities, superior academic achievement, active community service, and commendable personal behavior. The scholarship may be applied to tuition, room and board, books, a laptop computer, or related expenses. Renewable up to four years for a freshman and two years for a community college transferee.

### ***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.

### ***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.

### ***Pierre Claeysens Presidential Scholarship***

Provides full financial aid to promising undergraduate students. Criteria for the award are under development.

### ***General Scholarships***

Nominal general scholarships are available for qualified students.

Please contact the Financial Aid Office for further information on the above scholarships. Additional scholarships are available through the Ventura County Community Foundation. Please visit [www.vccf.org](http://www.vccf.org) for a list of Ventura County scholarships or contact them directly at (805) 988-0196.

CSU





# **Student Affairs**

CSU

## DIVISION OF STUDENT AFFAIRS

### MISSION

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

### OFFICE OF THE VICE PRESIDENT

**Location:** Bell Tower Building, Room 2300

(805) 437-8536

**Fax:** (805) 437-8549

The mission of the Office of the Vice President is to develop policies and procedures that will ensure a coordinated delivery system of student services through all departments within the Division of Student Affairs. This office coordinates all personnel, budget, communication, special programs, and training and development for the division. The directors of the four areas listed below report to the Vice President.

### ADMISSIONS AND RECORDS

**Location:** Enrollment Center

Professional Building, 1st Floor

(805) 437-8500

**Fax:** (805) 437-8509

The Office of Admissions and Records supports the mission and goal of the Division of Student Affairs by maintaining timely and accurate records on admissions, enrollment, and 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 in order to recruit, enroll, and retain a qualified and diversified undergraduate and graduate student body through our college fairs, visits, and presentations to local high schools, community colleges, and community organizations.

The recruitment staff is available to assist you in becoming aware of the requirements necessary to obtain admission to CSU Channel Islands. We offer the following services:

- Pre-Admissions Advising Appointments are available for students who have yet to apply to the University. Let one of our recruitment counselors guide you through general education or your planned major requirements before you even apply!

- Campus Tours are offered Monday through Friday at 11 am and 2 pm. By visiting CSU Channel Islands, you will have an opportunity to view the campus and familiarize yourself with the various resources that will assist in your university experience. For large groups, please call to schedule a date and time.
- California State University Education Presentations
- Information about CSU Channel Islands is provided to local schools and communities.

If you would like additional information regarding any of these services or would like to speak to one of our recruitment counselors, please feel free to contact us via phone at (805) 437-CSCI or toll free 1-888-44-CSUCI or via email at [prospective.student@csuci.edu](mailto:prospective.student@csuci.edu).

### Veterans Affairs

Students who are eligible for veterans, dependents, or reservists V.A. education benefits, should contact Michellyn Shonka, the campus Veterans Affairs representative, located in the Enrollment Center in the office of the Director of Admissions and Records, Room 122, or by telephone at (805) 437-8892. Services available include assistance in applying for educational benefits and education certification. Students planning to attend CSU Channel Islands should contact the Veterans Affairs Office once they have registered in order to complete certification paperwork. For additional information, please contact the V.A. representative located in the Director of Admissions and Records office.

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

**Location:** Bell Tower Building, Room 1415

(805) 437-8510

**Fax:** (805) 437-8529

**TDD:** (805) 437-8510

The Mission of the Office 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, Room 1415  
(805) 437-8510

The mission of Career Development Services is to assist students in reaching their educational, career, and employment goals. Career planning and job preparation resources available to students include:

- Computer Assisted Guidance: EUREKA and Monster.com
- One-on-One Career Counseling
- Career Library
- Resume Writing Workshops
- Interview Strategies Workshops
- Dress for Success Workshops
- Internship Opportunities
- Job Shadowing
- Student Worker Program
- Volunteer Opportunities
- Student Employment
- Graduate Leadership Opportunities
- Community Volunteer Opportunities

## Student Health Services

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

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 the Ventura County Medical Clinics by presenting a student identification card.

## 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 full 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 4 to 6 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 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 CSU.**

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, Room 1416  
(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 the University. 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.

*Services 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
- Recordings for the blind and dyslexic (limited services)
- Sign language interpreters
- Computer Aided Real-time Translation (CART)

We provide academic accommodations, such as alternative testing arrangements, based on disability-related needs under section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

## Personal Counseling Services

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

Counseling and Psychological Services provide high quality, confidential, short-term counseling free of charge to our students. Our staff is committed to helping students develop their maximum potential while pursuing their educational and personal goals.

## FINANCIAL AID OFFICE

**Location:** Enrollment Center  
Professional Building, 1st Floor  
(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). The FAFSA can be obtained in the Enrollment Center located on the first floor of the Professional Building. The FAFSA can also be completed online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). There are a variety of financial aid resources available for 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 you are enrolled at least half-time and during your 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.

**State Work-Study Program:** Students who are eligible for financial aid may apply for employment opportunities both on and off campus.

**Scholarships:** The University, in participation with the community, has an endowment that provides scholarships, which are based on academic excellence and community service (please refer to page 63).

## STUDENT DEVELOPMENT

**Location:** Bell Tower Building  
(805) 437-8998  
**Fax:** (805) 437-8549

The mission of the Office 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 through fostering a learning environment that promotes and embraces mentoring, diversity, leadership development, problem solving and decision-making. To this end we assist students in developing a well-balanced lifestyle that promotes awareness and improves the quality of life for all members of the Channel Islands campus. OSD 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, student programming board, and the student newspaper, Island View.

Student government 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 is a select group of students that 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 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 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. Orientation programs are offered to freshmen and transfer students for each semester of enrollment. These programs inform students about services and opportunities at CSUCI while assisting them with the initial advising and registration process. Transfer students are strongly encouraged to attend the New Student Orientation. Attendance for freshmen is mandatory.

### Outreach and Educational Opportunity Program (EOP)

The Outreach program introduces elementary and middle school students to the opportunities available on a college campus. Outreach programs are designed in collaboration with schools and may include school visits by CSU Channel Islands counselors, as well as CSU Channel Islands campus visits by students. Presentations vary depending on the age and abilities of students.

Part of our community outreach is the Educational Opportunity Program (EOP), an admissions and support services program designed to assist high school students who meet specific guidelines and demonstrate the potential to obtain a baccalaureate degree offered by the University. First-time freshmen and transfer students with a history of low income, who need admission assistance and support services to succeed in college, may apply to EOP. Applicants must demonstrate the academic potential and motivation to succeed in college, must be California residents, and must meet certain family income guidelines. Students who wish to apply to EOP are encouraged to apply early because the number of accepted applicants is limited.



## 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 the Office of Student Development, Student Activities provides educational and multi-cultural programs as well as leadership programs and initiatives for students. Student organizations at Channel Islands increase the vitality of the campus as well as provide leadership opportunities and community service. They provide a variety of opportunities from sports to politics. For additional information about current organizations or how to start a club, please contact Lisa LaFrenz at (805) 437-8998.

## Student Housing

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

The first phase of on-campus housing is currently in the design stage of development. Completion is anticipated for fall 2004. Please contact Toni Rice for further information at (805) 437-8962.

## The University Hub

The University HUB is located on the northwest corner of campus. The HUB is a great place to meet other students, engage in a friendly game of pool, a quiet game of chess, or just to hang out. It is equipped with a big screen TV, a game room, computers, a cozy place to read, and snack area.



CSU





# **General Education Requirements**

CSU

## 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 our society.

General Education courses are intended:

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

### 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 (12 units)

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 be 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 in-class 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
ENGL	107	Advanced Composition and 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

MATH	230	Logic and Mathematical Reasoning
UNIV	101	Critical Thinking and the University

### 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/BIOL	343	Forensic Science
CHEM/BUS/ECON	341	Drug Discovery and Development
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	105	Introduction to the Solar System
PHYS	200/L	General Physics I
PHYS	201/L	General Physics II
PHYS/MATH/COMP	345	Digital Image Processing
PHYS/BIOL/HLTH	434	Introduction to Biomedical Imaging
PHYS/COMP/MATH	445	Image Analysis and Pattern 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/CHEM/MATH	430	Research Design and Data Analysis
BIOL	431	Bioinformatics
BIOL	432	Principles of Epidemiology and Environmental Health
BIOL	433	Ecology and the Environment
CHEM/BIOL	343	Forensic Science
ESRM	100	Introduction to Environmental Science and Resource Management
PSY	220	Human Sexual Behavior

**B-3 Mathematics - Mathematics and Applications**

BIOL/MATH/PSY	202	Biostatistics
BIOL/CHEM/MATH	430	Research Design and Data Analysis
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 Problem-Solving
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	448	Scientific Computing

**B-4 Computers and Information Technology**

BIOL	431	Bioinformatics
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/COMP	345	Digital Image Processing
PHYS/COMP/MATH	445	Image Analysis and Pattern 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	102	Multicultural Children's Art
ART	110	Prehistoric Art to the Middle Ages
ART	111	Renaissance Art to Modern
ART	112	Art of the Eastern World
ART	330	Critical Thinking in a Visual World
ART	331	Art and Mass Media
ART	332	Multicultural Art Movements
ART	337	Art on Film and Film as Art
ART	433	Women in the Arts
ART/BUS	334	The Business of Art
ART/BUS/EDUC	434	The Museum: Culture, Business and Education
ART/ENGL	431	European Renaissance Literature and Art
ART/ENGL/MUS	432	Arts of the Harlem Renaissance
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
MUS	100	Music Appreciation
MUS	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**

ART/ENGL/ HIST	335	Ethnic Images in Novels, Film and Art
ART/ENGL	431	European Renaissance Literature and Art
ART/ENGL/ MUS	432	Arts of the Harlem Renaissance
ENGL	120	American Literature
ENGL	150	British and European Literature I
ENGL	220	American Literature II
ENGL	250	British and European Literature II
ENGL	337	Literature of the Environment
ENGL	449	Perspectives on Multicultural Literature
ENGL/BUS/ ECON	340	Business and Money in American Literature
ENGL/GEND	433	Gay/Lesbian/Bisexual/Transgender Studies
ENGL/HIST	334	Narratives of Southern California
ENGL/PHYS	338	Science and Conscience
ENGL/PSY	339	Psychology and Literature
ENGL/TH	333	Multicultural Drama in Performance/Production

**C-3a Language**

ASL	101	American Sign Language I
ASL	102	American Sign Language II
SPAN	101	Elementary Spanish I
SPAN	102	Elementary Spanish II
SPAN	201	Intermediate Spanish I
SPAN	202	Intermediate Spanish II
SPAN	211	Spanish for Heritage Speakers I
SPAN	212	Spanish for Heritage Speakers II

**C-3b Multicultural**

ART/ENGL/ HIST	335	Ethnic Images in Novels, Film and Art
ANTH	102	Cultural Anthropology
ANTH	323	Native Americans of California to the 1850's
ART	102	Multicultural Children's Art
ART	112	Art of the Eastern World
ART	332	Multicultural Art Movements
ART/HIST	333	History of Southern California Chicano/a Art
ENGL	449	Perspectives on Multicultural Literature
ENGL/TH	333	Multicultural Drama in Performance/Production
MUS	330	Jazz in America
PSY	344	Psychology and Traditional Asian Thought
SPAN	201	Intermediate Spanish I
SPAN	202	Intermediate Spanish II
SPAN	211	Spanish for Heritage Speakers I
SPAN	212	Spanish for Heritage Speakers II
UNIV	392	International Experience

**Category D: Social Perspectives (12 units)**

The courses in this category enhance student knowledge of the complex cultural and institutional world in which we 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 the social, political, historical, economic, educational or behavioral aspects of world cultures and systems, including the ways in which these interact and influence each other.

**Students must select a minimum of three courses (12 units), each course in a different social science discipline.**

ANTH	102	Cultural Anthropology
ANTH	103	Human Beginnings: Biological and Cultural Evolution
ANTH	310	Civilization of an Ancient Landscape: World Archaeology
ANTH	323	Native Americans of California to the 1850's
ANTH	443	Medical Anthropology: Cross-Cultural Perspectives on Health and Healing
ANTH/ESRM	332	Human Ecology
ART	331	Art and Mass Media
ART	337	Art on Film and Film as Art
ART	433	Women in the Arts
ART/BUS	334	The Business of Art
ART/BUS/ EDUC	434	The Museum: Culture, Business and Education
ART/HIST	333	History of Southern California Chicano/a Art
ART/MUS	336	Art and Music: Dissonance, Diversity and Continuity
BIOL	331	Biotechnology in the Twenty-First Century
BIOL	332	Cancer and Society
BIOL	432	Principles of Epidemiology and Environmental Health
BUS	424	Business, Government and Society
BUS/HIST/ ECON	349	History of Business and Economics in North America
CHEM/BUS/ ECON	341	Drug Discovery and Development
COMP	447	Societal Issues in Computing
ECON	110	Principles of Microeconomics
ECON	111	Principles of Macroeconomics
ECON	300	Fundamentals of Economics
ECON/FIN	343	Capital Theory
EDUC	101	Introduction to Education
EDUC	320	Education in Modern Society
ENGL	337	Literature of the Environment
ENGL/BUS/ ECON	340	Business and Money in American Literature
ENGL/GEND	433	Gay/Lesbian/Bisexual/Transgender Studies
ENGL/HIST	334	Narratives of Southern California
ENGL/PSY	339	Psychology and Literature
ESRM	100	Introduction to Environmental 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/CHEM	346	Scientific and Professional Ethics
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 Science
BIOL	213	Sex, Germs and Diseases
BIOL	333	Emerging Public Health Issues
COMP/PSY	449	Human-Computer Interaction
HLTH	322	Health Issues in Education
PHED	102	Seminar in Traditional Martial Arts: Tai Ji
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/HLTH	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 Division Interdisciplinary General Education Courses

Courses in the following list meet the upper division general education requirement and may also be counted toward the designated General Education category. If a course is designated in more than one GE category the student must choose which GE category the course is fulfilling.

ART/ENGL/ HIST	335	Ethnic Images in Novels, Film and Art
ANTH	345	Human Evolution and Diversity
ANTH	443	Medical Anthropology: Cross-Cultural Perspectives on Health and Healing
ANTH/ESRM	332	Human Ecology
ART	330	Critical Thinking in a Visual World
ART	331	Art and Mass Media
ART	332	Multicultural Art Movements
ART	337	Art on Film and Film as Art
ART	433	Women in the Arts
ART/BUS	334	The Business of Art
ART/BUS/ EDUC	434	The Museum: Culture, Business and Education
ART/ENGL	431	European Renaissance Literature and Art
ART/ENGL/ MUS	432	Arts of the Harlem Renaissance
ART/HIST	333	History of Southern California Chicano/a Art
ART/MUS	336	Art and Music: Dissonance, Diversity and Continuity
ART/PSY	338	Psychology of Art and Artists
BIOL	331	Biotechnology in the Twenty-First Century
BIOL	332	Cancer and Society
BIOL	333	Emerging Public Health Issues
BIOL/CHEM/ MATH	430	Research Design and Data Analysis
BIOL	431	Bioinformatics
BIOL	432	Principles of Epidemiology and Environmental Health
BIOL	433	Ecology and the Environment
BUS/HIST/ ECON	349	History of Business and Economics in North America
CHEM/BIOL	343	Forensic Science
CHEM/BUS/ ECON	341	Drug Discovery and Development
CHEM/PHYS	344	Energy and Society
COMP	447	Societal Issues in Computing
COMP/PSY	449	Human-Computer Interaction
ECON/FIN	343	Capital Theory
ENGL	330	Writing in the Disciplines
ENGL	337	Literature of the Environment
ENGL	449	Perspectives on Multicultural Literature
ENGL/BUS/ ECON	340	Business and Money in American Literature
ENGL/GEND	433	Gay/Lesbian/Bisexual/Transgender Studies
ENGL/HIST	334	Narratives of Southern California
ENGL/PHYS	338	Science and Conscience

ENGL/PSY	339	Psychology and Literature
ENGL/TH	333	Multicultural Drama in Performance/Production
HIST/ANTH	442	The African Diaspora
MATH	331	History of Mathematics
MATH	448	Scientific Computing
MGT/BIOL/ CHEM	346	Scientific and Professional Ethics
MUS	330	Jazz in America
MUS	333	The Varieties of Musical Experience
MUS	343	Teaching Music to Children
PHYS/MATH/345 COMP		Digital Image Processing
PHYS/BIOL/ HLTH	434	Introduction to Biomedical Imaging
PHYS/COMP/445 MATH		Image Analysis and Pattern Recognition
PHYS/MUS	335	The Physics of Music
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	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







# **Graduation Requirements**

CSU

# Graduation Requirements

## BACCALAUREATE DEGREE REQUIREMENTS

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

### Total Units

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

### Upper Division Units

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

### Major

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

### General Education

All students must complete General Education requirements. General Education requirements can be found in this section of the catalog. A minimum of nine units 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 units must be upper division, and 12 of the 30 must be in the major. At least 9 units of upper-division interdisciplinary General Education courses of the required 48 General Education units must be taken in residence at CSU Channel Islands.

## Grade Point Average (GPA)

An overall GPA of 2.0 is required for:

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

## U.S. History, State and Local Government Requirements

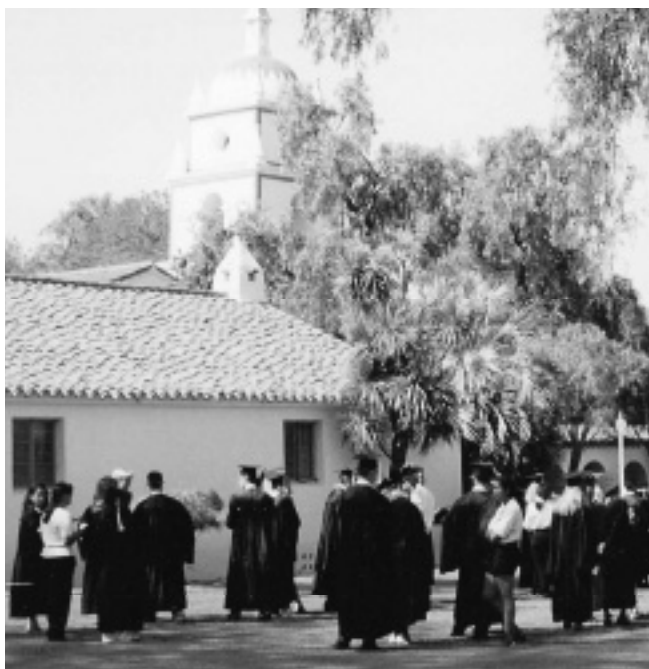
Demonstrated competencies in U.S. History, U.S. Constitution, and California and local government are required for graduation.

## Language and Multicultural Requirements

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

## Graduation Requirement in Writing Proficiency

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.



## 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 entitle 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. 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 major graduation evaluation and graduation progress worksheet** 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 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 fees for graduation application. This \$45 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, 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 the Office of 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.





# **Majors, Minors and Credentials**

CSU

## 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.

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## REQUIREMENTS FOR THE MINOR IN APPLIED PHYSICS

### Lower Division Requirements (12 units):

MATH 150     Calculus I (4)  
PHYS 200     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 (3)  
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     Topics in Physics (3)  
PHYS 492     Internship (3)  
PHYS 494     Independent Research (3)  
PHYS 497     Directed Studies (3)  
PHYS 499     Senior Colloquium (1)





## ART

### PROGRAMS OFFERED

- Bachelor of Arts Degree in Art
  - Option in Studio Art
  - Option in Art History
- Minor in Art

The 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 two-dimensional 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.

**CAREERS:** The Art Major also serves to prepare students for graduate study as well as careers in professional and academic fields in the Arts. Positions in the visual arts include the areas of painting, sculpture, graphic design, Web design, multimedia, computer graphics, digital imaging, digital film and video art, computer animation, visual effects, galleries, museums, teaching and numerous other professions in the arts.

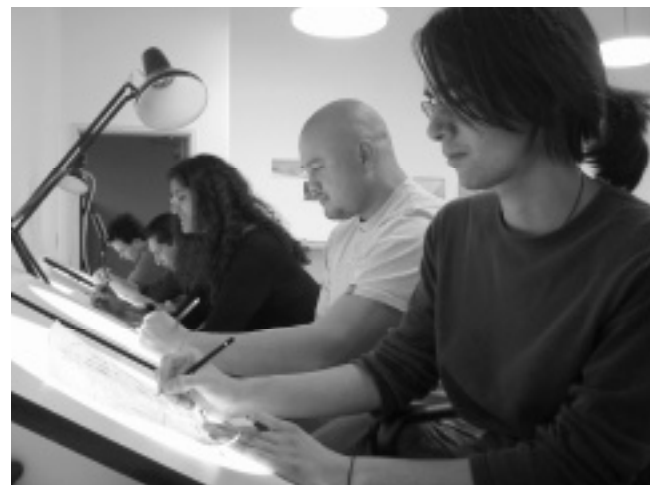
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### FACULTY

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## REQUIREMENTS 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 a minimum of two courses from the following:**

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

### Studio Electives (6 units):

In selecting lower division studio elective courses, 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	Painting (3)
ART 202	Sculpture (3)
ART 203	Illustration (3)
ART 204	Graphic Design (3)
ART 205	Multimedia (3)
ART 206	Animation (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. In upper division studio art courses, all art majors, either studio art option or art history option, are required to take a minimum of 2 courses from the 310-314 list. These are prerequisites for specific 320-326 courses, which are also prerequisites for 420-423 courses.

## REQUIREMENTS FOR THE OPTION IN STUDIO ART:

Upper Division Studio Art Courses (18 units)  
Upper Division Art History and Interdisciplinary Art Courses (6 units)  
Professional Preparation Courses (7-9 units)

## REQUIREMENTS FOR THE OPTION IN ART HISTORY:

Upper Division Art History and Interdisciplinary Art Courses (18 units)

Upper Division Studio Art Courses (6 units)

Professional Preparation Courses (7-9 units)

### Studio Art Courses:

Students are encouraged to pursue an interdisciplinary approach in the exploration of media and artistic processes by integrating traditional methods of art production with digital technologies. Assignments incorporate projects that lead toward development of artistic skills and computer literacy.

**Select a minimum of two courses from the following:**

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. Assignments focus on the development of artistic concepts, visual continuity and increased competency with media and applied techniques that result in the creation of individual art projects. (3 units, repeatable one time for additional credit).

ART 320	Two-Dimensional Art: Painting Theory and Process (3-3)
ART 321	Three-Dimensional Art: Sculpture Theory and Process (3-3)
ART 322	Digital Media Art: Time-Based Graphics and Visual Effects (3-3)
ART 323	Communication Design Technology: Packaging and Multimedia (3-3)
ART 324	Communication Design Technology: Web Design (3-3)
ART 325	Digital Media Art: Digital Filmmaking (3-3)
ART 326	Digital Media Art: 3D Computer Animation (3-3)

Advanced artistic problems courses provide the opportunity for in-depth investigations into selected media. Continued explorations integrate media, theory and technology leading students to the development of a congruent body of work. Creation and presentation of a professional portfolio is a required component of the coursework. (3 units, repeatable one time for additional credit).

ART 420	Advanced Artistic Problems: Two-Dimensional Art (3-3)
ART 421	Advanced Artistic Problems: Three-Dimensional Art (3-3)
ART 422	Advanced Artistic Problems: Digital Media Art (3-3)
ART 423	Advanced Artistic Problems: Communication Design Technology (3-3)

## Art History and Interdisciplinary Art Courses:

Upper division Art History and 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 counted toward Art major requirements). There are no prerequisites for Art History courses 330-450.

**Select a minimum of two courses from the following:**

ART 330	Critical Thinking in a Visual World (3)
ART 331	Art and Mass Media (3)
ART 332	Multicultural Art Movements (3)
ART 333	History of Southern California Chicano/a 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 as Art (3)
ART 338	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 450	Modern and Contemporary Art (3)

### Professional Preparation Courses:

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 492	Internship in the Arts (1-3)
ART 499	Arts Capstone Project (3)

### Required Supporting and other GE Courses (63 Units):

University Electives (9 units)

Title V, American Institution Requirement (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 Painting (3)
- ART 202 Sculpture (3)
- ART 203 Illustration (3)
- ART 204 Graphic Design (3)
- ART 205 Multimedia (3)
- ART 206 Animation (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)

### Art History and Interdisciplinary Art Courses (6 units):

#### Select a minimum of two courses from the following:

- ART 330 Critical Thinking in a Visual World (3)
- ART 331 Art and Mass Media (3)
- ART 332 Multicultural Art Movements (3)
- ART 333 History of Southern California Chicano/a 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 as Art (3)
- ART 338 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 450 Modern and Contemporary Art (3)



## 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 Asian-Pacific 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 ASIAN-PACIFIC 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	History of the Pacific Islands (3)
HIST 391	Traditional China (3)
HIST 392	Modern China (3)
HIST 393	Contemporary China (3)
HIST 394	Traditional Japan (3)
HIST 395	Modern Japan (3)
HIST 396	East Asia: Then and Now (3)
PHED 102	Traditional Asian Martial Arts: Tai Ji (repeatable) (1)
PSY 344	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
- Minor in Biology
- Certificate in Biotechnology

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 upper-division 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 in Biology with an Emphasis in Cell and Molecular Biology also 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 Certificate in Biotechnology will provide 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)

(For pre-professional and general biology students)

#### 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. Chemistry
  - CHEM 121 General Chemistry I (4)
  - CHEM 122 General Chemistry II (4)
4. Physics
  - 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 (33 units):

1. Biology
  - BIOL 300 Cell Physiology (4)
  - BIOL 302 Genetics and Evolution (4)
  - BIOL 400 Molecular Biology and Molecular Genetics (4)
  - BIOL 433\* Ecology and the Environment (4)
2. Organic Chemistry
  - CHEM 311 and 312 Organic Chemistry I (4)
  - CHEM 314 and 315 Organic Chemistry II (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. Ethics

#### **Select one of the following:**

- BIOL 346\* Scientific and Professional Ethics (3)
- PHYS/ENGL 338\* Science and Conscience (3)

### 4. Computing in Biology

#### **Select one of the following courses:**

- BIOL 410 Computer Applications in Biomedical Fields (3)
- BIOL 430\* Research Design and Data Analysis (3)
- BIOL 431\* Bioinformatics (4)

### 5. Service Learning

#### **A minimum of 2 units taken from the following:**

- BIOL 494 Independent Research (1-3)
- BIOL 497 Directed Study (1-3)

### 6. Capstone

- BIOL 499 Senior Capstone Colloquium (1)

\* Courses with an \* are double-counted toward upper-division GE credits.

## Electives in Biology (14 units):

A minimum of 14 units chosen from 300 to 400 level upper division biology courses, with at least one lab-based course and no more than two courses that could be taken at 300 level (no courses from BIOL 331 to 343 would be counted toward the major). CHEM 318 or CHEM 400 could also be taken to satisfy the electives.

## Electives in Any Discipline (6 units)

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

- ENGL 330 Writing in the Disciplines (3)
- American Institutions Requirement (6)
- Other GE Courses in Categories A-E (27)

## 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. Chemistry
  - CHEM 121 General Chemistry I (4)
  - CHEM 122 General Chemistry II (4)
4. Physics
  - 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 (41-42 units):

1. Biology
  - BIOL 300 Cell Physiology (4)
  - BIOL 301 Microbiology (4)
  - BIOL 302 Genetics and Evolution (4)
  - BIOL 400 Molecular Biology and Molecular Genetics (4)
  - BIOL 401 Biotechnology and Recombinant DNA Techniques (5)
  - BIOL 433\* Ecology and the Environment (4)
2. Organic Chemistry and Biochemistry
  - Select either Group A or Group B courses:**
  - Group A**
    - CHEM 311 Organic Chemistry I (3)
    - CHEM 312 Organic Chemistry I Laboratory (1)
    - CHEM 318 Biological Chemistry (3)
  - Group B**
    - (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. Ethics

**Select one of the following:**

- BIOL 346\* Scientific and Professional Ethics (3)  
PHYS/ENGL 338\* Science and Conscience (3)

4. Computing in Biology

**Select one of the following:**

- BIOL 430\* Research Design and Data Analysis (3)  
BIOL 431\* Bioinformatics (4)

5. Service Learning

**A minimum of 2 units taken from the following:**

- BIOL 492 Internship (2-3)  
BIOL 494 Independent Research (1-3)  
BIOL 497 Directed Study (1-3)

6. Capstone

- BIOL 499 Senior Capstone Colloquium (1)

\* Courses with an \* are double-counted toward upper-division GE credits.

**Electives in Biology (8-9 units):**

A minimum of 8-9 units chosen from 400 level courses, excluding BIOL 410.

**Electives in Any Discipline (6 units)**

**Required Supporting and Other GE Courses (33 units):**

- ENGL 330 Writing in the Disciplines (3)  
American Institutions Requirement (6)  
Other GE Courses in Categories A-E (24)



**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. Chemistry

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

4. Physics

**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 (41 units):**

1. Biology

- BIOL 300 Cell Physiology (4)  
BIOL 301 Microbiology (4)  
BIOL 400 Molecular Biology and Molecular Genetics (4)

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. Ethics

**Select one of the following:**

- BIOL 346\* 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 (3)  
BIOL/PHYS 464 Biomedical Instrumentation (4)

5. Computing in Medical Imaging

- BIOL 410 Computer Applications in Biomedical Fields (3)  
BIOL 430\* Research Design and Data Analysis (3)

#### 6. Service Learning

**A minimum of 2 units taken from the following:**

- PHYS 492 Physics Internship (3)
- BIOL 494 Independent Research (1-3)
- PHYS 494 Independent Research (3)
- BIOL 497 Directed Study (1-3)
- PHYS 497 Directed Study (3)

#### 7. Capstone

- BIOL/PHYS 499 Senior Capstone Colloquium (1)

\* Courses with an \* are double-counted toward upper-division GE credits.

#### **Electives in Biology and Physics (10 units):**

10 units chosen from upper-division courses in Biology and/or Physics.

#### **Required Supporting and Other GE Courses (33 units):**

- ENGL 330 Writing in the Disciplines (3)
- American Institutions Requirement (6)
- Other GE Courses in Categories A-E (24)

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

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 impact 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.

#### **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 Physiology (4)
  - BIOL 302 Genetics and Evolution (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 331-333, 343, 410 and 430.

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

(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 CHEM 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.
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.

Note: This program had not received final approval at the time this catalog went to press. Please visit our Web site at [www.csuci.edu](http://www.csuci.edu) for confirmation of its approval.



## BUSINESS

### PROGRAMS OFFERED

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

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.

**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 105	Composition and Rhetoric I (3)
	Or
ENGL 103	Stretch Composition II (3)
MATH 140	Calculus for Business and Economics (3)
	Or
MATH 150	Calculus (4)

### Upper Division Requirements (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 and Banking (3)
ENGL 483	Technical Visual Communication (3)
FIN 300	Business Finance (3)
MATH 329	Statistics for Business and Economics (3)
MGT 307	Management of Organizations (3)
MGT 346	Scientific and Professional Ethics (3)
MKT 310	Principles of Marketing (3)

### Upper Division Interdisciplinary Major Courses (6 Units):

BUS 334	The Business of Art (Art)
BUS 340	Business and Money in American Literature (ENGL)
BUS 341	Drug Discovery and Development (CHEM) (3)
BUS 349	History of Business and Economics in North America (HIST) (3)
BUS 434	The Museum: Culture, Business and Education (ART)
ECON 343	Capital Theory (FIN) (3)

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

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

## REQUIREMENTS FOR THE OPTION IN BUSINESS ECONOMICS (15-16 units)

Business Economics requires a minimum of 15 upper division units in economics from the following courses:

ECON 310*	Intermediate Microeconomics (3)
ECON 311*	Intermediate Macroeconomics (3)
ECON 320*	Money and Banking (3)
ECON 329*	Managerial Economics (3)
ECON 340	Business and Money in American Literature (3) (ENGL)
ECON 341	Drug Discovery and Development (3) (also BUS 341 and CHEM 341)
ECON 349	History of Business and Economics in North America (3) (BUS 349 and HIST 349)
ECON 343	Capital Theory (3) (also FIN 343)
ECON 370**	The World Economy (3)
ECON 471**	International Trade (3)
ECON 472**	International Macroeconomics (3)
ECON 488	Applied Managerial Econometrics (4)

\* These courses may be taken to meet the requirements of the option in business economics if they have not been taken to meet the upper division requirements for the Bachelor of Science in Business.

## REQUIREMENTS FOR THE OPTION IN MANAGEMENT (15 units)

Management Option requires 15 units from the following courses:

### All four of the following courses:

MGT 310	Management of International Businesses (3)
MGT 325	Entrepreneurial Management (3)
BUS 420	Cases in Strategy (3)
BUS 424	Business, Government and Society (3)

### One of the following courses:

MGT 421	Human Resource Management (3)
MGT 426	Management of Healthcare Organizations (3)

Note: This program had not received final approval at the time this catalog went to press. Please visit our Web site at [www.csuci.edu](http://www.csuci.edu) for confirmation of its approval.

## 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)
	Or
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	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 346	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 (24-28 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 en lieu of ECON 110 and 111, an additional course must be taken from the list of upper division electives below:

- MATH 140 Calculus for Business and Economics (3)  
OR  
MATH 150 Calculus I (4)

### Upper Division Requirements (6 units):

- ECON 110 Intermediate Microeconomics (3)  
OR  
ECON 329 Managerial Economics (3)  
ECON 311 Intermediate Macroeconomics (3)  
OR  
ECON 320 Money and Banking (3)

### Electives (8-12 units):

Additional upper divisions course in economics. (Totals units for the minor must add up to at least 24).



## 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, pre-pharmacy), 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.

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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 upper-division CHEM prefix courses, but excluding upper-division 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.

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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	The Chicano/a Child (3)
ART/HIST 333	History of Southern California Chicano/a Art (3)
BUS/ECON/HIST 349	History of Business and Economics in North America (3)
HIST 350	Chicano/a History and Culture (3) Title V
HIST 402	Southern California History and Culture (3)
HIST 421	Revolutionary Mexico, 1876-1930 (3)
Or	

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 cutting-edge 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.

### CONTACT INFORMATION

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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 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)

MATH 150	Calculus I (4)
MATH 151	Calculus II (4)
PHIL 230	Logic (3)
COMP 150	Object Oriented Programming (4)
COMP 151	Data Structures and Program Design (4)
COMP 162	Computer Architecture and Assembly Language (3)
MATH 240	Linear Algebra (3)
COMP 232	Programming Languages (3)
COMP 262	Computer Organization and Architecture (3)

### Upper Division Requirements (28 units):

MATH 300	Discrete Mathematics (3)
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)
COMP 447	Societal Issues in Computing (3, G.E. D)
MATH 448	Scientific Computing (3)
COMP 499	Senior Colloquium (1)
COMP 464	Computer Graphics I (3)
	Or
COMP 420	Database Theory and Design (3)

### Electives (12-13 units):

COMP 422	Design of Compilers (3)
COMP 432	Computational Bioinformatics (4)
COMP 464	Computer Graphics I (3)
COMP 466	Computer Graphics II (3)
COMP 469	Artificial Intelligence/Neural Nets (3)
MATH 429	Operation Research (3)
ENGL 482	Technical Writing (3)
COMP 449	Human Comp. Interaction (3)
COMP 424	Computer System Security (3)
COMP 429	Computer Networks (3)
COMP 462	Advanced Object Oriented Programming (3)
COMP 492	Internship (3)
COMP 494	Independent Research (3)
COMP 497	Directed Study (3)
COMP 499	Senior Colloquium (1)
COMP/PHYS 345	Digital Image Processing (3)
COMP/PHYS 445	Image Analysis and Pattern Recognition (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:

- MGT 346 Scientific and Professional Ethics (3)  
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 422 Design of Compilers (3)  
COMP 432 Computational Bioinformatics (4)  
COMP 466 Computer Graphics II (3)  
COMP 469 Artificial Intelligence/Neural Nets (3)  
MATH 429 Operation Research (3)  
ENGL 482 Technical Writing (3)  
COMP 449 Human Comp. Interaction (3, G.E. E)  
COMP 424 Computer System Security (3)  
COMP 429 Computer Networks (3)  
COMP 462 Advanced Object Oriented Programming (3)  
COMP 492 Internship (3)  
COMP 494 Independent Research (3)  
COMP 497 Directed Study (3)  
COMP 499 Senior Colloquium (1)  
COMP/PHYS 345 Digital Image Processing (3)  
COMP/PHYS 445 Image Analysis and Pattern  
Recognition (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. B4)  
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 Included in Major Requirements (18)  
General Education and Title V (34)

### 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

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 21st 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 service-driven economy. The power of educators to make the fundamental difference in students' lives makes education the most important social service.

The Teacher Education Program builds from the foundation of the undergraduate Liberal Studies option in Teaching and Learning (subject matter program). Our Education Programs contribute to the teaching profession by producing teachers 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.

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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 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 self-contained 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.** Application 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 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 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. Students who have not completed a state-approved subject matter program 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 (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 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 Cal State 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 (B) or better, with no course grades lower than a C+.

## REQUIREMENTS FOR THE MULTIPLE SUBJECT TEACHING CREDENTIAL

### FULL-TIME MULTIPLE SUBJECT CREDENTIAL PROGRAM (36 units)

#### Summer, Winter or Spring:

EDUC 520	Observing and Guiding Behavior in Multilingual/Multicultural and Inclusive Classrooms (3)
EDUC 521	Field Experience (1)

#### 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 (5)
EDMS 566	Initial Student Teaching Seminar (1)

#### Second Semester:

EDMS 523	Literacy 2: Multicultural/Multilingual (4)
EDMS 529	Science, Health and PE (4)
EDMS 575	Advanced Student Teaching (9)
EDMS 576	Advanced Student Teaching Seminar (1)

### PART-TIME MULTIPLE SUBJECT CREDENTIAL PROGRAM (36 units)

#### Summer, Winter or Spring:

EDUC 520	Observing and Guiding Behavior in Multilingual/Multicultural and Inclusive Classrooms (3)
EDUC 521	Field Experience (1)

#### 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 (5)
EDMS 566	Initial Student Teaching Seminar

#### Fourth Semester:

EDMS 575	Advanced Student Teaching (9)
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.** Application to both the University and the Education Program area. 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 state-approved 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 Schooling (3)
  - SPED 345 Individuals with Disabilities in Society (3)
  - EDUC 520 Observing and Guiding Behavior in Multicultural/Multilingual and Inclusive 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 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.
- 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 Education Program 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 7-12 classroom or an equivalent documented field experience must be completed.
- 12. 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 a Teaching Credential 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: 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 (B) or better, with no course grades lower than a 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) (2)
EDSS 571	Student Teaching Seminar Middle School (1)
EDSS 575	Student Teaching Middle School (6)
EDSS 580	Field Experience High School (Part-Time Program) (2)
EDSS 581	Student Teaching Seminar High School (1)
EDSS 585	Student Teaching High School (6)

### **Students take two courses from one of the following 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)



## PROPOSED COURSES OF STUDY FOR FULL OR PART-TIME PROGRAMS

### FULL TIME SINGLE SUBJECT MATHEMATICS PROGRAM (30 units)

#### First Semester: 16 units

EDSS 530	General Secondary School Methods (3)
EDSS 540	Literacy in Secondary Schools (3)
EDSS 531	Teaching Mathematics in Middle Schools (3)
EDSS 575	Student Teaching Middle School (6)
EDSS 571	Student Teaching Seminar (1)

#### Second Semester: 14 units

EDSS 550	Access to Learning: English Language Learners (2)
EDSS 560	Access to Learning: Special Needs Learners (2)
EDSS 541	Teaching Mathematics in Secondary Schools (3)
EDSS 585	Student Teaching High School (6)
EDSS 581	Student Teaching Seminar (1)

### FULLTIME SINGLE SUBJECT SCIENCE PROGRAM (30 units)

#### First Semester: 16 units

EDSS 530	General Secondary School Methods (3)
EDSS 540	Literacy in Secondary Schools (3)
EDSS 532	Teaching Science in Middle Schools (3)
EDSS 575	Student Teaching Middle School (6)
EDSS 571	Student Teaching Seminar (1)

#### Second Semester: 14 units

EDSS 550	Access to Learning: English Language Learners (2)
EDSS 560	Access to Learning: Special Needs 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 (1)

### FULLTIME SINGLE SUBJECT ENGLISH PROGRAM (30 units)

#### First Semester: 16 units

EDSS 530	General Secondary School Methods (3)
EDSS 540	Literacy in Secondary Schools (3)
EDSS 533	Teaching Writing in Secondary Schools (3)
EDSS 575	Student Teaching Middle School (6)
EDSS 571	Student Teaching Seminar (1)

#### Second Semester: 14 units

EDSS 550	Access to Learning: English Language Learners (2)
EDSS 560	Access to Learning: Special Needs Learners (2)
EDSS 543	Teaching Language Skills in Secondary Schools (3)
EDSS 585	Student Teaching High School (6)
EDSS 581	Student Teaching Seminar (1)

## 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 540	Literacy in Secondary Schools (3)
EDSS 570	Field Experience Middle School (Part-time) (1)

#### Fourth Semester:

EDSS 531,	English, Math, or Science Content
532,	Methods Course (3)
or 533	
EDSS 570	Field Experience Middle School (Part-time) (1)
EDSS 550	Access to Learning: English Language Learners (2)

#### Fifth Semester:

EDSS 541,	English, Math or Science Content
542,	Methods Course (3)
or 543	
EDSS 580	Field Experience High School (Part-time) (1)
EDSS 560	Access to Learning: Special Needs (2)

#### Sixth Semester:

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

Note: This program has not received final approval at the time the catalog went to press. Please visit our Web site at [www.csuci.edu](http://www.csuci.edu) for confirmation of its approval.



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

The program prepares candidates to teach students 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-22 year old 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.

**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 age 22.

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

- 1. Application.** Application 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 in 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-subject 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 Cal State 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 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 Cal State 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.

## 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 Cal State 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-12 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.

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 (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)**

**First Semester:**

- EDMS 522\* Literacy I: Multicultural/Multilingual (3)
- EDMS 526\* Modern methods in mathematics teaching (3)
- EDSS 540\*\* Literacy in Secondary Schools (3)
- SPED 541 Foundations of special education (3)
- SPED 543 Educating Diverse learners with mild to moderate disabilities (3)
- SPED 570\*\*\* Field Experience in general education (3)

**Second Semester:**

- SPED 542 Managing learning environments (3)
- SPED 545 Assessment of students with disabilities (3)
- SPED 546 Consultation and communication with families and professionals (3)
- SPED 580\*\*\*\* 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

\*\*\* Individuals holding a valid teaching credential will complete field experience with a resource teacher in a grade level different from the grade level of teaching credential.

\*\*\*\* Students must demonstrate competence teaching students in elementary and secondary settings. This may occur through field experience, student teaching and prior teaching experiences.

**PART-TIME EDUCATION SPECIALIST CREDENTIAL PROGRAM (35 units)**

**Semester one:** (See #4 in Requirements for Admission to the Education Specialist Teaching Credential Program)  
Prerequisite courses (6)

**Semester two:**

Prerequisite courses (6)

**Semester three:**

- EDMS 522\* Literacy I Multicultural/Multilingual (3)
- EDMS 526\* Modern methods in mathematics teaching (3)

**Semester four:**

- EDSS 540\*\* Literacy in Secondary Schools (3)
- SPED 541 Foundations of special education (3)

**Semester five:**

- SPED 542 Managing learning environments (3)
- SPED 543 Educating diverse learners with mild to moderate disabilities (3)

**Semester six:**

- SPED 570\*\*\* Field Experience in general education (3)
- SPED 545 Assessment of students with disabilities (3)

**Semester seven:**

- SPED 546 Consultation and communication with families and professionals (3)
- SPED 580\*\*\*\* Student teaching in special education (8)

Note: This program has not received final approval at the time this catalog went to press. Please visit our Web site at [www.csuci.edu](http://www.csuci.edu) for confirmation of its approval.



## ENGLISH: LITERATURE AND WRITING

### PROGRAMS OFFERED

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

The major in English 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.

Coursework in the 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 or Multicultural Literature, 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, and Journalism. English majors, trained in logical thinking, interpretative reading, and effective writing also do very well on the LSAT exams for Law school. 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, speechwriter, advertising copywriter, 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, 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):

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 Novel, 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 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 482 Technical Writing (3)

ENGL 483 Technical Visual Communication (3)

ENGL 484 Technical Writing for the Sciences (3)

### REQUIREMENTS FOR AN 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)

And

ENGL 465 Creative Writing Project (3)

### REQUIREMENTS FOR AN 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, non-fiction, 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)

And

ENGL 454 Multicultural Literature Project/Seminar (3)

### Required Supporting and Other GE Courses (69 units):

Electives (15)

American Institutions Requirement (6)

General Education (48)



## 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)
ENGL 456	Fiction by Women Authors (3)

## 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 Special Topics 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)



## 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)
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### 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)
American Institutions Requirement	(6)
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)
American Institutions Requirement (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)
American Institutions Requirement (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)	

Note: This program had not received final approval at the time this catalog went to press. Please visit our Web site at [www.csuci.edu](http://www.csuci.edu) for confirmation of its approval.

## 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):

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 consist 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 community-based 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.

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## REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN HISTORY (120 units)

### Lower Division Requirements (15 units):

#### World Civilizations (6 units):

- HIST 211 World Civ: Origins to 1500 (3)  
HIST 212 World Civ: Since 1500 (3)

#### American History (6 units):

- HIST 270 The United States to 1877 (3)  
HIST 271 The United States Since 1865 (3)

#### Methodology (3 units):

- HIST 280 The Historian's Craft (3)

### Upper Division Requirements (36 units):

Social and Cultural History of the Americas (12 units)

Students should select four classes from the following list:

- HIST 333 History of Southern California  
Chicano/a Art  
HIST 334 Narratives of Southern California  
HIST 335 American Ethnic Images in Novels, Film  
and Art  
HIST 349 History of Business and Economics in  
North America  
HIST 350 Chicano/a History and Culture  
HIST 369 California History and Culture  
HIST 372 United States Industrialism and  
Progressivism  
HIST 373 American Labor History  
HIST 374 United States since 1945  
HIST 401 United States Immigration History,  
1840-1945  
HIST 402 Southern California History and Culture  
HIST 412 Law and Society  
HIST 420 History of Mexico  
HIST 421 Revolutionary Mexico, 1876-1930  
HIST 470 People and Everyday Life in Early America

### World History (including African, Asian, European, and Pacific histories) (12 units)

Students should select four classes 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 History of the Pacific Islands  
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 436 Psychology and History of Asian Warrior  
Cultures  
HIST 442 African Diaspora

## Thematic History (6 units)

Students should select two classes from the following list:

HIST 365	Themes in World History
HIST 366	Oceans of World History
HIST 367	Environmental History
HIST 412	Law and Society
HIST 413	World Religions and Classical Philosophy
HIST 414	Women in History
HIST 415	Society and Radicalism

## Historiography (2 units)

HIST 491	Historiography
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## Capstone (3 units)

HIST 499	Capstone Seminar
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## Interdisciplinary Courses (9 units)

Students should take three courses designated interdisciplinary (numbering 330-349 and 430-449) from any discipline. History majors are encouraged but not required to select from the following list:

HIST 333	History of Southern California Chicano/a Art
HIST 334	Narratives of Southern California
HIST 335	American Ethnic Images in Novels, Film and Art
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

## Required Supporting and other GE Courses (66 units)

University Electives (18 units)  
General Education (42 units) (Courses double counted in Major/GE increase units available for electives)  
Title V, American Institution Requirements (6 units)



## 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)
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### Upper Division Requirements (9 units):

Students must select any three courses from the program's upper-division offerings.



## LIBERAL STUDIES

### PROGRAMS OFFERED

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

The Liberal Studies program provides an education that allows students to integrate traditional areas of study. Students choose from two options: Concentrated Studies or Teaching and Learning. Both of the Liberal Studies options provide an excellent broad-based background for entry into professional and/or graduate programs.

**CAREERS:** Students in Concentrated Studies will design a Program of Study with a faculty member. Students who graduate with this option will be in demand by corporations as well as non-profit and government organizations. These graduates will have flexible problem-solving skills and breadth of knowledge allowing them to excel in positions that require rapid on-the-job learning. This option will appeal to students who want flexibility in designing their course of study or students who need the flexibility this degree offers in order to complete their education.

The Teaching and Learning option provides the coursework content necessary for admission into the Multiple-Subject Teaching Credential Program, which prepares individuals to teach on the K-8 grade level. The need for teachers who can draw from many areas of knowledge is especially acute and it is expected that graduates in the Teaching and Learning option will be in high demand.

Students who are interested in teaching on the 7-12 grade level should consider obtaining a bachelor's degree in a traditional major (e.g. History, English, Math, or Biology) and then apply to be admitted into the Single-Subject Teaching Credential Programs in History, English, Math, or Science. Alternatively, students may work with a faculty member to develop a Program of Study in Concentrated Studies to prepare them for the single-subject content examination.

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## 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)

This option consists of a 9 unit Core, a 45 unit Program of Study, and a 3 unit Capstone. In order for a student to have a Program of Study approved, it must be developed with a tenure-track faculty advisor. General Education may not be double-counted with the requirements for the Option.

### Required Core Courses (9 Units):

Choose one course from each of the following Core areas. (Note: the courses listed under Multicultural Studies meet the Multicultural Graduation Requirement for students who are General Education certified. For a complete list of eligible Multicultural Studies courses, see the Advising Center.)

### Advanced Writing Course (3):

- ENGL 330 Writing in the Disciplines (3)
- ENGL 482 Technical Writing (3)
- ENGL 483 Technical Visual Communication (3)
- ENGL 484 Technical Writing in the Sciences (3)

### Multicultural Studies (3):

- ANTH 102 Cultural Anthropology (3)
- ANTH 323 Native Americans of California to the 1850s (3)
- ART 102 Multicultural Children's Art (3)
- ART 112 Arts of the Eastern World
- ART 332 Multicultural Art Movements (3)
- ART/HIST 333 History of Southern California Chicano/a Art (3)
- ART/ENGL/HIST 335 American Ethnic Images in Novels, Film and Art (3)
- ENGL/TH 333 Multi-Cultural Drama in Performance/Production (3)
- ENGL 449 Perspectives on Multi-Cultural Literature (3)
- MUS 330 Jazz in America (3)
- PSY 344 Psychology and Traditional Asian Thought (3)
- SPAN 201 Intermediate Spanish I (4)
- SPAN 202 Intermediate Spanish II (4)
- SPAN 211 Spanish for Heritage Speakers I (4)
- SPAN 212 Spanish for Heritage Speakers II (4)
- UNIV 392 International Experience (1-3)

### Computer Literacy (3):

- COMP 100 Computers: Their Impact and Use (3)
- COMP 101 Computer Literacy (3)
- COMP 102 Introduction to Algorithms (3)
- COMP 105 Computer Programming Introduction (3)
- COMP 150 Object Oriented Programming (3)



## Program of Study (45 Units)

The Program of Study must be arranged with a tenure-track faculty advisor and consist of a coherent collection of courses from the relevant disciplines. A minimum of 21 units must be upper-division and no more than 21 units can be taken with the same prefix to fulfill requirements, though additional same-prefix units may be taken as electives. 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 initial Program of Study to the Advising Center.

Program of Study examples include, but are not limited to, Pre-Medical Studies, Pre-Single Subject Credential Programs (e.g. History, Science, or Math) for Teaching at the Secondary School Level, and Interdisciplinary Studies.

## Capstone (3 units)

All students must enroll in one unit of LS 499 during the final year prior to graduation.

LS 499 Capstone Project (1)

**Students must also take two units from some combination of the following Capstone courses:**

LS 492 Individual Research (1-2)

LS 494 Service Learning/Internship (1-2)

LS 497 Directed Studies (1-2)

LS 499 Capstone Project (1-2)

## 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)

General Education and American Institutions (Title V) courses may not be double-counted with the Core or Program of Study.



## REQUIREMENTS FOR THE TEACHING AND LEARNING OPTION:

A total of 91–94 units are required for the Bachelor of Arts in Liberal Studies, Teaching and Learning Option. These units include General Education, Liberal Studies Core, Concentration, and Capstone courses. Courses meeting both General Education and the Teaching and Learning Option may be counted as meeting both requirements. The Liberal Studies Core and Concentration courses fulfill the California Commission on Teacher Credentialing standards for the subject matter preparation of teachers, kindergarten to grade 8. Core courses and options have been specified so that all of the California teacher preparation standards will be met. Students must select one of the specified areas of concentration. Requirements for the Concentrations are available from the Advising Center.

## Required Core Courses (82 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 (25 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 (4)

HIST 369 California History and Culture (3)

ECON 111 Principles of Macroeconomics (3)  
Or

ECON 300 Fundamentals of Economics (3)

ANTH 102 Cultural Anthropology (3)

EDUC 101 Introduction to Education (3)

EDUC 320 Education in Modern Society (3)

### 3. Mathematics (6 units):

MATH 208 Modern Math for Elementary Teaching I:  
Numbers and Problem Solving (3)

MATH 308 Modern Math for Elementary Teachers II:  
Geometry, Probability and Statistics (3)

### 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 Understanding Fine Art Processes (3)  
 Or ART 102 Multicultural Children's Art (3)  
 Or ART 110 Prehistoric Art to the Middle Ages (3)  
 Or ART 111 Renaissance to Modern Art (3)  
 Or ART 112 Arts of the Eastern World (3)  
 Or ART 331 Art and Mass Media (3)  
 Or ART 332 Multicultural Art Movements (3)  
 Or 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 (9 units):

- PSY 100 Introduction to Psychology (3)  
 PSY 210 Learning, Cognition and Development (3)  
 SPED 345 Individuals with Disabilities in Society (3)

### 8. Capstone (2 units):

- LS 499 Capstone Project (2)



### REQUIRED CONCENTRATION (9 Units)

Nine additional units must be taken from one of the following Concentrations:

Reading, Language and Literature  
 History and Social Science  
 Mathematics  
 Science  
 Visual and Performing Arts  
 Physical Education and Health  
 Human Development and Psychology  
 Bilingual Studies

### Required Supporting and Other GE Courses (31 Units):

Electives (11–17)  
 American Institutions Requirement (American Government) (3)  
 General Education outside the Core (9–12)

Three of the six units of the American Institutions Requirement (Title V) and 36–39 units of General Education are included in the Core for the Teaching and Learning Option. Students must satisfy General Education categories A3, C2, and C3a, which are outside of the Core courses, and 3 units of an upper-division interdisciplinary General Education course (numbered 330–349 or 430–449) outside of the major. Two upper-division interdisciplinary General Education courses (SPED 345, and TH 333/ ENGL 333 or MUS 330 or MUS 343) are required for Teaching and Learning. To maximize the number of electives, students should consider satisfying General Education category C2 with an upper-division interdisciplinary General Education course. Courses in the Bilingual Studies and Reading, Language and Literature Concentrations may meet General Education categories C2 or C3a.

Students should consider taking EDUC 510 and EDUC 512 as Electives since these courses are prerequisites for admission to the Multiple-Subject Teaching Credential.



## MATHEMATICS

### PROGRAMS OFFERED

- Bachelor of Science in Mathematics
- Minor in Mathematics

Mathematics can be pursued as a scholarly discipline of an especially elegant and creative art form or it can be treated as a valuable tool in an applied discipline. Our program addresses both needs. Students will be given a strong background in mathematics and statistics as well as a substantial amount of interdisciplinary applications in Physics, Computational Biochemistry, Biostatistics, Business, Computer and Information Sciences, Computer Imaging or Artificial Intelligence.

**CAREERS:** The mathematics major will prepare students for teaching careers, studies in graduate programs (in pure mathematics, applied mathematics, mathematics education, or the mathematical sciences) or for employment in high-tech and bio-tech industries, where mathematics-trained professionals with interdisciplinary expertise (sciences and business) are increasingly sought after.

### CONTACT INFORMATION

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### FACULTY

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

### Lower Division Requirements (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 150	Object Oriented Programming Or
COMP 105	Computer Programming Introduction (3-4)

Additional Computer Science course (3-4)

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 (19 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 452	Complex Analysis (3)
MATH 499	Senior Colloquium (1)

### ELECTIVES IN MAJOR (15-19 units):

By the sophomore year the student should decide on one of the emphases listed in the Proposed Plan of Study (6-9)

MATH 318	Mathematics for Secondary School Teachers (3)
MATH 354	Analysis of Algorithms (3)
MATH 393	Abstract Algebra (3)
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 Riemannian Geometry (3)
MATH 482	Number Theory and Cryptography (3)
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 490	Topics in Mathematics (3)
MATH 492	Internship (3)
MATH 494	Independent Study (3)
MATH 497	Directed Study (3)
MATH 499	Senior Colloquium (1)

### Required Supporting and other GE Courses

Elective Courses (18)

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 (3-4)  
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:

MGT 346 Scientific and Professional Ethics (3)  
BIOL 431 Bioinformatics (3)  
PHYS 434 Biomedical Imaging (3)  
COMP 447 Societal Issues in Computing (3)

Select either PHYS 201 and one additional science  
course or 2 semester science sequence in sciences ( 7-8,  
G.E. B1 and B2]

NOTE: 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 200 and  
201(8) as the science sequence.*

MATH 430 Research design and Data Analysis  
(3, G.E. B1,B3, Interdisciplinary)  
COMP 432 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)  
MATH 452 Complex Analysis

### 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 520 Observing and Guiding Behavior in  
Multilingual/Multicultural and Inclusive  
Classrooms  
Or  
PSY 100 Introduction to Psychology (3)  
MATH 318 Mathematics for Secondary School  
Teachers (3)  
MATH 393 Abstract Algebra

### 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 (13-14 Units+ G.E.):

MATH 452 Complex Analysis (3)  
MATH 499 Senior Colloquium (1)  
Choose 3 or more Math Electives (9)

## **TOTAL REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS DEGREE (120 units)**

Lower Division Required Major Courses (35)

Upper Division Required Major Courses (19)

Upper Division Elective Major Courses (15-19)

Elective Courses (17)

General Education Included in Major Requirements (18)

General Education and Title V Requirements (34)

## **REQUIREMENTS FOR THE MINOR IN MATHEMATICS (20 units)**

MATH 150     Calculus I (4)

MATH 151     Calculus II (4)

MATH 300     Discrete Math (3)

In addition, students should select three upper division courses (9 units) from the Mathematics program approved by the advisor



## 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 CSU Channel Islands 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 CSU Channel Islands 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 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 CSU Channel Islands 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 BACHELOR IN ARTS IN PSYCHOLOGY (120 units)

### Lower Division Required Courses (18 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)

**Psychology majors must also take one of the following courses:**

PSY 212 or PSY 220 or BIOL 100 or BIOL 200 or BIOL 201 or ANTH 103 or ANTH 120

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. Nine units from these required lower division courses may be counted toward GE requirements.

### Upper Division Required Core Courses (18 units):

Psychology majors will normally take these courses at CSU Channel Islands. 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 toward the Psychology major.

PSY 300	Psychological Research and Statistical Methods with Lab I (3)
PSY 301	Psychological Research and Statistical Methods with Lab II (3)
PSY 310	History and Systems of Psychology (3)
PSY 312	Social Psychology (3)
PSY 313	Clinical and Abnormal Psychology (3)
PSY 314	Behavioral Neuroscience (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 toward 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	Psychology in Literature (3)
PSY 340	History and Psychology of Nazi Germany (3)
PSY 344	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	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	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
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)

### Required Supporting and other GE Courses (72 units)

General Education (48 units)

American Institution Requirements (6 units)

Electives (18 units)



## REQUIREMENTS FOR THE MINOR IN PSYCHOLOGY (18 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. PSY 100 Introduction to Psychology (3)
2. Two courses from the following list (6):
 

PSY 210	Learning, Cognition and Development (3),
	Or
PSY 211	Cognition and 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 units):

1. One course from the following list (3 units):
 

PSY 310	History and Systems in Psychology (3)
PSY 312	Social Psychology (3)
PSY 313	Clinical and Abnormal Psychology (3)
PSY 314	Behavioral Neuroscience (3)
2. Six (6) units of coursework from any psychology courses at the 300 level or above (6 units).

## REQUIREMENTS FOR THE MINOR IN DEVELOPMENTAL PSYCHOLOGY (Child and Adolescent Emphasis) (18 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 and Development (3),
	Or
PSY 211	Cognition and Learning (3)
PSY 213	Developmental Psychology (3)

### Upper-Division Requirements (12 units):

1. One course from the following list (3 units):
 

PSY 310	History and Systems in Psychology (3)
PSY 312	Social Psychology (3)
PSY 313	Clinical and Abnormal Psychology (3)
PSY 314	Behavioral Neuroscience (3)
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.

### Contact Information

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### Faculty

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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)
	Or
SPAN 211	Spanish for Heritage Speakers I (4)
SPAN 212	Spanish for Heritage Speakers II (4)

#### Upper Division Requirements (12 units):

##### *Required courses (6 units):*

SPAN 301	Advanced Spanish I (3)
SPAN 302	Advanced Spanish II (3)

##### *Select two courses from the following (6 units):*

SPAN 304	Spanish for Careers and Professions (3)
SPAN 310	Introduction to Prose and Poetry (3)
SPAN 401	Contrastive Features of Spanish and English (3)
SPAN 410	Civilizations and Cultures of Spain (3)
SPAN 411	Civilizations and Cultures of Latin America (3)
SPAN 421	Spanish for Educators I (3)
SPAN 422	Spanish for Educators II (3)
ART/HIST 333	History of Southern California Chicano/a Art (3)
ENGL/SPAN 455	Bilingual Literary Studies (3)



CSU



# **Course Descriptions**

CSU

## COURSE NUMBERING

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

## 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  
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, job-order 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 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. 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. 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 of 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, 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, 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 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 ESRM 332  
GenEd: D and Interdisciplinary

### **ANTH 345 HUMAN EVOLUTION AND DIVERSITY (3)**

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, non-human primates. Discusses the concept of race from an anthropological perspective. Includes issues of speciation and race, adaptation to cold, heat, desert, tropics, and 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: CROSS-CULTURAL 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 emphasizes 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, and an exploration on 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 water-based media. Particular emphasis will be on the development of fundamental skills and the understanding of color, shape, surface and pictorial structure.

**ART 202 SCULPTURE (3)**

Six hours laboratory per week

Prerequisite: ART 105, 106, 107

An introduction to basic sculpture materials and techniques. Experiments in representational and abstract sculpture will explore a variety of three-dimensional materials through additive and subtractive sculptural processes. Particular emphasis will be on the development of fundamental skills and the understanding of design, form and structural elements

**ART 203 ILLUSTRATION (3)**

Six hours laboratory per week

Prerequisite: ART 105, 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, Web sites 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, and inbetweening, and cell production leading to the creation of short works in animation.

### **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 two-dimensional 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 three-dimensional 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 time-based 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, 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 up to six 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 up to six 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 up to six units.

**ART 323 COMMUNICATION DESIGN TECHNOLOGY: PACKAGING AND MULTIMEDIA (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, product identity and interactive multimedia. At this phase of study, projects focus on the integration of artistic concept and technological proficiency in the creation of design projects for print, packaging, interactive multimedia, and Internet applications. Repeatable up to six 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 Web sites. 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 up to six 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 up to six units.

**ART 326 DIGITAL MEDIA ART: 3D COMPUTER ANIMATION (3)**

Six hours laboratory per week

Prerequisite: ART 206, ART 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 up to six units.

**ART 330 CRITICAL THINKING IN A VISUAL WORLD (3)**

Three hours lecture per week

A critical look at subjective responses and objective reasoning in the assessment of visual images that permeate everyday 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 CHICANO/A 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

Same as PSY 338

GenEd: C1, E and Interdisciplinary

### **ART 420 ADVANCED ARTISTIC PROBLEMS: TWO-DIMENSIONAL 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 coursework.

### **ART 421 ADVANCED ARTISTIC PROBLEMS: THREE-DIMENSIONAL 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 coursework. Repeatable up to six units.

### **ART 422 ADVANCED ARTISTIC PROBLEMS: DIGITAL MEDIA ART (3)**

Six hours laboratory per week

Prerequisite: ART 322 or 325 or 326

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 coursework. Repeatable up to six units.

### **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 coursework. Repeatable up to six units.

### **ART 431 EUROPEAN RENAISSANCE LITERATURE AND ART (3)**

Three hours lecture/discussion per week

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 non-Western traditions.

Women as subject matter in painting, sculpture, photography, film and video will also be explored as related to artistic, social, historical and political issues.

GenEd: C1, D 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 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)**

Variable hours 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 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 fieldwork 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 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



## 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 PHYSIOLOGY (4)**

Three hours lecture and three hours laboratory per week  
Prerequisite: CHEM 122; CHEM 311 and 312 or concurrent enrollment; BIOL 201 with a grade of C or better

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: CHEM 122; BIOL 201 with a grade of C or better

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 AND EVOLUTION (4)**

Three hours lecture and one hour recitation per week  
Prerequisite: CHEM 122; BIOL 201 with a grade of C or better

Principles of classical transmission genetics, population genetics and evolution, with an introduction to modern molecular genetics.

**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: 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 ESRM 313

**BIOL 315 INTRODUCTION TO BIOPHYSICS (4)**

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 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 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 spectroscopies; fiber comparisons; drug analysis; arson/explosive residue analysis; toxicological studies; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis. Lab fee required. Same as CHEM 343

GenEd: B1, B2 and Interdisciplinary

### **BIOL 346 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 346 and MGT 346

GenEd: D and Interdisciplinary

### **BIOL 400 MOLECULAR BIOLOGY AND MOLECULAR GENETICS (4)**

Three hours lecture and three hours laboratory per week  
Prerequisite: CHEM 314 and 315, 318 or 400; BIOL 300 or 302 with a grade of C or better

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: CHEM 318 or 400; BIOL 300 and 302 with grades of C or better

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: CHEM 122; BIOL 201 with a grade of C or better

An in-depth study of toxic chemicals and their interactions within the ecosystems. Topics include the origin, fate, chemical and biological detection, and quantification of pollutants and toxins and their impact on organisms at the molecular, biochemical, cellular, physiological, organismal, and community levels of organization. Basic toxicology, genetic toxicology, environmental mutagenesis and the molecular basis of mutation induction will be covered.

### **BIOL 410 COMPUTER APPLICATIONS IN**

**BIOMEDICAL FIELDS (3)**

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. Same as COMP 410

**BIOL 416 RADIOBIOLOGY AND RADIONUCLIDES (3)**

Three hours lecture per week

Prerequisite: PHYS 201, BIOL 300

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: CHEM 122; BIOL 300 with a grade of C or better

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: CHEM 122; BIOL 300 with a grade of C or better

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: CHEM 318 or 400; BIOL 300 with a grade of C or better

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: CHEM 122; BIOL 300 with a grade of C or better

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: CHEM 122; BIOL 300 with a grade of C or better

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: CHEM 122; BIOL 300 and 302 with grades of C or better

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: CHEM 122; BIOL 300 with a grade of C or better

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: CHEM 122; BIOL 300 with a grade of C or better

Principles of oncology are examined. Included are mechanisms of oncogenesis at cellular and molecular levels, characteristics of cancer, advantages and disadvantages of various therapies of cancer treatment.

**BIOL 430 RESEARCH DESIGN AND DATA ANALYSIS (3)**

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. Same as CHEM 430 and MATH 430  
GenEd: B2, B3 and Interdisciplinary

### **BIOL 431 BIOINFORMATICS (4)**

Four hours lecture in the lab per week

Prerequisite: CHEM 318 or 400; BIOL 400 with a grade of C or better

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: CHEM 122; BIOL 201 with a grade of C or better

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 (3)**

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: B1, E and Interdisciplinary

### **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 (1-3)**

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: CHEM 122; BIOL 300 with a grade of C or better

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)**

Prerequisite: 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)**

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.



## **BUSINESS**

### **BUS 110 BUSINESS LAW (3)**

Three hours lecture per week

Introduction to the legal and regulatory environment of business, emphasizing the U.S. 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 of 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 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 of seminar per week

Prerequisites: Senior standing or consent of instructor

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. May be repeated to a maximum of 9 units. 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 decision-making 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.

## CHEMISTRY

### CHEM 100 CHEMISTRY AND SOCIETY (3)

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: A passing score on the Chemistry Placement Examination or CHEM 105

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 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 introduction 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, GC-MS, IR, and UV-visible) used to characterize molecules. Lab fee required.

### 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 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 spectroscopies; fiber comparisons; drug analysis; arson/explosive residue analysis; toxicological studies; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis. Lab fee required. Same as BIOL 343

GenEd: B1, B2 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 346 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 346 and MGT 346

GenEd: D and Interdisciplinary

## **CHEM 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. Same as BIOL 430 and MATH 430  
GenEd: B2, B3 and Interdisciplinary

## **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. 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. Credit/No Credit.

**COMMUNICATIONS****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



## 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 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 time-sharing. Networked systems are also discussed. The salient problems associated with implementing systems are considered including interrupt or event-driven systems, multi-tasking, storage and data-base management, and input-output. Emphasis will be placed on some of the simple algorithms used to solve common problems encountered such as deadlocks, queue service, and multiple accesses to data. Projects will be implemented to reinforce the lectures.

### **COMP 410 COMPUTER 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. Same as BIOL 410

### **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 444

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 444 and MATH 344

Basic software design and analysis considerations in networking computers into coherent, cooperating systems capable of processing computational tasks in a distributed manner. Network topology, routing procedures, message multiplexing and process scheduling techniques will be discussed.

### **COMP 432 COMPUTATIONAL BIOINFORMATICS (4)**

Four hours of lecture in the lab per week

Prerequisite: Programming skills, Statistics, BIOL 201

recommended, 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 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, 230

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 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 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, 362

An exploration of the use of computers to perform computations normally associated with intelligence, pattern formation and recognition using various 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 degree-related 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)**

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, 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 AND 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 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 their 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 (governmental) 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 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; 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: ECON 310 or 329; MATH 150;

BIOL/MATH/PSY 202 or MATH 329 or 352

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.

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. 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: 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 literature-based instruction for native English speakers and English Language Learners in English-only, Multilingual and Bilingual contexts. Needs of English Language Learners and exceptional children, technology for teaching and learning 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, 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: 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 (5)**

Equivalent of six 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 (9)**

Equivalent of eleven 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 SINGLE SUBJECTS 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/GEO-SCIENCE 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 English Language Learners 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) (2)**

Five hours per week in a middle school setting  
Prerequisite: Admission to the Single Subject Credential Program.

Co-requisite: EDSS 530

Participatory observation in selected secondary schools under the supervision of a classroom teacher and University supervisor.

**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) (2)**

Five hours per week in a middle school setting

Prerequisite: Admission to the Single Subject Credential Program

Co-requisite: Education Single Subjects content methods course

Participatory observation in selected high school level secondary schools under the supervision of a classroom teacher and University supervisor.

**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 EDUCATION (3)**

Two hours lecture and two hours laboratory per week  
Exploration of the elementary teaching profession; personal goals, teaching-learning environment, and career opportunities and experiences that assist students in gaining accurate knowledge of schooling in the 21st century. Field experience in school 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 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 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. Focuses 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.

### **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.

## **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, 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 well-versed 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. May be linked with another lower-division GE course.

GenEd: A2

### **ENGL 106 COMPOSITION AND RHETORIC II — SERVICE 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: ENGL 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 (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 and adolescent literature.

Students analyze narrative and expository texts. Focus will be on critical reading for K-12 students and analysis of perspective in fiction and non-fiction. Works studied will be representative of several genres, cultures, and periods of literature. Students evaluate the use of elements of persuasive argument in print, speech, videos, and in other media.

**ENGL 315 INTRODUCTION TO LANGUAGE, STRUCTURE AND LINGUISTICS (3)**

Three hours lecture/discussion per week

Prerequisite: ENGL 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, their function, morphology, 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, productions with elements of cultural dance and music included.

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. Coursework 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 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 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, D, 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. Same as BUS 340 and ECON 340

GenEd: C2, D and Interdisciplinary

### **ENGL 378 CONTEMPORARY NATIVE AMERICAN AUTHORS: TELECOURSE (3)**

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 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 of the tragedians Aeschylus, Sophocles and Euripides, as well as the comic playwright Aristophanes. 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, and 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

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 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 BILINGÜES (3)**

Three hours lecture per week

Prerequisite: ENGL 103 or 105 and SPAN 202 or 212

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 mágico, short stories/cuentos, and poetry. Readings will be in the original language; class discussions will be bilingual. Same as SPAN 455

### **ENGL 456 FICTION BY WOMEN AUTHORS (3)**

Three hours lecture/discussion per week

Prerequisite: ENGL 220 or ENGL 250

Examines both the development of contemporary fiction by women and its relationship to the established canon. Explores aesthetics and themes in the fiction of women of different ethnicities and classes. Analyzes the social and historical context of those literary productions. Raises relevant critical questions about the 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. As the culmination of the Creative Writing Emphasis, the purpose of this independent-study course is to produce a significant work in the genre of the student's choice, chosen in consultation with his or her instructor.

### **ENGL 475 LANGUAGE IN SOCIAL CONTEXT (3)**

Three hours lecture/discussion per week

Prerequisite: 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 upper-division 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 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 twofold. 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 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 impact 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, 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, 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, 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, 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, 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.  
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.  
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 runoff, 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.

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. 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.

Lab fee required.

### GEOL 321 ENVIRONMENTAL GEOLOGY (4)

Three hours lecture and three hours laboratory per week

Interrelationships between human and natural geologic hazards: tsunamis, 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 CIVILIZATIONS: ORIGINS 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 pre-colonial 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 (4)**

Four hours lecture per week

This course is specially designed for students in the Teaching and Learning Option of the 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 1600s 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: U.S. 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 EUROPEAN HISTORY, 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 EUROPEAN HISTORY, 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 CHICANO/A 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. Coursework 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 their economies. Same as BUS 349 and ECON 349

GenEd: D and Interdisciplinary

**HIST 350 CHICANO/A 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. Meets Title V U.S. History and Constitution requirement

**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 16th 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 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/A 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 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 PHILOSOPHY (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 1800s; topics include, but not 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, early popular unrest, collective actions, and protests.

## **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 (3)**

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: B1, 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 (1-2)**

Prerequisite: 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 ongoing reflection, and evaluate the activity. Repeatable.

### **LS 494 INDEPENDENT RESEARCH (1-2)**

Prerequisite: Upper-division standing

Students design and implement a study project in conjunction with a faculty member. Repeatable

### **LS 497 DIRECTED STUDIES (1-2)**

Prerequisite: Upper-division standing

Provides student credit for curricular activities under the direction of a Liberal Studies faculty member. Repeatable.

### **LS 499 CAPSTONE PROJECT (1-2)**

Prerequisite: Senior standing

In conjunction with a faculty advisor, students design and complete a project that integrates prior course work and disseminate the project to the campus community. Repeatable.



## **MATH**

### **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 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  
Topics 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, inductive and deductive 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, propositional 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  $\mathbb{R}^n$ , 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 per week

Prerequisite: MATH 150

Current issues of modern secondary school math curriculum including abstract thinking and problem-solving approaches to teaching. Content covers systems of geometry, algebra, precalculus, calculus, probability and statistics. Designed for students intending to become secondary school teachers.

**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 and consequences 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)**

Three hours lecture per week

Prerequisite: MATH 250 (may be taken concurrently)

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 seminumerical and non-numerical 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. Same as BIOL 430 and CHEM 430  
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 350 or COMP 151 and MATH 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 452 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 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

Topics include: divisibility, prime numbers, unique factorization theorem, congruencies, solutions of linear congruencies, solutions of quadratic congruencies, Fermat's Little Theorem, Wilson's Theorem, and 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)**

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 346 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 346 and CHEM 346

GenEd: D and Interdisciplinary

### **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 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, new-product development and product life cycle strategies, pricing, communications, direct and on-line marketing, and social responsibility and marketing ethics.

### **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 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 of 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. Lab fee required.

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 problem-solving 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 problem-solving 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.  
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 problem-solving 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 problem-solving 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 (4)

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: PHYS 201, BIOL 300

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 (3)**

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: B1, 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 CR/NC.

### **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)**

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 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, 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 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.



## **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

Prerequisite: PSY 100 (may be taken concurrently)

Examines psychological theories of cognition as they apply to learning. Theories introduced in this course 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, 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 non-Western 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: B2, 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 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 and trauma, mood, schizophrenia and psychosis, eating and substance abuse, memory and organic dysfunctions, personality; social, cultural, and legal issues related to psychopathology.

### **PSY 314 BEHAVIORAL NEUROSCIENCE (3)**

Two hours lecture and two hours laboratory per week

An introduction to the neurological and physiological factors related to cognition, emotion, language, learning, motivation, perception, and memory. Topics include: neuroanatomy as well as the basic concepts of clinical neuropsychology and the effects of chemical signals on behavior, as well as the effect of behavior.

### **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 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, D, 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 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 436

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, 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 and consent of instructor

An intensive study of some aspect of psychology, usually via an in-depth review of the literature. 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 SENIOR CAPSTONE COURSE (1-3)**

Prerequisite: Upper Division standing and consent of instructor

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.

GenEd: C3a-Not available for General Education (C3a) credit to students with two or more years of high school Spanish taken within the last three years.

### **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 Spanish-speaking world.

GenEd: C3a

### **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, 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, 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, C3b

### **SPAN 212 SPANISH FOR HERITAGE SPEAKERS II (4)**

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, 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)

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)

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 401 CONTRASTIVE FEATURES OF SPANISH AND ENGLISH (3)**

Three hours lecture per week

Prerequisite: SPAN 302 or equivalent

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 equivalent

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. Oral presentations will be required.

### **SPAN 411 CIVILIZATIONS AND CULTURES OF LATIN AMERICA (3)**

Three hours lecture per week

Prerequisite: SPAN 302 or equivalent

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 equivalent

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 equivalent

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: 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 BILINGÜES (3)**

Three hours lecture per week

Prerequisite: ENGL 103 or 105 and SPAN 202 or 212

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 mágico, short stories/cuentos, 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 541 FOUNDATIONS OF SPECIAL EDUCATION (3)**

Three 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 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, socio-economically 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 per week

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, productions with elements of cultural dance and music included.

Same as ENGL 333

GenEd: C2, C3b and Interdisciplinary

### TH 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 of the tragedians Aeschylus, Sophocles and Euripides, as well as the comic playwright Aristophanes. 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 101 CRITICAL THINKING AND THE UNIVERSITY (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 heuristics 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 U.S., 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



CSU



# Index

CSU

# INDEX - 2003/2004 CATALOG

## CALIFORNIA STATE UNIVERSITY

### CHANNEL ISLANDS

#### A

Academic Affairs . . . . .	37-48
Vice President for Academic Affairs. . . . .	37
Dean of the Faculty . . . . .	37
Academic Programs . . . . .	37
Faculty Affairs and Academic Resources . . . . .	37
Advising Center . . . . .	37
Math Tutoring Lab . . . . .	38
University Writing Center . . . . .	38
Credentials Office. . . . .	38
Extended Education . . . . .	38
Open University. . . . .	38
Library. . . . .	39
Library Services . . . . .	39
The Robert J. Lagomarsino Collection. . . . .	39
Faculty Biographies. . . . .	40-48
Academic Calendar 2003/2004 . . . . .	4
Academic Dishonesty . . . . .	31-32
Academic Policies, Student . . . . .	29-33
Academic Probation & Disqualification . . . . .	32
Academic Programs . . . . .	37
Acceleration of University Studies . . . . .	32
Activities, Clubs and Organizations, Student. . . . .	71
Adding Courses After the First Two Weeks of Instruction . . . . .	29
Adding Courses During the First Two Weeks of Instruction . . . . .	29
Admissions and Records. . . . .	51
Admission Procedures and Policies . . . . .	51
Undergraduate Application Procedures. . . . .	51
Impacted Programs . . . . .	51
Graduate and Post-Baccalaureate Application Procedures . . . . .	52
Application Filing Periods . . . . .	52
Hardship Petitions . . . . .	52
Undergraduate Admission Requirements . . . . .	52-54
Eligibility Index. . . . .	53
Evaluation of Foreign Baccalaureate-Level Coursework . . . . .	53
Provisional Admission . . . . .	53
TOEFL Requirement . . . . .	55
Graduate and Post-Baccalaureate Admission Requirements . . . . .	55-56
Evaluation of Foreign Degrees. . . . .	56
Graduate-Postbaccalaureate TOEFL Requirement . . . . .	56
International (Foreign) Student Admission Requirements. . . . .	56
Intrasystem and Intersystem Enrollment Programs . . . . .	56
Privacy Rights of Students in Education Records . . . . .	57
Cancellation of Registration or Withdrawal from the Institution. . . . .	57
Admission Procedures and Policies . . . . .	51
Admission Requirements, Undergraduate . . . . .	52-54
Advanced Placement. . . . .	32
Advising Center. . . . .	37
Anthropology (Minor Only) . . . . .	87
Appeals, Course Grade . . . . .	31

Application Filing Periods . . . . .	52
Application for Graduation. . . . .	84
Application Procedures, (Graduate, Post-Baccalaureate) . . . . .	52
Application Procedures, Undergraduate. . . . .	51
Applied Physics (Minor Only) . . . . .	88
Appointed Trustees . . . . .	19
Art . . . . .	89-91
Asian-Pacific Studies (Minor Only) . . . . .	92
Associated Students Incorporated . . . . .	70
Availability of Institutional and Financial Assistance. . . . .	7
Average Annual Cost of Education and Sources of Funds Per Full-Time Equivalent Student. . . . .	62

#### B

Baccalaureate Degree Requirements. . . . .	83
Biographies, Faculty. . . . .	40-48
Biology . . . . .	93-96
Blackboard. . . . .	10
Business . . . . .	97-99

#### C

Cabinet, President's. . . . .	9
Calendar, Academic. . . . .	4
California State University System (CSU) . . . . .	19
Trustees of the California State University. . . . .	19
Ex-Officio Trustees . . . . .	19
Officers of the Trustees. . . . .	19
Appointed Trustees. . . . .	19
Chancellor's Office . . . . .	20
CSU Campuses Map and Contact Information . . . . .	20-21
International Programs. . . . .	22
California State University Channel Islands. . . . .	7
Five Ways to Find Information About CSU Channel Islands . . . . .	7
Availability of Institutional and Financial Assistance. . . . .	7
Changes in Rules and Policies . . . . .	7
Catalog Production Team . . . . .	8
History of the University . . . . .	8-9
Mission. . . . .	8
University Mascot. . . . .	9
University Colors . . . . .	9
President's Cabinet. . . . .	9
Human Resources . . . . .	10
Information Technology Services . . . . .	10
Open Lab. . . . .	10
PC Lab . . . . .	10
MAC Lab . . . . .	10
Student Webmail . . . . .	10
Blackboard . . . . .	10
Campus Map and Legend, CSU Channel Islands . . . . .	16
Campuses Map, CSU. . . . .	20-21
Cancellation of Registration or Withdrawal from the Institution. . . . .	57
Career Development Services. . . . .	68
Career Placement . . . . .	25
Career, Health, Accommodation and Personal Counseling (C.H.A.P.s). . . . .	67-68
Catalog Production Team . . . . .	8
Certificates. . . . .	96, 100, 113
Biotechnology. . . . .	96

Chemistry . . . . .	100
Technical Writing . . . . .	113
Chancellor's Office . . . . .	20
Changes in Rules and Policies. . . . .	7-8
Changing Basis for Grading . . . . .	31
Chemistry (Minor Only) . . . . .	100
Chicano/a Studies (Minor Only). . . . .	101
Class Attendance. . . . .	30
Colors, University . . . . .	9
Commencement and Honors Convocation . . . . .	84
Commencement Ceremony . . . . .	31
Computer Science . . . . .	102-103
Cost of Education . . . . .	62
Course Descriptions. . . . .	133-186
Course Numbering. . . . .	133
Course Descriptions . . . . .	133-186
Course Grade Appeals . . . . .	31
Credentials, Education. . . . .	104-110
Credentials Office . . . . .	38
Credit Toward Graduation for Courses Taken Outside CSU Channel Islands. . . . .	33

## D

Dean of the Faculty. . . . .	37
Declaration of Majors . . . . .	29
Descriptions, Course . . . . .	133-186
Determination of Residence for Nonresident Tuition Purposes. . . . .	26
Developmental Psychology (Minor Only) . . . . .	128
Directed Self Placement (DSP). . . . .	27
Disability Accommodation Services . . . . .	69
Discipline, Student. . . . .	28-29
Dishonesty, Academic . . . . .	31-32
Disqualification, Academic . . . . .	32
Double Degrees. . . . .	29
Double-Counting of Course Requirements . . . . .	29

## E

Economics (Minor Only). . . . .	99
Education (Credentials) . . . . .	104-110
Education Records, Privacy Rights of Students in . . . . .	57
Educational Opportunity Program (EOP) . . . . .	70
Eligibility Index . . . . .	53
English . . . . .	111-113
English Placement Test (EPT) . . . . .	27
Entry Level Mathematics Placement Examination (ELM) . . . . .	27
Environmental Science and Resource Management. . . . .	114-116
Ex-Officio Trustees . . . . .	19
Extension Courses. . . . .	33
Extended Education . . . . .	38

## F

Faculty Affairs and Academic Resources. . . . .	37
Faculty Biographies . . . . .	40-48
Fee Waivers . . . . .	62
Fees and Debts Owed to the Institution. . . . .	62
Fees, Schedule of. . . . .	61
Filing Periods, Application. . . . .	52
Financial Aid Office. . . . .	69
Financial Matters . . . . .	61-63

Schedule of Fees. . . . .	61
Refund of Fees Including Nonresident Tuition . . . . .	61
Fees and Debts Owed to the Institution . . . . .	62
Fee Waivers. . . . .	62
Average Annual Cost of Education and Sources of Funds Per Full-Time Equivalent Student . . . . .	62
Procedure for the Establishment or Abolishment of a Student Body Fee . . . . .	63
Scholarships . . . . .	63
Five Ways to Find Information About CSU Channel Islands. . . . .	7
Forgiveness of Previously Earned Grade (Repeat and Delete) . . . . .	31

## G

General Education Categories and Courses. . . . .	76
General Education Requirements. . . . .	75
General Education . . . . .	75
General Education Categories and Courses . . . . .	76
Grades . . . . .	30
Graduate and Post-Baccalaureate Admission Requirements . . . . .	55-56
Graduate and Post-Baccalaureate Application Procedures . . . . .	52
Graduate-PostBaccalaureate TOEFL Requirement. . . . .	56
Graduation Application. . . . .	52
Graduation Information and Application Process for the Bachelor's Degree . . . . .	84
Graduation Requirements. . . . .	83
Baccalaureate Degree Requirements . . . . .	83
Total Units . . . . .	83
Upper Division Units. . . . .	83
Major . . . . .	83
General Education. . . . .	83
Residence. . . . .	83
Grade Point Average . . . . .	83
U.S. History, State and Local Government Requirements. . . . .	83
Language and Multicultural Requirements. . . . .	83
Graduation Requirement in Writing Proficiency . . . . .	83
Graduation Information. . . . .	84
Graduation Information and Application Process for the Bachelor's Degree. . . . .	84
Application for Graduation . . . . .	84
Key Steps to Graduation . . . . .	84
Commencement and Honors Convocation . . . . .	84
Grants . . . . .	69

## H

Hardship Petitions. . . . .	52
High School Students . . . . .	33
History . . . . .	117-118
History of the University . . . . .	8-9
Honors (Semester, Program, University) . . . . .	31
Honors Convocation. . . . .	84
Honors in Biology . . . . .	96

## I

Immigration Requirements for Licensure. . . . .	25
Impacted Programs. . . . .	51

International (Foreign) Student Admission Requirements . . . . .	56
International Program Credit . . . . .	33
International Programs, CSU . . . . .	22
Intrasystem and Intersystem Enrollment Programs. . . . .	56

<b>J</b>	
Judicial Affairs . . . . .	70

<b>K</b>	
Key Steps to Graduation. . . . .	84

<b>L</b>	
Labs (Open, PC, MAC). . . . .	10
Lagomarsino Collection, Robert J. . . . .	39
Liberal Studies . . . . .	119-122
Library . . . . .	39
Loans. . . . .	69

<b>M</b>	
MAC Lab. . . . .	10
Majors, Minors & Credentials . . . . .	87-129
Anthropology (Minor Only). . . . .	87
Applied Physics (Minor Only) . . . . .	88
Art . . . . .	89-91
Asian-Pacific Studies (Minor Only) . . . . .	92
Biology. . . . .	93-96
Business. . . . .	97-99
Chemistry (Minor Only). . . . .	100
Chicano/a Studies (Minor Only) . . . . .	101
Computer Science. . . . .	102-103
Economics (Minor Only) . . . . .	99
Education (Credentials). . . . .	104-110
English. . . . .	111-113
Environmental Science & Resource Management. . . . .	114-116
History. . . . .	117-118
Liberal Studies. . . . .	119-122
Mathematics . . . . .	123-125
Psychology. . . . .	126-128
Spanish (Minor Only) . . . . .	129
Majors, Declaration of. . . . .	29
Mascot, University. . . . .	9
Math Tutoring Lab. . . . .	38
Mathematics. . . . .	123-125
Message from the President . . . . .	1
Military Selective Service Act . . . . .	27
Mission . . . . .	9
Multiple Majors. . . . .	29
Multiple Subject Teaching Credential . . . . .	104-106

<b>N</b>	
New Student Orientation . . . . .	70
Nondiscrimination Policy . . . . .	25
Nonresident Tuition, Refund of Fees Including . . . . .	61
Numbering, Course. . . . .	133

<b>O</b>	
Officers of the Trustees . . . . .	19
Open Lab. . . . .	10
Open University . . . . .	38

Outreach and Educational Opportunity Program (EOP) . . . . .	70
--	----

<b>P</b>	
Parking Services. . . . .	13
Participating in Commencement Ceremonies . . . . .	31
PC Lab. . . . .	10
Personal Counseling Services . . . . .	69
Petitions, Hardship . . . . .	52
Police Services . . . . .	10
Policies and Regulations . . . . .	25-33
Nondiscrimination Policy . . . . .	25
Use of Social Security Number . . . . .	25
Career Placement . . . . .	25
Immigration Requirements for Licensure . . . . .	25
Determination of Residence for Nonresident Tuition Purposes. . . . .	26
Military Selective Service Act . . . . .	27
Systemwide Placement Test Requirements . . . . .	27
English Placement Test (EPT). . . . .	27
Directed Self Placement (DSP) . . . . .	27
Entry Level Mathematics Placement Examination (ELM) . . . . .	27
Student Discipline. . . . .	28-29
Student Academic Policies . . . . .	29-33
Declaration of Majors. . . . .	29
Double-Counting of Course Requirements. . . . .	29
Multiple Majors . . . . .	29
Double Degrees . . . . .	29
Adding Courses During the First Two Weeks of Instruction . . . . .	29
Adding Courses After the First Two Weeks of Instruction . . . . .	29
Withdrawal from Courses . . . . .	30
Class Attendance . . . . .	30
Grades . . . . .	30
Changing Basis for Grading. . . . .	31
Course Grade Appeals. . . . .	31
Forgiveness of Previously Earned Grade (Repeat and Delete). . . . .	31
Semester Honors . . . . .	31
Program Honors. . . . .	31
University Honors . . . . .	31
Participating in Commencement Ceremonies. . . . .	31
Academic Dishonesty. . . . .	31-32
Academic Probation & Disqualification . . . . .	32
Acceleration of University Studies. . . . .	32
Advanced Placement . . . . .	32
Unit Credit by Examination. . . . .	33
Substitution of Courses . . . . .	33
Waiver of Course Requirement . . . . .	33
Credit Toward Graduation for Courses Taken Outside CSU Channel Islands. . . . .	33
High School Students . . . . .	33
Extension Courses . . . . .	33
Open University. . . . .	33
International Program Credit. . . . .	33
President's Cabinet . . . . .	9
Privacy Rights of Students in Education Records. . . . .	57
Probation, Academic . . . . .	32
Procedure for the Establishment or Abolishment of a Student Body Fee. . . . .	63
Procedures and Policies, Admission . . . . .	51

Program Honors .....	31
Programs, Impacted .....	51
Psychology .....	126-128
Public Safety. ....	10-13
Police Services. ....	10-13
Transportation and Parking Services .....	13

## R

Recruitment. ....	67
Refund of Fees Including Nonresident Tuition. ....	61
Registration, Cancellation. ....	57
Residence, Determination of Residence for Nonresident Tuition Purposes .....	26
Robert J. Lagomarsino Collection. ....	39

## S

Schedule of Fees .....	61
Scholarships .....	63
Semester Honors. ....	31
Single Subject Teaching Credential .....	106-108
Social Security Number, Use of. ....	25
Sources of Funds Per Full-Time Equivalent Student ..	62
Spanish (Minor Only). ....	129
Special Education Teaching Credential .....	109-110
State Work-Study Program .....	69
Student Academic Policies. ....	29-33
Declaration of Majors. ....	29
Double-Counting of Course Requirements. ....	29
Multiple Majors .....	29
Double Degrees .....	29
Adding Courses During the First Two Weeks of Instruction .....	29
Adding Courses After the First Two Weeks of Instruction .....	29
Withdrawal from Courses. ....	30
Class Attendance .....	30
Grades. ....	30
Changing Basis for Grading. ....	31
Course Grade Appeals .....	31
Forgiveness of Previously Earned Grade (Repeat and Delete) .....	31
Semester Honors .....	31
Program Honors. ....	31
University Honors .....	31
Participation in Commencement Ceremonies. . .	31
Academic Dishonesty .....	31-32
Academic Probation & Disqualification. ....	32
Acceleration of University Studies. ....	32
Advanced Placement .....	32
Unit Credit by Examination .....	33
Substitution of Courses .....	33
Waiver of Course Requirement .....	33
Credit Toward Graduation for Courses Taken Outside CSU Channel Islands. ....	33
High School Students .....	33
Extension Courses .....	33
Open University. ....	33
International Program Credit. ....	33
Student Activities, Clubs and Organizations .....	71
Student Affairs. ....	67-71
Vice President for Student Affairs .....	67
Admissions and Records .....	67
Recruitment .....	67

Veterans Affairs .....	67
Career, Health, Accommodation and Personal Counseling (C.H.A.P.s). ....	67-68
Career Development Services .....	68
Student Health Services. ....	68
Disability Accommodation Services .....	69
Personal Counseling Services .....	69
Financial Aid Office .....	69
Grants. ....	69
Loans .....	69
State Work-Study Program .....	69
Scholarships. ....	69
Student Development. ....	70-71
Associated Students Incorporated. ....	70
Judicial Affairs .....	70
New Student Orientation .....	70
Outreach and Educational Opportunity Program (EOP) .....	70
Recreation and Leisure Services .....	71
Student Activities, Clubs and Organizations .	71
Student Housing .....	71
The University Hub .....	71

Student Body Fee, Establishment or Abolishment of a .....	63
Student Development .....	70-71
Student Discipline .....	28-29
Student Health Services .....	68
Student Housing. ....	71
Student Webmail. ....	10
Substitution of Courses. ....	33
Systemwide Placement Test Requirements. ....	27

## T

Table of Contents. ....	2-3
Telephone Directory. ....	14-15
Alphabetical Listing for Faculty and Staff . . .	14-15
The University Hub. ....	71
TOEFL Requirement .....	55
Transportation and Parking Services. ....	13
Trustees of the California State University .....	19
Tutoring .....	37-38

## U

Undergraduate Admission Requirements .....	52-54
Undergraduate Application Procedures .....	51
Unit Credit by Examination .....	33
University Colors. ....	9
University Honors. ....	31
University Hub, The. ....	71
University Mascot .....	9
University Writing Center. ....	38
Use of Social Security Number. ....	25

## V

Veterans Affairs .....	67
------------------------	----

## W

Waiver of Course Requirement. ....	33
Waivers, Fee. ....	62
Withdrawal from Courses .....	30
Withdrawal from the Institution .....	57
Writing Center, University .....	38