

California State University, Stanislaus
1995-1997

## THE PRESIDENT'S MESSAGE

CSU Stanislaus is an exceptional public university which offers all the benefits of a private education. Opportunities for students are significant, partly because the faculty are exceptionally qualified, with eighty-five percent holding the Ph.D. or its equivalent. The University offers the virtues of private education at the cost of public education. An outstanding feature of the University is faculty access to students
 and their commitment to teaching excellence, coupled with the staff commitment to provide the quality of support necessary to assure high standards of education.
Our 21,000 alumni/ae will join us in celebration of our 35th anniversary in the Fall of 1995. They are state and national politicians, teachers, doctors, lawyers, agribusiness men and women, realtors, public educators, community leaders, artists, human services professionals, and much more.
From the Baccalaureate to the Master's degree and post baccalaureate credentials, CSU Stanislaus in Turlock offers educational programs in nearly 70 fields of specialization for oncampus and off-campus students who are full-time or part-time, daytime or evening.
CSUS continues to emphasize quality and excellence in education to respond to the multiple needs of students. Located in the fastest growing region in California, students represent a highly diversified population. Through a strong commitment to diversity and educational equity, CSU Stanislaus helps each student reach his or her full potential. Educational enrichment opportunities are available through programs offered by University Extended Education. The University has earned both statewide and national recognition for its excellence.

Through the recent augmentation of programs in Stockton, the CSU Stanislaus Stockton Center will serve to reinvigorate the long-term cooperative relationship between the University and the San Joaquin Delta College. Undergraduate programs in the liberal arts and business, and graduate programs in business administration, public administration, and education are currently available to students. In addition, the instructional television system offers nearly 100 courses annually to students in nine locations around the region.
This catalog describes the University's educational resources and is designed to assist students in making the best choices for their future. Please familiarize yourself with its contents. We look forward to your becoming an integral part of the CSU Stanislaus family.



CALIFORNIA STATE UNIVERSITY, STANISLAUS $1960 \quad 0 \quad 1995$

## Catalog 1995-97

## Changes in Rules and Policies

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

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

## Catalog Orders

Reference copies of the catalog are available in the Vasche Library; personal copies can be purchased at the Kiva Bookstore for $\$ 7.00$. To order copies by mail from Kiva Bookstore, within the continental United States, include $\$ 3.00$ to cover tax, handling, and postage. For international orders send $\$ 7.00$ plus $\$ 14.99$ (U. S. dollars).

## Schedule of Classes

The Schedule of Classes is available at the Kiva Bookstore for $\$ 1.00$ (includes tax). To order copies by mail, within the continental United States, include $\$ 1.50$ to cover handling and postage. For international orders send a total of $\$ 6.79$ (U.S. dollars).

## Credits

The CSU Stanislaus catalog is prepared by the Office of the Associate Vice President for Academic Resources.

| Editor/Project Coordinator | Connie Bratten |
| :--- | :--- |
| Curriculum Consultant | Jeanne Elliott |
| Departmental Graphics | Tim Gable and Vicki Eden |
| Catalog Cover Design | Vicki Eden |
| Special thanks to | Ed Aubert and Judy Tiger |

On the Cover: Without Doug, 1994, watercolor by Martin Camarata, Chair, CSU Stanislaus Art Department, printed courtesy of Mrs. Phyllis Taylor.

## Contents

1995-96 Academic Calendar ..... 1
The California State University ..... 4
University Mission Statement ..... 9
Introduction to CSU Stanislaus ..... 11
Regional Education ..... 19
Admission to the University ..... 22
Registration and other Fees ..... 41
Financial Aid ..... 44
Student Affairs ..... 46
Policies and Procedures ..... 53
Academic Standards ..... 64
International Programs ..... 69
Undergraduate Degrees and Programs ..... 71
Graduate Studies ..... 84
Cóurse Numbering System ..... 97
College of Arts, Letters, and Sciences ..... 98
Anthropology ..... 100
Applied Studies ..... 109
Art ..... 111
Biological Sciences ..... 122
Chemistry ..... 135
Child Development ..... 143
Cognitive Studies ..... 153
Communication Studies ..... 158
Computer Science ..... 167
Criminal Justice ..... 173
Drama ..... 180
Economics ..... 185
English ..... 191
Environmental and Resource Studies ..... 207
Environmental Sciences ..... 209
Ethnic Studies ..... 211
Geography ..... 216
Geology ..... 224
Gerontology ..... 230
History ..... 231
University Honors Program ..... 242
Humanities ..... 244
Interpersonal Studies ..... 245
Journalism ..... 246
Latin American Studies ..... 248
Liberal Studies ..... 249
Marine Sciences ..... 266
Mathematics ..... 275
Modern Languages ..... 285
Multidisciplinary Studies ..... 302
Music ..... 305
Nursing ..... 322
Philosophy ..... 327
Physics, Physical Sciences and Geology ..... 332
Politics and Public Administration ..... 343
Psychology ..... 359
Russian and East European Studies ..... 376
Social Sciences ..... 377
Master of Social Work ..... 386
Sociology ..... 390
Women's Studies ..... 398
School of Business Administration ..... 403
Accounting ..... 410
Finance ..... 415
Management ..... 419
Marketing ..... 423
Operations Management ..... 427
Computer InformationSystems ..... 431
School of Education ..... 438
Credential Programs ..... 440
Advanced Studies in Education ..... 442
Physical Education and Health ..... 458
Teacher Education ..... 476
Vocational Education ..... 501
The General Faculty ..... 503
Appendixes
A. Eligibility Index Table ..... 517
B. History of Calendar Changes ..... 519
C. Determination of Residence Status ..... 519
D. Procedure for Establishment/Abolishment of Student Body Fee ..... 520
E. Refund Regulations ..... 521
F. Average Annual Cost of Education per FES ..... 522
G. Student Discipline ..... 522
H. Grade Assignment and Grade Appeal Procedures ..... 524
I. Privacy Rights of Students in Education Records ..... 526
J. Institutional and Financial Assistance ..... 527
K. Sexual Harassment Policy ..... 527
L. Learning Disabled Student G.E.-Breadth Requirement Waiver ..... 529
M.Learning Disabled Student Course Substitutions ..... 530
N. College Board Advanced Piacement Examination Policy ..... 531
Index ..... 532

## 1995-96 Academic Calendar

## Fall 1995 Semester

Registration dates and related information are available in the current Schedule of Classes.
November 1, 1994-July 31, 1995 ........ Admission Application Filing Period
February 27, 1995 ................................Applications Due for Fall 1995 and Winter 1996 Graduation
March 2 ................................................ Priority Financial Aid Application
Deadline $\dagger$
September 4 .........................................Labor Day (Campus Closed)
September 5
Classes Begin
September 19 ........................................Applications Due for Spring and Summer 1996 Graduation
October 2 ............................................. Enrollment Census Date: enrollments not accepted after this date
October 10 ...........................................Columbus Day (Offices Open, No Classes)
November 10 ...................................... Veterans' Day (Offices Open, No Classes)
November 23-24 ..................................Thanksgiving Holiday (Campus Closed)
December 8 ..........................................Last Day of Classes
December 11 ........................................Reading Day
December 12-15 .................................. Final Examinations
December 15........................................Last Day of Term
December 15 ........................................ Bound Master's Theses due to Graduate Studies Office
December 15-20 .................................. Grades Due from Faculty
December 25, 1995-January 1, 1996 ...Holiday Break, Campus Closed

## Winter 1996 Term

Registration dates and related information are available in the current Schedule of Classes.

| March 2, 1995 | Priority Financial Aid Application |
| :---: | :---: |
|  | Deadline $\dagger$ |
| June 1-November 15, 199 | Admission Application Filing Period |
| January 3, 1996.............. | Classes Begin |
| January 10 | Enrollment Census Date: enrollments not accepted after this date |
| January 15. | Martin Luther King Day (Campus Closed) |
| January 31. | Last Day of Classes |
| February 1 | Reading Day |
| February 2 | Final Examinations |
| February 2. | Last Day of Term |
| February 2 | Bound Master's Thesis Due to Graduate |
| February 2 | Studies Office <br> Grades Due from Faculty |

[^0]
## Spring 1996 Semester



## Summer 1996 Session

April 15, 1996
Registration Begins for Summer Session
June 17-August 23, 1996
Summer Session Instruction

Contact the Extended Education Office for further information.

[^1]
## ACADEMIC CALENDAR



7 2
$\begin{array}{lllllll}3 & 5 & 5 & 6 & 7 & 8 & 9\end{array}$
$\begin{array}{llllll}10 & 11 & 12 & 13 & 14 & 15\end{array} 16$
17181920212223 24252627282930

OCTOBER 1995
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6 & 7\end{array}$
$\begin{array}{lllllll}8 & 9 & 11 & 121314\end{array}$
$\begin{array}{llllll}15 & 16 & 17 & 18 & 19 & 20\end{array}$
22232425262728 293031

NOVEMBER 1995
$\begin{array}{llll}1 & 2 & 3 & 4\end{array}$ $\begin{array}{llllll}5 & 6 & 7 & 8 & 9 & 10\end{array} 11$ $\begin{array}{lllllll}12 & 13 & 14 & 15 & 16 & 17 & 18\end{array}$ 192021222325 2627282930

| DECEMBER 1995 | JANUARY 1996 | FEBRUARY 1996 |
| :---: | :---: | :---: |
| 12 | 17 3 4 5 6 | 1 23 |
| $\begin{array}{llllllll}3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$ | $\begin{array}{llllllllll}7 & 8 & 9 & 10 & 11 & 12 & 13\end{array}$ | 4 5. 6\% 7 3 910 |
| 10 111 1213141516 |  | 11 12.3.14.15 617 |
| 17 18.19.20. 4122 | 21222324252627 | $\begin{array}{lllllll}18 & 19 & 20 & 21 & 22 & 23 & 24\end{array}$ |
| 24 25:26,27:28:29 30 | 28293031 | 2526272829 |

MARCH 1996

|  | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 |  |  |  |  |  |  |

APRIL 1996
$\begin{array}{llllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$
7 8.9 10.1112 13
$\begin{array}{llllll}14 & 15 & 16 & 17 & 18 & 19\end{array} 20$
21222324252627 282930

JUNE 1996
1
2 324.5.6.7 8
910 11. 12.13 .1415 $\begin{array}{lllllll}16 & 17 & 18 & 19 & 20 & 21 & 22\end{array}$ $\begin{array}{lllll}23 & 24 & 25 & 26 & 27 \\ 28 & 29\end{array}$

JULY 1996
$\begin{array}{llll}1 & 2 & 3 & 5 \\ 5\end{array}$ $\begin{array}{lllllll}7 & 8 & 9 & 10 & 11 & 12 & 13\end{array}$ $\begin{array}{llllll}14 & 15 & 16 & 17 & 18 & 19\end{array} 20$ $\begin{array}{llllll}21 & 22 & 23 & 24 & 25 & 26 \\ 27\end{array}$ 28293031

MAY 1996

$$
\begin{array}{ccccccc} 
& & & 1 & 2 & 3 & 4 \\
5 & 6 & 7 & 8 & 9 & 10 & 11 \\
12 & 13 & 14 & 15 & 16 & 17 & 18 \\
19 & 20 & 21 & 22 & 23 & 24 & 25 \\
26 & 27 & 28 & 29 & 30 & 31 &
\end{array}
$$

AUGUST 1996.

|  |  |  |  | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | $\begin{array}{lllllll}11 & 12 & 13 & 14 & 15 & 16 & 17\end{array}$ $18 \quad 192021 \quad 22 \quad 2324$ $2 5 \longdiv { 2 6 } 2 7 2 8 . 2 9 3 0 3 1$ 30



## 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.

The oldest campus-San Jose State University-was founded as a Normal School in 1857 and became the first institution of public higher education in California. California State University, Monterey Bay, became the CSU's 21st campus in September 1994. The California Maritime Academy in Vallejo, founded in 1929, joined the CSU as its 22nd campus in July 1995.

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

The Trustees, the Chancellor, and the Presidents develop systemwide policy, with actual implementation at the campus level taking place through broadily 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 of the campuses require for graduation a basic program of general education-breadth requirements,"regardless of the type of bachelor's degree ormajor field selected by the student.

The CSU offers more than 1,500 bachelor's and master's degree programs in some 200 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.

In fall 1993, the system enrolled approximately 326,000 students, taught by more than 16,000 faculty. Last year the system awarded over 50 percent of the bachelor's degrees and 30 percent of the master's degrees granted in California. More than 1.2 million persons have been graduated from the 20 campuses since 1960.

# Trustees of the California State University 

## Ex Officio Trustees

Governor of California
The Honorable Pete Wilson
State Capitol, Sacramento 95814

Lieutenant Governor of California
The Honorable Gray Davis
State Capitol, Sacramento 95814

Speaker of the Assembly
The Honorable Doris Allen
State Capitol, Sacramento 95814

StateSuperintendentof Public Instruction Delaine Eastin<br>721 Capitol Mall, Sacramento 95814

Chancellor of the California State University
Dr. Barry Munitz
400 Golden Shore
Long Beach 90802-4275

## Officers of the Trustees

Governor Pete Wilson .............................................................................. President
Mr. Jim Considine ................................................................................... Chairman
Ms. Martha Fallgatter ......................................................................Vice Chairman
Chancellor Barry Munitz
Secretary-Treasurer

## Appointed Trustees

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

Mr. Roland E. Arnall (1998)<br>Ms. Marian Bagdasarian (1996)<br>Ms. Martha C. Fallgatter (1995)<br>Mr. William D. Campbell (1995)<br>Mr. Ralph R. Pesqueira (1996)<br>Mr. Ted J. Saenger (1997)<br>Mr. Anthony M. Vitti (1997)<br>Mr. James H. Gray (1998)<br>Mr. Jim Considine (1994)

Mr. Ronald L. Cedillos (1999)
Dr. Bernard Goldstein (1993)
Mr. William Hauck (2001)
Dr. Joan Otomo-Corgel (2001)
Mr. J. Gary Shansby (1999)
Mr. Chirstopher A. Lowe (1995)
Mr. Michael D. Stennis (2002)
Mr. Stanley T. Wang (2002)

> Correspondence with Trustees
> should be sent:
> c/o Trustees Secretariat
> The California State University
> 400 Golden Shore, Suite 134
> Long Beach, California $90802-4275$

## Office of the Chancellor

The California State University<br>400 Golden Shore<br>Long Beach, California 90802-4275<br>(310) 590-5506

Dr. Barry Munitz ....................................................... Chancellor - CSU System
Ms. Molly Corbett Board ..............................Executive Vice Chancellor
Dr. Peter S. Hoff....................... Senior Vice Chancellor, Academic Affairs
Dr. June Cooper............... Vice Chancellor, Human Resources and Operations
Mr. Richard West .................................Vice Chancellor, Business and Finance
Dr. Douglas X. Patino ................ Vice Chancellor, University Advancement
Ms. Christine Helwick ..................................... Interim General Counsel

## Campuses of The California State University

California State University, Bakersfield
9001 Stockdale Highway
Bakersfield, California 93311-1099
Dr. Tomas A. Arciniega, President (805) 664-2011

California State University, Chico
1st \& Normal Streets
Chico, California 95929
Dr. Manuel A. Esteban, President (916) 898-6116

California State University, Dominguez Hills
1000 East Victoria Street
Carson, California 90747
Dr. Robert C. Detweiler, President
(310) 516-3300

California State University, Fresno
5241 North Maple Avenue
Fresno, California 93740
Dr. John Welty, President
(209) 278-4240

California State University, Fullerton
Fullerton, California 92634-9480
Dr. Milton A. Gordon, President
(714) 773-2011

California State University, Hayward
Hayward, California 94542
Dr. Norma S. Rees, President
(510) 881-3000

Humboldt State University
Arcata, California 95521
Dr. Alistair W. McCrone, President (707) 826-3011

California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, California 90840
Dr. Robert C. Maxson, President (310) 985-4111

California State University,
Los Angeles
5151 State University Drive
Los Angeles, California 90032
Dr. James M. Rosser, President
(213) 343-3000

California Maritime Academy
200 Maritime Academy Drive
Vallejo, California 94590
Dr. Mary E. Lyons, President
(707) 648-4200

8 / California State University

California State University, Monterey Bay
100 Campus Center
Seaside, California 93955-8001
Dr. Peter P. Smith, President (408) 393-3338

California State University, Northridge
18111 Nordhoff Street
Northridge, California 91330.
Dr. Blenda J. Wilson, President (818) 885-1200

California State Polytechnic University, Pomona 3801 West Temple Avenue Pomona, California 91768
Dr. Bob Suzuki, President (909) 869-7659

California State University, Sacramento
6000 J Street
Sacramento, California 95819
Dr. Donald R. Gerth, President (916) 278-6011

California State University, San Bernardino 5500 University Parkway San Bernardino, California 92407
Dr. Anthony H. Evans, President (909) 880-5000

San Diego State University 5300 Campanile Drive San Diego, California 92182
Dr. Thomas B. Day, President
(619) 594-5000

## Imperial Valley Campus

720 Heber Avenue
Calexico, California 92231 (619) 357-3721

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

San Jose State University
One Washington Square
San Jose, California 95192
Dr. Robert L. Caret, President
(408) 924-1000

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

California State University, San Marcos
San Marcos, California 92069-0001
Dr. Bill W. Stacy, President
(619) 752-4000

Sonoma State University
1801 East Cotati Avenue
Rohnert Park, California 94928
Dr. Ruben Arminana, President
(707) 664-2880

California State University, Stanislaus
801 West Monte Vista Avenue
Turlock, California 95382-0299
Dr. Marvalene Hughes, President
(209) 667-3122

## University Mission


#### Abstract

*California State University, Stanislaus is an educationally, intellectually, and culturally dynamic public university with a unique responsibility to serve the central San Joaquin Valley and the neighboring Central Sierra foothills. Its mission is integrated by three core principles: excellence, diversity, and responsiveness. Every facet of University life is affected by these principles and every member of the campus community is guided by them. Excellence is revealed in teaching, learning, research, artistic and other creative endeavors. Diversity is revealed in the composition of faculty, students, and staff and the educational environment they nurture. Responsiveness is revealed in the ways the University addresses the needs of all groups and contributes to the quality of life in its service region.


In fulfilling its commitment to excellence, CSU Stanislaus:

## Promotes and values teaching excellence

CSU Stanislaus stresses quality instruction, pedagogical flexibility, professional development, and curricular innovation. It has a faculty dedicated to teaching and to the cultivation of a creative learning environment. In this environment, students are motivated to become resourceful, responsible, and competent citizens. The commitment to excellence is given meaning in every instructional setting.

Meets the educational needs of its undergraduate, graduate, and credential
students
CSU Stanislaus is committed to graduating students who have the desire and ability to communicate effectively in diverse cultural and intellectual environments. To this end, students are expected to attain mastery of fundamental problem-solving techniques along with critical thinking skills for the communication and evaluation of ideas. In the process, they are exposed to a diversity of ideas, perspectives, cultures, and technologies.

The University provides programs and support services to traditional and nontraditional students, day and evening students, full-time and part-time students, and campus and off-campus students. The delivery of these programs and services involves the constructive participation of faculty, staff, and students.

Encourages and supports the creative, scholarly, and artistic efforts of its faculty
Research, scholarship, and other creative endeavors complement the University's mission of teaching excellence. Faculty serve as role models and are expected to remain active participants in their chosen fields. The University supports on-going professional development and the involvement of students in the creative activities of its faculty.

Protects academic freedom and cultivates a positive intellectual environment in which ideas are freely exchanged, creativity is nurtured, and information services are readily available

The University seeks to create a stimulating intellectual environment-one that is presented both in and out of the classroom. This environment contributes to the personal, social, and intellectual growth of students; encourages persons of varied perspectives to engage in discussions where ideas can be exchanged and debated freely; promotes and nourishes creativity; motivates individuals to explore the benefits of technology; and provides access to information through the library and other resources. The educational climate is designed to protect and preserve academic freedom.

## In fulfilling its commitment to a multicultural society, CSU Stanislaus:

Fosters diversity on campus, promotes mutual understanding and respect among all groups, provides equal educational access to all, including those with disabilities and those facing personal barriers, and offers a curriculum that prepares students to live productively in a multicultural society

The forces underlying cultural pluralism in California-particularly international immigration-are unmistakable today and are likely to become even more significant in the future. In fact, by the first decade of the 21 st century California will become a state without a single ethnic majority group.

As an institution of higher learning, CSU Stanislaus both initiates and responds to change through the composition of its personnel and student body, the contents of its curriculum, and its attitudes toward diversity. As a leader in the multicultural society, and as a reflection of it, the University becomes a multicultural university providing equal educational access to all and nourishing a healthy respect for cultural pluralism.
In fulfilling its commitment to be responsive, CSU Stanislaus:
Provides educational and professional services suited to the needs of the citizens of its six-county service region and seeks to extend its contributions and influence throughout California, the nation, and the world

While fulfilling its obligation to provide educational and professional services to a global community, CSU Stanislaus has a legally established mandate to provide these same kinds of services to a six-county area. The University has a special responsibility to contribute to the enrichment of this region and to sponsor activities that meet the needs of the community at large.

Provides public service to communities and works constructively with other educational, public, and private organizations on matters of mutual interest

The University seeks to establish mutually beneficial partnerships with schools and other educational agencies, government, businesses, and professions. These partnerships represent a commitment and application of campus expertise and University resources both within and outside the region.

## California State University, Stanislaus

University Advisory Board

Beverly M. Finley, Chair
Curt Andre, O.D.
Jo Berry
William Carney

Ben Duran<br>Marty Grynbaum<br>Robert Janzen, M.D.<br>Richard Lang

James R. Lindsey Sedrick Mitchell<br>Tony Ramos<br>Niniv Tamimi

## Advisory Board Honorary Life Members

Charles E. Aquilar
Thomas K. Beard
A. Joseph Bellizzi

Dorothy L. Bissini
Joyce L. Carrillo
William Charles
Harold C. Cook
Joseph C. Crane
Gerard J. Crowley
A. J. Cusenza, D.D.S.

Peter Fluetsch
Patricia Gallo
Ernest T. Gemperle

Bettylou George
Alden R. Houbein
John Ielmini
Carmen Jackson
Judith Jensen
Barry Jett
Charles E. Jolitz
Tom Madden
John Mensinger
Shawn Moosekian
George Moton
Wendell J. Olson

Marian Palmer
Frank Ruggieri
Frank H. Saunders
Donald L. Smith
Jane Evans Vilas
Marlene Tingley John Ward Karl E. Wellman
Donald H. West
Stanley T. Wilson
William Youngdale
Michael Zagaris

## Administration

President.
Marvalene Hughes
Staff Assistant to the President ....................................Julia Fahrenbruch
Director, Public Affairs ...............................................James McGrew
Director, Athletics Joseph Donahue
Director, Community and Minority Affairs Richard Patterson

## Provost/Vice President for

Academic Affairs
Richard A. Curry
Associate Vice President for Academic Affairs
and Dean of Graduate Studies..................................Diana Mayer Demetrulias
Director, Stockton Center ....................................Jessie Garza-Roderick
Director, Research \& Grants ...............................Frances Moore Jeffries
Director, University Extended Education ...........Thomas L. O'Neil Coordinator, Regional Distance Education .........Samuel A. Oppenheim Coordinator, Graduate Office ...............................Mary L. Coker
Associate Vice President for Academic
and Human Resources
Donald W. Bowers
Associate Director, Human Resources .................Mary Kobayashi Lee
Interim Director, Office of
Information Technology
Clive Houston-Brown
Interim Associate Director, OIT ...........................Debra L. Lillie
Director, Institutional Research
Edward L. Lamie
Interim Dean, College of Arts, Letters,and Sciences
Jay P. Christofferson
Interim Associate Dean Cynthia L. Morgan
Department Chairs:
Anthropology/Geography Kofi Akwabi-Ameyaw
Art Martin L. Camarata
Biological Sciences Wayne S. Pierce
Chemistry James E. Byrd
Communication Studies Fred P. Hilpert
Computer Science Thomas J. Carter
DramaJere D. Wade
Economics H. Dieter Renning
English George E. Settera
History Austin Ahanotu
Mathematics Louis A. Feldman
Modern Languages James A. Wakefield, Jr.
Music Edward C. Harris
Nursing June L. Boffman
Philosophy James A. Tuedio
Physics, Physical Sciences \& Geology Marvin Johnson
Politics/Public Administration Steven W. Hughes
Psychology Gary D. Novak
Social Work Ellen Dunbar
Sociology/Criminal Justice Cecil A. Rhodes
Women's Studies and Ethnic Studies Richard L. Luevano
Dean, School of Business Administration Gordon L. Patzer
Department Chairs:
Accounting \& Finance Don E. Garner
Computer Information Systems Eleftherios G. (Al) Tsacle
Management, Marketing, and
Operations Management Nael A. Aly
Graduate Programs Director Vacant
Dean, School of Education Irma Guzman Wagner
Department Chairs:
Advanced Studies in Education Roy Y. Yasui
Physical Education and Health William M. Morris
Teacher Education Doni K. Kobus
Credential Analyst Lilia J. Baballe .
Dean, Library Services John K. Amrhein
Associate Librarian (Reference) Laura M. Boyer
Senior Assistant Librarian (Cataloging) Valerie Bross
Librarian (Online Searching/Reference) Paula J. Crawford
Librarian (Systems) Priscilla S. Peters
Librarian (Archives/Reference) Robert L. Santos
Senior Asst. Librarian (Reference/Circulation) Judith A. ThomsenSenior Asst. Librarian (Acquisitions)Vacant
Senior Asst. Librarian (Collection
Development)Vacant
Vice President for Student Affairs andDean of StudentsDavid K. Keymer
Senior Director, Enrollment Services/Director, Admissions and Records Edward J. Aubert
Associate Director, Adm. and Records Judith L. Graves
Director, Financial Aid Joan R. Hillery
Director, University Outreach Services Jaime Alcaraz
Senior Director, Retention Services/Director,
Counseling, Career Development andAcademic Support ServicesKaren L. MendoncaCoordinator, Employer Relations/StudentEmployment ServiceDon Lawson
Coordinator, International Student Program Robert L. Santos
Coordinator, Disabled Student Programs Leland R. Bettencourt
Director, Academic Advising and
T. Peter Finley Tutoring ServicesAssociate Director Academic Advising ........Laura L. Collard
Director, EOP/Student Support Services Ronald Noble
Project Director, Student Support Services. Jessi Diaz
Coordinator, Summer Bridge Frank C. Espinosa
Director, ILE Program George E. Settera
Director, Writing Skills Program Ann Krabach
Director, Teacher Diversity Program Richard Levering
Director, Faculty Mentor Program Kofi Akwabi-Ameyaw
Director, California Mini-Corps (Turlock) Fernando Peña
Director, Calfiornia Mini-Corps (Stockton) Josephina Gutierrez-Miller
Senior Director, Student Life andDirector, Health CenterFrederick S. Edmondson
Director, Housing and Residential Life Mark B. Erickson
Director, University Union Carol Burke
Director, Student Programming and Organizations Lee J. Renner
Senior Physician Page R. Riskin
Vice President, Business and Finance. Maynard Robinson
Senior Director, Facilities Planning and Operations Carl K. Coffey
Director, Physical Plant Robert A. Gallegos
Director, Public Safety Services James E. Shaw
Environmental Health and Safety Officer Ronald Y. Misaki
Executive Director, University Advancement Lorraine M. Gonsalves
Senior Director, Fiscal Affairs and
Asst. to the V.P. Business and Finance Becka A. PaulsenUniversity ComptrollerJim D. Phillips
University Budget Officer John R. Waayers
Assistant University Budget Officer Kimberly K. DeHart
Foundation Director Gary M. Toombs

## Hours of Operation

Regular Hours: 8:00 a.m to 5:00 p.m., Monday through Friday.
Summer Hours: 7:30 a.m. to 4:00 p.m., Monday through Friday, June through August.
Note: The Cashier's Office closes to public services at 4:00 p.m.

## The Academic Program

Students are encouraged to take courses that will give them a broad understanding of the liberal arts and sciences during their first two years of study. This breadth then permits them to make a more informed choice of their field of specialization. The University offers 34 such majors for in-depth and pre-career study. A listing of all available majors, minors, and concentrations is included in the "Degrees and Programs" section of this catalog.

CSU Stanislaus also offers Master of Arts and Master of Science programs described in the "Graduate Programs" section of this catalog.

## Accreditation

CSU Stanislaus received its first accreditation by WASC in 1964 and has been fully accredited each subsequent review cycle. In addition, the following programs are accredited by their specialty organizations:

## College of Arts, Letters, and Sciences

- Art - the National Association of Schools of Art and Design.
- Chemistry - the American Chemical Society.
- Computer Science - the Computing Sciences Accreditation Board.
- Drama - the National Association of Schools of Theatre.
- Music - the National Association of Schools of Músic.
- Nursing - the National League for Nursing.
- Public Administration - the National Association of Schools of Public Affairs and Administration.
- Social Work - This program has achieved candidacy by the Council for Social Work Education.


## School of Business Administration

- The School of Business Administration has achieved candidacy status from the American Assembly of Collegiate Schools of Business Administration.
- The Accounting program has achieved candidacy status from the American Assembly of Collegiate Schools of Business Administration.


## School of Education

- The School of Education is accredited by the National Council for Accreditation of Teacher Education and by the California Commission on Teacher Credentialing.
In January, 1994, the School of Business Administration received "candidacy status" both for its business and accounting programs from the American Assembly of Collegiate Schools of Business. "Candidacy status is an indication that an institution has voluntarily committed to participate in a program of self-improvement and is actively progressing toward the status of accreditation; candidacy status is not accreditation and does not guarantee eventual accreditation."


## The 4-1-4 at CSU Stanislaus

California State University, Stanislaus was the first public, four-year institution of higher learning in California to adopt a 4-1-4 academic calendar. The program, now beginning its twenty-third year, has been well received by students and faculty.

Under 4-1-4 the academic year consists of two 13-week semesters and a monthlong Winter Term beginning in January. Fall semester ends before the holiday break and spring semester finishes in late May. A typical student load is four courses in the fall, one during Winter Term, and four in the spring-hence "four-one-four."

Although in the course of an academic year, the 4-1-4 calendar is exactly equivalent to traditional semester or quarter programs in terms of instructional weeks (30), credit units earned, teaching loads, and registration fees, the structure of the 4-1-4 year provides greater opportunities for an innovative and challenging curriculum.

The unique dimension of 4-1-4 is the month-long Winter Term in which both students and faculty concentrate on one course or project. Winter Term is tangible evidence of the University's commitment to intellectual inquiry and creative pedagogy. To stimulate academic innovation and encourage students to explore unfamiliar disciplines, many Winter Term courses and projects are graded on a Credit/No Credit basis. Winter Term courses, as an integral part of the 4-1-4 calendar, are required for graduation.

During Winter Term both teacher and student have an unusual chance for intensive, uninterrupted pursuit of a single subject. This concentration of time, resources, and energy in itself constitutes a new intellectual experience for most undergraduates. Furthermote, CSU Stanislaus Winter Term policy facilitates interdisciplinary teaching and learning, invites off-campus field work and research, allows students to propose courses or projects, and provides foreign travel/study courses.

## The Facilities

The campus of California State University, Stanislaus blends modern facilities with the pastoral charm of the countryside. Two-hundred and twenty acres provide room for growth as enrollment dictates. The campus grounds have undergone improvements in landscaping over the past several years, providing a beautiful, wellmaintained setting to enhance university life.

CSU Stanislaus was established by the State Legislature in 1957 and first offered classes in September of 1960 in temporary quarters at the Stanislaus County Fairgrounds in Turlock. The University moved to its permanent site in 1965 following construction of its first major facilities. The Classroom Building housed facilities for art, music, drama, and the sciences in addition to providing classrooms for lectures. The library, a companion project to the Classroom Building, was later name the Vasche Library in memory of the university's founding president Dr. J. Búrton Vasche.

The Performing Arts Complex opened a few years later to provide space for the departments of art, drama, and music. This multipurpose project includes a modern, functional 300-seat Mainstage Theatre for drama productions, recitals, concerts, and lectures. The music facility features a 200 -seat recital hall, while art occupies spacious and modernly-equipped studios as well as the University Art Gallery.

The addition of the Science Building provided one of the most modern facilities of its kind in the California State University system, with traditional as well as spaceage equipment: a laser laboratory, a tissue cultures lab, an electron microscope, geology labs, greenhouse, and other laboratories and classrooms for science and mathematics students. An observatory serving astronomy classes was added adjacent to the Science Building in 1977.

The Dining Hall Complex opened its doors in the Fall of 1975, and the adjacent Stanislaus Union Building (SUB) was added in 1978. These facilities have become the center for students during their leisure hours. The Dining Hall Complex includes a cafeteria with seating for 500 , two smaller dining rooms for private meetings, and the Residence Life Village dining hall, Mom's.

The University Union houses the Kiva Bookstore, Kiva Computer Store, Associated Students offices, a recreation center, lounges, multipurpose room, study and conference rooms, the campus radio station and the Union Market Cafe.

Physical education facilities constructed over the years include a Fieldhouse, a Gymnasium with seating for 2,300, softball and baseball diamonds, soccer field, a vita-course, tennis courts, an all-weather track, and a swimming pool.

Dedicated in 1981, the campus Health Center provides basic medical services, health maintenance, and health education.

Campus facilities also include: The Village, a 260 -student housing complex that opened in 1993, with phase 2, accommodating another 96 students, to open in 1996; a Computer Science Building that was converted from a Bank of America portable branch facility donated to the University in 1982; and the Television Learning Center that was converted from a former athletic storage facility in 1982 for development of the Regional Television Course Distribution System.

Other additions include Vasche Library II completed in 1989, doubling the size of the original building, and a major addition to the University Union Building, including an enlargement of Kiva Bookstore completed in 1992. Plans for a 98,000 square foot Professional Schools Building have been completed and construction is scheduled for Fall 1996 with occupancy in 1997-98. Plans for a 130,000 square foot Educational Services Building are also complete. Construction is dependent upon a future bond issue.

## Library

Located on the second and third floors of the Vasche Library Building, the University Library provides the recorded knowledge and cultural materials that students and faculty need for study and research. These materials are freely available in attractive and comfortable surroundings accommodating 548 readers in a variety of seating patterns. The Library is staffed by paraprofessional library assistants and by professionally trained librarian-scholars who organize, analyze, and interpret those materials. Professional reference service is available during most of the hours the Library is open. The librarians also offer to help students acquire the principles of independent library research through formal courses and individual instruction. The Library offers a specialized program of consultation and assistance for graduate students with in-depth research for papers and theses. Computerized data base searching is available to all CSU Stanislaus students and faculty through the use of CD-ROM workstations and on-line access to remote databases.

The Library collection has been developed with the active participation of the faculty to meet the needs of the curriculum and special areas of research. It contains over 310,000 volumes, and includes subscriptions to about 2,200 periodicals. Back files of most of these periodicals are available. The Library is a selective depository for United States government publications, and maintains an extensive collection of documents published by the State of California and local governments of the University's six-county service area.

The Library's curriculum collection, which consists of courses of study, curriculum guides, and activity units is available on microfiche for the use of pre-service and in-service teachers enrolled in the School of Education. A collection of about 3,100 representative children's books comprises the children's collection.

Publications which are not locally available can be obtained quickly for CSU Stanislaus students and faculty by the Library's interlibrary loan service, which is connected electronically to over 10,000 libraries of all types.

Stockton Center students receive library services from the main campus library in Turlock, and also have full library privileges at the University of the Pacific in Stockton.

## Instructional Media Center

The University provides centralized instructional media services designed to enrich classroom instruction by providing access to the latest equipment and materials available. Media materials available on campus include 350 film titles and over 200 videocassette tapes which are used extensively by the faculty and students in the library as well as in the classroom.

The Instructional Media Center has comprehensive catalogs of films, videotapes, and other off-campus materials available through rentals from major film libraries throughout the United States.

Faculty members may check out video recorders and camcorders to use in course-connected activities. Coaxial cables connect major campus buildings; eventually equipment will be installed to provide instant access to instructional materials through an electronic distribution system.

Qualified personnel assist with the production of instructional materials. Services offered include: Video production studio, preview rooms, transparency-making, high speed stereo copying of audio cassette tapes, duplication of video tapes, fax services, video editing, and photographic duplication of slides.

## Institute for International Studies (IIS)

The IIS mandate is to provide campus and community with international and multi-cultural learning resources. The Institute's programs receive their primary support from grants made by individuals, foundations, and government agencies. The Institute houses and sponsors such diverse projects as the Foreign Language Association of Central California, the Center for Southeast Asian Studies, the Community International Lecture Series, the International Scholar in Residence Program, Project Ethiopia, and the Project in International and Multi-Cultural Education (PIME). Contact the Institute for additional information on current programs (209) 667-3117.

## Public Safety

The Department of Public Safety/State University Police, (209) 667-3114, employs trained, full-time peace officers and support staff for the 24 hour protection of the campus, its students, staff, and faculty. The department offers a wide variety of crime prevention and personal safety awareness programs including sexual assault and date/acquaintance rape awareness, CPR and first aid training, residence and personal property protection and general personal safety. In addition to its law enforcement duties, such as traffic and parking enforcement, the Department of Public Safety also provides public services including personal after-hour escort service, the locking and unlocking of buildings and rooms, motorist assistance including battery jumps and vehicle unlocks, and the administration of the lost and found property program.

In an emergency or to report an incident use the emergency Blue Light phones located on campus or dial 9-911 if using a campus phone line or 911 from a public telephone.

## University Union Facility Reservations

All University Union Facility Reservations can be made in person at the Information Center located in the lobby of the University Union or by calling (209) 667-3780. There are three conference rooms available for reservation by students and campus community at no charge. In addition, the Event Center is available for rent by student clubs, campus departments, and the outside community.

## Information Center

The Information Center is located in the lobby of the University Union Building. The phone number is (209) 667-3122. The Center provides information about various student activities, campus events and programs, extensions to all faculty, staff, and campus departments and a variety of other services. In addition, all University Union facility reservations can be made at the Information Desk. The Center is staffed by student employees, Monday through Thursday, 7:30 a.m. to 7:00 p.m. and Friday, 7:30 a.m. to 5:00 p.m.

## Inter-collegiate Athletics

The University participates in eleven inter-collegiate sports at the NCAA Division II level, and is a member of the Northern California Athletic Conference. Seven men's sports are sponsored - basketball, baseball, golf, soccer, cross country, and track and field. The five women's sports are basketball, softball, volleyball, cross country, and track and field.

The University's athletic teams competed at the NCAA Division III level for fourteen years beginning with the 1975-76 seasons and, with twelve NCAA golf championships, two baseball championships, and over 160 athletes earning AllAmerican honors the program has become nationally recognized for its dedication to excellence. Within the conference CSU Stanislaus' athletes have won numerous team and individual awards, and on five occasions a Stanislaus athlete has been named Student-Athlete of the Year for the entire league, an honor that places equal emphasis upon academic and athletic achievements.

## Regional Education

## The Stockton Center

## Distance Learning (Instructional Television) University Extended Education Higher Education Consortium of Central California

Office: Library Building 175B, (209) 667-3082
Associate Vice President for Academic Affairs: Diana Mayer Demetrulias Director of the Stockton Center:
Coordinator of Regional Distance Learning:
Director of University Extended Education:

Jessie Garza-Roderick
Samuel A. Oppenheim
Thomas O'Neil

The University fulfills its mission as a regional university through a variety of programs and activities which serve the needs of the citizens in the University's sixcounty service region.

## The Stockton Center

| Location: | San Joaquin Delta College |
| :--- | :--- |
|  | 5151 Pacific Avenue, Stockton, CA 95207, (209) 474-5777 |
| Director: | Jessie Garza-Roderick |
| Office Hours: | 8 a.m.-7 p.m. Mon-Thur, 8 a.m.-5 p.m. Fri. |

In cooperation with San Joaquin Delta College, California State University, Stanislaus operates a Center on the Delta College campus in Stockton. Resident credit classes leading to both baccalaureate and master's degrees are offered at the Stockton Center for the convenience of citizens of San Joaquin County. This cooperative arrangement between two segments of California's public higher education system is now in its twenty-first year of operation. Degree and credential programs offered by the University are designed to complement the two-year Associate of Arts work provided by San Joaquin Delta College.

Accreditation: Degree programs offered at the Stockton Center are fully accredited by the Western Association of Schools and Colleges and are an integral part of the program of California State University, Stanislaus. In addition, the following programs, offered at the Stockton Center, are accredited by their speciality organizations:

School of Education - the National Council for Accreditation of Teacher Education (NCATE) and the California Commission on Teacher Credentialing
School of Business Administration and the Accounting program - candidacy status from the American Assembly of Collegiate Schools of Business Administration.
Public Administration - the National Association of Schools of Public Affairs and Administration
Nursing - the National League for Nursing
Recognition: The American Association of State Colleges and Universities (AASCU) in Washington, D.C., with a membership of 360 univerșities and colleges nationwide, selected the Stockton Center and CSU Stanislaus for national recognition as an innovative educational program in 1984. In 1985, AASCU recognized the University's single subject credential fieldsite program in San Joaquin County in its
annual "Shoẁcase of Excellence" awards given for developing innovative teacher preparation curriculum.

Applications and Information: The Stockton Center provides selected student services including admissions information, academic advising, and assistance with financial aid.
Degree Programs at the Stockton Center

Bachelor of Arts
Master's Degrees

- Criminal Justice
- History
- Liberal Studies
- Organizational Communication
- Psychology
- Social Sciences

Bachelor of Science

- Business Administration
- Accounting
- General Business
- Master of Business Administration
- Master of Multilingual Education
- Master of Public Administration

Credentials

- Multiple Subjects Credential: Culture, Language, and Academic Development (CLAD)
- Administrative Services Credential
- Single Subjects Credential (Manteca Fieldsite)

Note: Check with an adviser to determine if all course work is available in Stockton. Some degree programs may require that certain classes be taken at the campus in Turlock.

## Distance Learning (Instructional Television)

Office: Library Building 175B, (209) 667-3318
Coordinator: Samuel A. Oppenheim
The University operates an instructional television system which transmits regular courses from two classroom studios on campus and one studio in Stockton to remote reception sites.

This delivery system provides for active participation of students at the remote sites through an audio talk back capability.

The televised courses are currently received by classrooms in Stockton, Manteca, Tracy, and Dos Palos.

Beginning in the spring of 1996, the University plans to offer a third broadcast channel using compressed video technology which allows for 2-way audio and 2-way video. Receptions sites are planned for the Stockton Center and Merced College.

## University Extended Education

Office: Classroom Building 123, (209) 667-3111
Director: Thomas O'Neil
The University Extended Education provides a number of programs and services to the people of the CSU Stanislaus service area-Calaveras, Mariposa, Merced, Stanislaus, San Joaquin, and Tuolumne Counties. The programs are designed primarily to meet the needs of nontraditional students throughout the region. Additional information on any of these programs can be obtained by writing University Extended Education or calling (209) 667-3111.

Open University: Students who are not interested in seeking a degree or who have not been admitted as regular students may enroll, on a space-available basis and
with the permission of the instructor, in any regularly scheduled course offered by the University. This type of enrollment through University Extended Education which is taken for credit only, is then recorded on a student's Extension transcript. If a student later wishes to have Open University credit applied toward a degree, a maximum of twenty-four units is allowable for a baccalaureate degree and nine units for a graduate degree. In all cases the permission of the major department is required.

Extension Programs: Through University Extended Education, the University offers especially designed courses, both credit and noncredit, to meet particular needs. Seminars, conferences, workshops, and weekend courses on specific topics are offered throughout the year.

Courses offered which meet professional licensing requirements may carry CEU (Continuing Education Unit) credit, applicable to the standards of licensing agencies; these are particularly appropriate in fields such as law, medicine, nursing, accounting, and public service which require continuing participation in professional education.

Summer Sessions: University summer sessions are operated through University Extended Education, and offer courses for regular resident credit.

Special Programs: Additional special programs offered include such things as travel courses, teleconferences, lectures, and business and professional seminars. Such activities are ways the institution responds to regional needs, and University Extended Education actively seeks new opportunities to serve the community.

Contract Courses: Organizations planning continuing education courses using their own instructors can contract with University Extended Education to offer academic credit for these off-campus courses. Students who complete these courses are awarded extension credit for their work.

Contract Degree Programs: When a group or organization has a number of students interested in earning the same academic degree, the Division of Continuing and Extended Education can provide degree program course work at an off-campus location. By working in cooperation with a CSU Stanislaus academic department, Extended Education will schedule a full curriculum for students to earn either a bachelor's or master's degree. Each term regular University faculty travel to an offcampus location to teach courses. The convenience of this service can make earning a University degree available to working people who might not otherwise be able to travel to the campus classes.

## The Higher Education Consortium of Central California (HECCC)

The Higher Education Consortium of Central California (HECCC) was founded in 1980-81 as a distance learning consortium.

HECCC is a cooperative effort of CSU Stanislaus, Columbia College, Merced College, Modesto Junior College, and San Joaquin Delta College.

HECCC is governed by an Executive Committee, a President's Council, a Technical Committee (which works on technical and communications planning), and a Curriculum Committee (which fosters curricular coordination and integration). A half-time Executive Director coordinates the activities of HECCC.

The consortium's purpose is to foster curricular and other forms of educational cooperation - including library technology, articulation and transfer of students, and staff development - to provide greater service to over 1.2 million citizens of the University's 10,000 square mile service area. Cost effective services are particularly important because of increasingly limited fiscal resources.

## Admission to the University

CSU Stanislaus admits several categories of students: qualified high school graduates, transfer students from two-year colleges and four-year institutions, and those with baccalaureate degrees. Students may pursue specific course work and programs leading to baccalaureate degrees, advanced degrees, teaching and school service credentials, certificate programs, and professional degrees. Postbaccalaureate students also may be admitted for course work for personal or professional growth.

## Admissions Procedures and Policies

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

## Admission Reapplication Requirement

Most non-enrolled students who wish to register must first be admitted or readmitted to CSU Stanislaus. Beginning Fall Semester 1995, a former CSU Stanislaus undergraduate or postbaccalaureate student wanting to re-enroll at the University may register for courses without filing an application for readmission if both of the following apply: (1) the student was enrolled for residence credit course work after the Enrollment Census Date for a Fall or Winter or Spring term in the 12 months immediately preceding the start of the term of desired re-enrollment; and (2) the student has not enrolled at another college/university or graduated from CSU Stanislaus or another college/university since last enrolled at Stanislaus.

All other former students seeking enrollment must submit an application for readmission and pay a $\$ 55$ application fee. The Enrollment Census Date is defined as the 20th instructional day in Fall and Spring Semesters and the 6th day of instruction in Winter Term.

Applicants and re-applicants who file an admission application during a "Late Application" filing period will be assessed a $\$ 15$ Late Admission Application Fee in addition to the $\$ 55$ application fee.

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

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

## Undergraduate Application Procedures

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

## CSU Application Filing Periods

Term<br>Summer Quarter<br>Fall Terms<br>Winter Term<br>Spring Terms

Applications First Accepted<br>February 1<br>November 1<br>June 1<br>August 1

Student Notification Normally Begins<br>March<br>December<br>July<br>September

## Filing Period Duration

Each campus accepts applications until capacities are reached. Many campuses limit undergraduate admission in an enrollment category because of overall enrollment limits. If applying after the initial filing period, consult the campus admissions office for current information. A late filing fee may be charged.

## Application Acknowledgment

Applicants may expect an acknowledgment of application receipt from the first choice campus within two to four weeks of filing the application. A notice that space has been reserved will also include a request to submit the records necessary for the campus to evaluate academic qualifications. A student may be assured of admission if the evaluation of academic qualifications indicates completion of admission requirements. Such a notice is not transferable to another term or to another campus.

## Impacted Programs

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

The CSU will announce before the opening of the fall filing period which programs are impacted and the supplementary criteria campuses will use. That announcement will be published in the "CSU Review," distributed to high school and college counselors. Information about the supplementary criteria is also sent to program applicants.

An application for admission to an impacted program must be filed during the first month of the filing period. To be considered for impacted programs at two or more campuses, a student 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 freshmen eligibility index, the overall transfer grade-point average, and a combination of campus-developed criteria. If scores on either the SATI or the ACT are a requirement, the test should be taken no later than December if applying for the fall admission cycle (November, if applying to San Luis Obispo).

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 alternative major either at the first choice campus or another campus.

## Undergraduate Admission Requirements

## Test Requirements

Freshman and transfer applicants who have fewer than 56 semester (or 84 quarter units) of transferable college credit must submit scores, unless exempt, from either the Scholastic Assessment Test of the College Board (SATI) or the American College Test Program (ACT). (See Appendix A for appropriate Eligibility Index tables.) Test scores are also used for advising and placement purposes. Registration forms and dates for the SAT I or ACT are available from school or college counselors, or from a CSU campus testing office, or from:

The College Board (SAT I)
Registration Unit, Box 592
Princeton, New Jersey 08541
(609) 771-7588

Américan College Testing Program (ACT) Registration Unit, P.O. Box 168
Iowa City, Iowa 52240
(319) 337-1270

Special institutional administrations of the SAT I will be arranged for CSU Stanislaus applicants. Contact the University Testing Office, 667-3157, for additional information.

## Health Screening

All new and readmitted students, born after January 1, 1957, will be notified of the requirement to present proof of measles and rubella immunizations. This is not an admission requirement, but shall be required of students by the beginning of their second term of enrollment in the CSU. Proof of measles and rubella immunizations shall also be required for certain groups of enrolled students who have increased exposure to these diseases.

## Freshman Requirements

To qualify for regular admission as a first-time freshman an applicant must

1. be a high school graduate,
2. have a qualifiable eligibility index (see section below), and
3. have completed with grades of C - or better the courses in the comprehensive pattern of college preparatory subject requirements (see "Subject Requirements"). Courses must be completed prior to the first enrollment in the California State University.

## Eligibility Index

The eligibility index is the combination of a high school grade-point average and the score on either the American College Test (ACT) or the Scholastic Assessment Test (SATI). The grade-point average is based on grades earned during the final three years of high school (excluding physical education and military science) and bonus points for approved honors courses (see "Honors Courses"). The CSU may offer early, provisional admission based on course work completed through the junior year of high school and course work planned for the senior year.

The index can be calculated by multiplying the grade point average by 800 and adding the total score on the SAT I. Or multiply the grade point average by 200 and add ten times the ACT composite score. A California high school graduate (or a resident of California for tuition purposes), needs a minimum index of 2800 using the SAT I, or 694 using the ACT; the Eligibility Index Tables (reproduced as Appendix A) illustrate several combinations of required test scores and averages. Beginning April 1995, SAT I (re-centered) scores will increase the minimal eligibility index to 2900 for California residents.

An applicant who did not graduate from a California high school nor is a resident of California for tuition purposes, needs a minimum index of 3402 (SAT I) or 842 (ACT), or 3502 (SAT I re-centered).

Applicants with grade point averages above 3.00 ( 3.60 for nonresidents) who have satisfied all college preparatory subject requirements are exempt from the test requirements. However all applicants are urged to take the SAT I or ACT since all campuses use test results for advising and placement purposes.

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

## Honors Courses

Up to eight semesters of designated honors courses in approved subjects taken in the last two years of high school receive additional points in grade point average calculations. Each unit of A in approved courses will receive a total of 5 points; B, 4 points; C, 3 points; D, 1 point; and none for $F$ grades.

## Subject Requirements

The California State University requires that first-time freshman applicants complete, with grades of " $\mathrm{C}-$ " or better, the following comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school.

## English, 4 years;

Mathematics, 3 years: algebra, geometry, and intermediate algebra;
U.S. history (or U.S. history and government), 1 year;

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

## Subject Requirement Substitution for Students with Disabilities

Applicants with disabilities are encouraged to complete college preparatory course requirements if at all possible. If they are judged unable to fulfill a specific course requirement because of a disability, alternate college preparatory courses may be substituted for specific subject requirements. Substitutions may be authorized on an individual basis after review and recommendation by a department chair in consultation with the director of a CSU disabled student services program. Failure to complete courses required for admission may limit later enrollment in certain majors, particularly those involving mathematics. For further information and substitution forms, call the director of disabled student services at your nearest CSU campus. (Also refer to Appendixes L and M.)

## Foreign Language Subject Requirement

The foreign language subject requirement may be satisfied by applicants who demonstrate competence in a language other than English equivalent to or higher than expected of students who complete two years of foreign language study in the same language. Consult with your school counselor or any CSU campus admissions or relations with schools office for further information.

## High School Advanced Placement Program

The CSU Stanislaus Advanced Placement Program is intended to supplement the curriculum available to qualified high school students by opening university courses to them, providing these students a gradual transition to higher education. The program allows qualified students to enroll in any lower-division course on a spaceavailable basis, providing all course prerequisites are satisfied. See the appropriate section of the catalog regarding prerequisites for courses. Regular college credit will be awarded. Submission of a special application form each term is a prerequisite for continued enrollment. Advanced Placement applicants are not required to take the ACT or SAT. Students may not enroll through Extended Education without prior Admissions and Records Office approval. No admission application fee is required. Regular registration fees are required. Inquiries should be addressed to the Director of Admissions and Records, who is responsible for approving these applications.

## Provisional Admission

CSU Stanislaus may provisionally admit first-time freshman applicants based on their academic preparation through the junior year of high school and the program 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 graduation from high school.

## Honors at Entrance

Honors at Entrance is awarded to an admitted undergraduate student whose past record indicates promise of superior academic achievement at CSU Stanislaus. This award ranks equal to or greater than that of scholarships granted by the University and establishes an academic status equivalent to that of qualifying for the University's list of honor students.

## Admission as an Undergraduate Transfer

A transfer student who has a grade point average of $2.0(\mathrm{C})$ or better (nonresidents, 2.4 or better) in all transferable units attempted, is in good standing at the last college or university attended, and meets any of the following standards will qualify for admission:

1. Meets the freshman admission requirements in effect for the term of application (see "Freshman Requirements" section); or
2. Was eligible as a freshman at the time of high school graduation and has been in continuous attendance in an accredited college since high school graduation; or
3. Was eligible as a freshman at the time of high school graduation except for the subject requirements, has made up the missing subjects, and has been in continuous attendance in an accredited college since high school graduation; or
4. Has completed at least 56 transferable semester ( 84 quarter) units and meets the requirements listed below based on high school graduation date.
An applicant who graduated from high school 1988 or later:
a. Has completed all subject requirements in effect when graduating from high school (including high school and/or college course work), or,
b. Has completed at least 30 semester units of college course work 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 which 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,
c. Hasmet the Intersegmental General Education TransferCurriculum(IGETC) requirements in English communication and mathematical concepts and quantitative reasoning.
An applicant who graduated from high school prior to 1988:
a. Has completed 4 years of high school English and 2 years of high school math, with grades of "C-" or better, or,
b. Has completed baccalaureate courses with grades of " $\mathrm{C}-$ " or better in each course that meets the General Education requirements in communication in the English language and mathematics/quantitative reasoning, or,
c. Has met the IGETC requirements in English composition and mathematical concepts and quantitative reasoning.
Transferable courses are those designated for baccalaureate credit by the college or university offering the courses.

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

California residents who are military service personnel or veterans may be considered under special admission requirements. Undergraduate transfers over 25 years of age should refer to the "Adult Students" section of this catalog.

## International Student Admission Requirements

The CSU must assess the academic preparation of students from other countries. For this purpose, international students include immigrants and those who hold U.S. visas as students, exchange visitors, or in other non-immigrant classifications.

The CSU uses separate requirements and application filing dates in the admission of international students. Verification of English proficiency (see the section on TOEFL requirement for undergraduate applicants below), financial resources, and academic performance are all important considerations. 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.

## TOEFL Requirement (Undergraduate)

All undergraduate applicants, regardless of citizenship, who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction must present a score of 500 or above on the Test of English as a Foreign Language. Campuses may require a score higher than 500. CSU Stanislaus requires TOEFL part scores of at least 50.

When English language school enrollment in the United States is planned prior to arrival at CSU Stanislaus, an academically qualified international student may request the Admissions and Records Office to issue a conditional admission letter and/or INS I-20 Form for a future term. Regular admission is possible only after submission of satisfactory TOEFL scores and/or satisfactory completion of an approved advanced English language program.

## Insurance Requirement for International Student

Effective August 1, 1995, as a condition of receiving an I-20 or IAP-66 form, all $\mathrm{F}-1$ and $\mathrm{J}-1$ visa applicants must agree to obtain and maintain health insurance as a condition of registration and continued enrollment in the California State University. Such insurance must be in amounts as specified by the United States Information Agency (USIA) and NAFSA Association of International Educators. The campus president or designee shall determine which insurance policies meet these criteria. Further information may be obtained from the Student Health Center in the Health Center Building (209) 667-3396.

## Ineligible Undergraduates

Undergraduates not admissible under one of the above provisions should enroll in a two-year college or other appropriate institution, or consult the CSU Stanislaus Admissions and Records Office for advice regarding their situation. Only under the most unusual circumstances will such applicants be permitted to enroll in the University. Permission is granted only by special action and the number of exceptions is limited by law.

## 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 Director of Admissions and Records regarding hardship admission.

## Admission as a Postbaccalaureate or Graduate Student

See "Graduate Programs" section of this catalog.

## 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 all the following conditions are met:

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); and
2. Has not been enrolled in college as a full-time student for more than one term during the past five years; and
3. If there has been any college attendance, has earned a 2.0 (C) average or better in all attempted transferable course work.
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. A student should have completed the majority of high school college preparatory courses, or college remediation of these courses, and must demonstrate skills equivalent to eligible students to be admitted as an adult student. Appropriate college entrance examination scores must be submitted at the time of application.

## CSU Visitors Program

Any student entitled to continued enrollment at one of the other 21 campuses of The California State University system may enroll at CSU Stanislaus as a visiting student for a term by following a simplified application procedure. Concurrent enrollment at two CSU campuses may similarly be approved. Students at Stanislaus also may apply for visitor status at another CSU campus. CSU Visitor Status and Concurrent Enrollment application forms are available on request from the CSU Stanislaus Admissions and Records Office and must be completed and filed before instruction begins.

## Application Fee

A fee of fifty-five dollars (\$55) is charged for processing applications for admission to the University. This fee is nonrefundable and nontransferable to a different term. Late applicants will be charged a $\$ 15$ late fee. (See the Admission Reapplication Requirement section of this catalog.)

## CSU English Placement Test (EPT)

The CSU English Placement Test must be completed by all non-exempt undergraduates prior to placement in appropriate University English course work. Information bulletins and registration materials for the EPT will be mailed to all students subject to the requirement. The materials may also be obtained from the University Testing Office.

Purpose of the EPT: The EPT is designed to assess the level of reading and writing skills of entering lower-division students so they can be placed in appropriate courses. Those students who do not demonstrate college-level skills will be directed to courses or programs to correct identified deficiencies. ${ }^{2}$

[^2]30 / Admission to the University

## Who must take the EPT?

1. Unless you qualify for one of the EPT exceptions listed below, you are required to take the EPT before the end of your first semester at CSUS. Failure to satisfy this testing requirement before the end of your first semester of enrollment will result in a second semester registration hold. (See registration instructions section of the Schedule of Classes.) You must not register for General Education ENGL 1001 if your score on the EPT is not at least 149 unless you successfully complete an appropriate CSUS prebaccalaureate composition course.
2. If your score on the EPT is not at least 149, you must enroll in an appropriate course of remedial study which, upon completion, will allow enrollment in a required General Education English Composition course. (See course placement requirements below.)

## Exemption from the EPT requires one of the following:

- a score of 3,4 , or 5 on either the Language and Composition or the Composition and Literature examination of the College Board Advanced Placement Program; or
- a satisfactory score on the CSU English Equivalency Examination; or
- a score of 470 or above on the verbal section of the College Board Scholastic Aptitute Test ${ }^{3}$ (SAT-Verbal) taken prior to March 1994; or
- a score of 470 or above on the verbal section of the College Board Scholastic Assessment Test I: reasoning test taken between March 1994 and March 1995 (if taken after March 1995, the required score is 550); or
- a score of 600 or above on the College Board Achievement Test in English Composition ${ }^{3}$ with essay taken prior to January 1994; or
- a score of 600 or above on the College Board SAT II Writing Test taken between January 1994 and March 1995 (if taken after March 1995, the required score is 660); or
- a score of 22 or above on the ACT English Usage Test (taken prior to October 1989); or
- a score of 25 or above on the enhanced ACTEnglish Test (taken October 1989 or later); or
- for transfer students, completion and transfer to CSU Stanislaus of an acceptable baccalaureate level course in English composition for three semester units with a grade of "C-" or better; or
- placement by the CSUS English Department in ILE English or ESL course work.
The enrollment prerequisite for ENGL 1001, Freshman Composition, requires a total EPT score of 149 or better, successful completion of an appropriate prebaccalaureate composition course, or an approved exemption from the EPT.

Course Placement Requirements:
EPT Score Course No. Course Title
0-T148 English 0111 Writer's Workshop
T149-T150 English 1001 Freshman Composition (With Conditions) ${ }^{4}$
T151 and above English 1001 Freshman Composition (No Conditions)

[^3]
## CSU Entry-Level Mathematics (ELM) Test and Mathematics Competency for Graduation

The ELM examination tests for entry level mathematics skills acquired through three years of rigorous college preparatory mathematics course work (normally Algebra I, Algebra II, and Geometry). Information bulletins and registration materials for the ELM will be mailed to all students subject to the requirement. The materials may also be obtained from the University Testing Office. ${ }^{3}$

1. Unless you qualify for one of the ELM test exceptions listed below, you are required to take the ELM test before the end of your first semester at CSUS. Failure to satisfy this testing requirement before the end of your first semester of enrollment will result in a second semester registration hold. (See registration instructions section of the Schedule of Classes.) You may not enroll in any required General Education or other baccalaureate-level mathematics course until you have passed the ELM test or earned an exemption from taking it. (See ELM placement scores, below.)
2. If you take but do not pass the ELM test (and do not have an exemption from it), you are required to enroll in an appropriate course of remedial study culminating in the passing of MATH 0105, Intermediate Algebra, at CSUS or you must retake and pass the ELM test. If you pass MATH 0105 at CSUS you will be eligible to take a General Education mathematics course and will not have to take the ELM again.
3. You may satisfy the mathematics competency requirement for graduation by passing the ELM test or by passing MATH 0105 as specified above, or by passing with a "C-" grade or better, a mathematics course that satisfies the General Education Breadth Requirement in Quantitative Reasoning. ${ }^{6}$
Exemption from the ELM requires one of the following: ${ }^{7}$

- a score of 3 or above on the College Board Advanced Placement mathematics test ( AB or BC ); or
- a score of 560 or above on the mathematics section of the Scholastic Aptitude Test (SAT-Math) taken prior to March 1994; or
- a score of 560 or above on the math section of the College Board SAT I: Reasoning Test taken between March 1994 and March 1995 (if taken after March 1995, see footnote below); or
- a score of 560 or above on the College Board Math Achievement Test, Level I, II, or IIC (Calculator), taken prior to March 1994; or
- a score of 560 or above on the College Board SATII: Mathematics TestsLevel I, II, IIC (Calculator) taken between March 1994 and March 1995 (if taken after March 1995, see footnote below); or

[^4]- a score of 24 or above on the American College Test (ACT) Mathematics Test (taken prior to October 1989) or a score of 25 or above on the enhanced ACT Mathematics Test (taken October 1989 or later); or
- for transfer students, completion and transfer from another institution of a college level mathematics course that satisfies the General Education Breadth Requirement in Quantitative Reasoning with a grade of "C-" or better.


## Interpretation of ELM Scores for those who took the ELM Test After

 March, 1992:ELM Score ELM Placement
0-360 Enroll in MATH 0101, Pre-Algebra, or retake and pass the ELM
370-470 Enroll in MATH 0102, Elementary Algebra, or retake and pass the ELM
480-540 Enroll in MATH 0105, Intermediate Algebra, or retake and pass the ELM
550-700 You have passed the ELM

## Transcripts Required

Undergraduate applicants must request two sets of complete official transcripts from (1) the last high school they attended and (2) each college and university at which they registered. These should be sent directly to the Admissions and Records Office. Transcripts presented by students cannot be accepted unless they are presented in a sealed institutional envelope.

If applicable, General Educational Development (GED) examination results and California High School Proficiency Examination Certificates must be submitted in addition to available high school records.

No determination of admission eligibility will be made until all required transcripts have been received. Official transcripts must include a complete record of all previous high school and college work attempted whether or not the applicant desires credit. A separate official transcript is required from each college attended even though one transcript may show work completed at another college. All records submitted become the property of the University. Records submitted by students who do not enroll are retained for only one year.

## Applicants with Courses in Progress

Applicants who are in attendance at a school or college when transcripts are requested must file a transcript which includes verification of the subjects in which they are currently enrolled. After applicants have completed these subjects, they must notify the school or college to forward two supplementary transcripts showing the final grades for that term.

## Veterans

Veterans who desire to have their military records evaluated for possible credit toward a baccalaureate degree must file a copy of their separation papers (DD 214) or form DD 295 with their application. Prompt submission of these records is required if Veterans educational benefits are being requested.

## Returning Students

Former students of CSU Stanislaus who are returning after graduation or any absence are required to submit two copies of official and complete transcripts covering attendance at any other college after enrollment at Stanislaus. A former postbaccalaureate student who is not planning to complete the University's degree, credential, or certificate requirements need not submit additional transcripts.

## Summer Session and Extension Registrants

Students seeking to enroll for summer session or extension are not required to file official transčripts. Subsequent admission to the University's degree, credential, or certificate programs will require completion of regular admission procedures.

## Systemwide Tests Required of Most New Students

Failure to take the required English Placement Test (EPT) or Entry Level Mathematics Test (ELM) before the end of the first semester or second quarter of enrollment may lead to administrative probation, which according to Section 41300.1 of Title 5, California Code of Regulations, and CSU Executive Order 393, may lead to disqualification from future attendance.

## Intensive Learning Experience (ILE) Program

All first-time freshman students are automatically part of the Intensive Learning Experience program. Eligible students are identified by their SAT I scores ( 320 or lower in either the Verbal or Mathematics section) or by their scores on the EPT (141 or below) or ELM (360 or below). With SAT I (re-centered) scores, the cutoffs are 400 verbal and 370 mathematics. Students in the program receive reading/writing instruction in small classes ( $12-15$ students). Tutoring services are provided at no cost to the student in both mathematics and English. Students in the program also receive extra personal attention in order to enhance the possibility for a successful beginning to their University career. For more information, contact the ILE Director, (209) 6673361.

## English as a Second Language (ESL)

The English as a Second Language program is designed for those students in the University, both international and permanent residents, for whom English is not their native language. The three courses in the program provide intensive instruction, along with tutoring, in writing and reading. All courses in the program yield graduation credit. For further information contact the Department of English, (209) 667-3361.

## Graduation Requirement in Writing Proficiency

All students must demonstrate competency in writing skills as a requirement for graduation. (See "Upper Division Writing Proficiency" under "Undergraduate Degrees and Programs.") For further information, contact the WPST Coordinator, (209) 667-3247.

## Evaluation and Acceptance of Credit

The Admissions and Records Office will evaluate previous college work as it relates to the requirements of CSU Stanislaus. Each student seeking a degree will be issued an Evaluation of Transfer Credit which will serve as a basis for determining the remaining requirements for the student's specific objective. The evaluation remains valid as long as the student matriculates for the term specified, pursues the objective declared, and remains in continuous enrollment. The student will not be obligated to meet additional graduation requirements unless such requirements become mandatory as aresult of changes in the California Code of Regulations. (See "Catalog Year for Graduation Requirements" under "General Requirements for a Degree.")

Because of these regulations, a student should notify the Admissions and Records Office of any change in degree objective specified on a transfer credit evaluation. (See "Declaration or Change of Degree Objectives.")

While students may follow the specific catalog year academic requirements on which their transfer credit evaluation is based, they will be held responsible for complying with all changes in other regulations, policies, and procedures which may appear in subsequent catalogs.

## Advanced Placement, International Baccalaureate, Credit by Examination, and Challenge Examinations

CSU Stanislaus grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Students who present scores of three or better will be granted up to six semester units (nine quarter units) of college credit. See Appendix N "College Board Advanced Placement Examination Policy."

CSU Stanislaus grants credit to those students who pass examinations that have been approved for credit systemwide. These include the Advanced Placement Examinations, International Baccalaureate Examinations, CSUEnglish Equivalency Examination, and some College Level Examination Program (CLEP) examinations.

Students may challenge courses by taking examinations developed at the campus. Credit shall be awarded to those who successfully pass challenge examinations.

Contact the Admissions and Records Office (667-3264) for current credit-byexamination information. See the "Policies and Procedures" section of this catalog for additional information on challenge examinations.

Course credit earned through the University's on-campus Advanced Placement Program for High School Students or from early entrance programs at other colleges will be recognized by Stanislaus as regular credit. (See "Undergraduate Admission Requirements.")

## International Baccalaureate Credit

1. International Baccalaureate examination results must be sent directly to the Admissions and Records office for credit consideration.
2. Higher Level International Baccalaureate courses on the UC "A-F" college preparatory lists are considered Honors courses and for admission purposes carry an extra grade point for $\mathrm{A}, \mathrm{B}$, or C grades. Additional honor grade points cannot be included if it raises the grade point average above a 4.00 . Honor points are only
calculated for grades eleven and twelve and are limited to a maximum of eight semester courses.
3. A student who has earned the International Baccalaureate diploma (not the certificate) will be eligible for ádmission as a first-time freshman.
4. College credit will not be allowed for subsidiary level examinations.
5. Six units of ungraded advanced standing credit will be allowed for any higher level examination passed with a score of 4 or higher.

## Transfer of Credit from a Community College

Transferable courses are defined as those officially certified as baccalaureate level by the regionally accredited college at which the courses were taken. No upperdivision credit may be allowed from a two-year college, nor may credit be allowed for professional courses in education.

The University accepts up to a maximum of 70 semester units of credit from twoyear colleges. Additional lower-division courses may be taken at the university for full credit, even after 70 units have been earned. Admission to the University as an upper-division student may be allowed even if all General Education requirements have not been completed. Because a minimum of two years of upper-division study is required for graduation, it is advisable to transfer as soon as possible after completion of 56 transferable units.

## Credit for Noncollegiate Instruction

CSU Stanislaus grants undergraduate degree credit for successful completion of noncollegiate instruction, either military or civilian, appropriate to the baccalaureate, that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. The number of units allowed are those recommended in the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs.

Credit allowed for such instruction will be designated as provisional. Regular credit may be granted upon adviser recommendation, departmental endorsement, and completion of 24 semester units at CSU Stanislaus with a 2.0 (C) grade point average or better.

## Course Work Completed Ten Years Before Enrollment

Course work completed ten years before enrollment at CSU Stanislaus is designated provisional credit primarily to alert the student and academic adviser that course scheduling adjustments may be warranted. Regular credit for this course work will be allowed based on adviser recommendation after satisfactory completion of 24 units at the University.

## Credit for Extension and Correspondence Courses

The maximum credit for correspondence and extension courses which may be allowed toward the bachelor's degree is 24 semester units.

## Workshop Credit

Workshop credit does not substitute for course credit in acredential sequence and will not be applied toward the General Education, major, or minor degree requirements of the University. Such credit may be applied toward a bachelor's degree only as elective units. Workshops (formerly numbered 4920 to 4929) at CSU Stanislaus are open to both undergraduate and postbaccalaureate students.

## Veterans Services

Veterans should contact the Department of Veterans Affairs to ascertain their eligibility under the various assistance programs.

California veterans or dependents of veterans should contact the California Department of Veterans Affairs for information regarding VA or Cal-Vet benefits, application procedures, or other related services.

The Veterans Office, Library 110, (209) 667-3081, offers assistance in securing veterans benefits, solving transition problems and procedures when first enrolling at the University, obtaining tutoring, and handling financial problems. Information and referral services are provided for a wide range of other veteran-related needs.

## Educational Assistance for Veterans

Applications for VA and Cal-Vet educational benefits must be made through the Veterans Office. The Veterans Office forwards all applications and necessary VA forms to the Department of Veterans Affairs for final claim determination. Please note unit load requirements below.

## Unit Load Requirements

For veterans and eligible dependents, all undergraduates are classified as full- or part-time according to the unit totals listed below:

| Classification | Fall/Spring Units | Winter Units |
| :---: | :---: | :---: |
| Full-time | 11.0 or more | 4.0 or more |
| $3 / 4$ | $8.0-10.5$ | $2.0-2.5$ |
| $1 / 2$ | $6.0-7.5$ | 1.5 |

Postbaccalaureate students are classified as full- or part-time according to the unit totals listed below:

| Classification | Fall/Spring Units | Winter Units |
| :---: | :---: | :---: |
| Full-time | 7.0 or more | 2.0 or more |
| $3 / 4$ | $5.5-6.5$ | NA |
| $1 / 2$ | $4.0-5.0$ | NA |

## Servicemembers Opportunity Colleges

California State University, Stanislaus is a member of Servicemembers Opportunity Colleges (SOC), a group of over 400 colleges and universities providing postsecondary education tomembers of the military throughout the world. As an SOC member, CSU Stanislaus carefully evaluates and assigns credit for course work undertaken through each of the armed services, the Office of the Secretary of Defense, and a consortium of thirteen leading national higher education associations.

## Credit for Military Service

Undergraduate students who have completed basic training and one year of active duty military service will receive six semester units of credit toward admission. Four semester units of credit will be allowed to active duty reservists, or for less than one year of active service. Of this credit, two units of Health and one unit of Physical Education Activity will be awarded in G.E. Area E.

Courses taken at military service schools, if appropriate for a baccalaureate degree, may also yield credit. Students seeking Veterans educational benefits are required to promptly submit all military records pertaining to training and experi-
ence. Separation papers (DD 214) or form DD 295 and appropriate military community college transcripts verifying such experience must be filed with the Admissions and Records Office before credit will be allowed.

For veterans not requesting benefits, submission of these records is optional.

## Preparation for Preprofessional Studies

The plan of undergraduate study of CSU Stanislaus emphasizes a liberal education in preparing for professional or vocational specialization. Students preparing for a professional specialization have opportunities to do so by selecting, in consultation with an appropriate preprofessional adviser, the kind of curriculum that best meets the requirements set by the profession they wish to enter.

## Premedical and Health Professions Committee

The majority of students entering medical and dental schools in the United States do so after acquiring a B.A. or B.S. degree at an undergraduate college. Possession of an undergraduate degree is especially worthwhile, since professional schools do not offer liberal arts subjects.

Students enrolled at CSU Stanislaus may prepare for admission to professional schools in medicine, veterinary medicine, dentistry, pharmacy, optometry, and other health professions such as physical therapy. With the appropriate selection of courses, they may also qualify to apply for training in a medical laboratory and become certified medical laboratory technicians. The University offers pre-professional course work for areas such as laboratory technology, cytotechnology, nursing, and other paramedical and health-related fields. Preprofessional Studies information should be obtained from the appropriate department.

The Premedical and Health Professions Committee has been established to organize programs of study qualifying students for admission to professional schools. Students should register with the Committee as soon as possible by contacting the Committee Chair James C. Hanson (209) 667-3476. A Committee member will prepare a suggested basic program of courses to supplement the curriculum outlined by the major adviser.

Most undergraduate, majors are appropriate for a preprofessional student as long as certain basic subject areas are included in the program. For specific professional school requirements, refer to special sources such as "Medical School Admissions Requirements" (a publication of the Association of American Medical Colleges), and consult with the Committee.

The Committee will compile data on each student and prepare a letter of evaluation to be sent at the student's request in support of applications to professional schools. It is important to contact the Committee as soon as possible (preferably before interview with the major adviser) so the student can be advised properly. Registration with the Committee does not commit the student to any particular program or career.

Students especially interested in the areas of medicine, pharmacy, optometry, dentistry, and veterinary medicine are advised to complete, as a minimum, one-year sequences in English composition, biological sciences (ZOOL 1050 and BOTY 1050), chemistry (CHEM 1100, 1110), and physics (PHYS 2100, 2110), during their freshman and sophomore years. Mathematics to the level of precalculus (MATH 1100 ) should be attained by this time. Normally dental and medical school admission
tests are taken in the spring of the junior year with the following additional preparation completed or in progress: CHEM 3010/3030, 3020/3040; and either ZOOL 3130, 3150 or BIOL 3310. MATH 1410 or 1910 is encouraged as preparation for these examinations also.

Additional recommendations will be provided through advisement from the Premedical and Health Professions Committee and the major adviser.

AMCAS (American Medical College Application Service), MCAT (Medical College Admission Test), DAT (Dental Admission Test), OAT (Optometry Admission Test), and VAT (Veterinary Admission Test) application forms, packets and information are available through the Committee.

## Preprofessional Law Program

Applicants for admission to most law schools are expected to have a B.A. or B.S. degree and to have taken the Law School Admission Test. No single "prelaw" major is required, or in most instances recommended, since the successful study of law is more often related to the ability to grasp and solve difficult analytical problems and to employ disciplined work habits than the mastery of any particular field of study.

Several broad objectives of prelegal education are set forth by the Association of American Law Schools. These include the oral and written command of language; an understanding and appreciation of social, political, and economic values, institutions, problems, and frames of reference; and an ability for creative, innovative, critical, and analytical thinking.

Since no one major is mandatory, the student should select one which emphasizes the areas mentioned above. English, economics, history, philosophy, political science, sociology, and social sciences are particularly appropriate majors. In addition, the student should consult with the prelaw adviser in the Politics and Public Administration Department.

For additional information, see the bulletins or catalogs of various law schools or the Official Guide to U. S. Law Schools, current edition, prepared by the Law School Admission Council and the Association of American Law Schools. This handbook may be obtained at most university bookstores or ordered from Law Services, Newtown, PA 08541. Also, consult adviser John T. Wold, (209) 667-3388.

## Internships

Many academic departments at CSU Stanislaus offer internship opportunities to undergraduate and graduate students. Placements in a variety of private, non-profit, and public agencies are designed to encourage both pre-professional training and the integration of field and classroom experiences. Students should contact their academic advisers for additional information.

## Cooperative Education Program

Cooperative Education at California State University, Stanislaus provides students with paid work experiences directly related to their major field of study and career objectives. Sophomores, juniors, and seniors with a GPA of at least 2.3 may be placed either in "alternating" assignments where they work full-time for a semester while enrolled for academic credit, or in "parallel" assignments where they work parttime and attend school concurrently. These job placements are coordinated by University faculty. Up to eight hours of academic credit earned through Co-op courses may be applied to graduation requirements.

Co-op students thus have opportunities to gain practical experience which complements their academic study and permits them to explore actual career options before graduation. In these assignments co-op students earn competitive income and often are subsequently hired full-time by their employers. Placement of students in Cooperative Education appointments is the responsibility of the appropriate department through which the student registers for Cooperative Education credits.

## Registration and Enrollment in Courses

Registration is the final step in the matriculation process. The Schedule of Classes listing courses offered is available before the academic advising period for each term. Once admitted to CSU Stanislaus, a student must be advised to receive guidance on course selection. In order to receive advising, the student may: (a) schedule an appointment with the major department to meet with an academic adviser or (b) attend a new student orientation session for a more comprehensive introduction to the University. Participation in New Student Orientation is strongly recommended. Contact the Academic Advising Center at (209) 667-3304 for additional information.

Students who register late may find themselves handicapped in arranging their programs. Those who register after classes begin for a term must pay a $\$ 25$ late registration fee, as required by State law.

If a student unofficially drops a course or leaves CSU Stanislaus without officially dropping courses or withdrawing from the University through the Admissions \& Records Office, the student may receive grades of U, F, or NC. If a student attends a course without officially adding it through the Admissions \& Records Office by the last day to add a course, the student will not receive credit for the course.

Students who do not attend the first class meeting after registering for a course may be dropped from the course by the instructor. However, a student will be held personally responsible for timely dropping unwanted courses through the Admissions \& Records Office. (Refer to the section on "Instructor Disenrollment Privilege.")

## California Articulation Number

The California Articulation Number (CAN) System identifies some of the lowerdivision transferable, introductory courses commonly taught within each academic discipline on college campuses.

The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus. Example: CAN ECON 2 on one campus will be acceptable for CAN ECON 2 on another participating campus. Each campus retains its own numbering system.

Although the system is in the development stage, it is expected that most campuses throughout the State will qualify to participate and use CANs. Check with the University Articulation Officer, 667-3081, for lists of participating campuses and courses.

The California Articulation Numbers are listed parenthetically by the course description in this catalog. At present, the following are CSU Stanislaus qualifying courses:

| CAN | CSUS | CAN | CSUS |
| :--- | :--- | :--- | :--- |
| COURSE | COURSE | COURSE | COURSE |
| AJ 2 | CJ 2250 | GEOL 2 | GEOL 2100 |
| AJ 4 | CJ 2280 | GEOL 4 | GEOL 2200 |
| AJ 6 | CJ 2260 | GOVT 2 | PSCI 1201 |
| AJ 8 | CJ 2270 | JOUR 2 | JOUR 2150 |
| ANTH 2 | ANTH 2080 | JOUR 4 | COMM 2200 |
| ANTH 4 | ANTH 2060 | MATH 2 | MATH 1000 |
| ANTH 6 | ANTH 2090 | MATH 4 | MATH 1030 |
| ART 2 | ART 2515 | MATH 16 | MATH 1100 |
| ART 4 | ART 2520 | MATH 18 | MATH 1410 |
| ART 6 | ART 1340 | MATH 20 | MATH 1420 |
| ART 8 | ART 1010 | MATH 22 | MATH 2410 |
| ART 14 | ART 1100 | MATH 26 | MATH 2510 |
| ART 16 | ART 1200 | MATH 30 | MATH 1910 |
| BIOL 4 | ZOOL 1050 | PHIL 2 | PHIL 1010 |
| BIOL 6 | BOTY 1050 | PHIL 4 | PHIL 2400 |
| BIOL 10 | ZOOL 2250 | PHYS 2 | PHYS 2100 |
| BUS 2 | ACC 2110 | PHYS 4 | PHYS 2110 |
| BUS 4 | ACC 2130 | PHY 2250 \& 252 |  |
| CHEM 2 | CHEM 1100 | PHYS 8 | PHYS 2260 \& 2262 |
| CHEM 4 | CHEM 1110 | PHYS 12 | PHYS 2270 \& 2272 |
| CHEM 12 | CHEM 2010 | PHYS 14 | PHYS 2270 |
| CSCI 8 | CIS 2010 | PSY 2 | PSYC 2010 |
| CSCI 10 | CS 2700 | SOC | SOC 1010 |
| ECON 2 | ECON 2500 | SOC 2 | SOC |
| ECON 4 | ECON 2510 | SPCH 4 | COMM 2000 |
| ENGL 2 | ENGL 1001 | STAT 2 | MATH 1600 |
| GEOG 2 | GEOG 2010 |  |  |

## Registration and Other Fees

A $\$ 55.00$ nonrefundable and nontransferable application fee is payable by check or money order at the time application for admission is made. Most non-enrolled students who wish to register must first be admitted or readmitted to CSU Stanislaus. Beginning Fall Semester 1995, a former CSU Stanislaus undergraduate or postbaccalaureate student who is re-enrolling at the University may register for courses without submitting an application for readmission if both of the following apply:

1. The student was enrolled for residence credit course work after the Enrollment Census Date for a Fall or Winter or Spring term in the 12 months immediately preceding the start of the re-enroilment term desired; and
2. The student has not enrolled at another college or university or graduated from CSU Stanislaus or another college or university since last enrolled at CSU Stanislaus.
Registration fees are payable at the time of registration. Students will be held to their feee status as of Enrollment Census Date. The following schedule reflects applicable fees and tuition at the time of publication of this catalog.

## Schedule of Fees

| Subject to change without notice | SUMMER <br> (4) | FALL | WINTER | SPRING |
| :---: | :---: | :---: | :---: | :---: |
| REGISTRATION FEES: |  |  |  |  |
| Instructionally Related Activity (1) | \$0.00 | \$18.00 | \$4.00 | \$18.00 |
| Heath Facility | 0.00 | 2.50 | 1.00 | 2.50 |
| University Union | 12.00 | 42.00 | 6.00 | 42.00 |
| Assoclated Students | 2.00 | 21.00 | 3.00 | 21.00 |
| Health Services | 0.00 | 60.00 | 20.00 | 60.00 |
| State University Fee > 6 UNITS (Regular) | N/ | 720.00 | 144.00 | 720.00 |
| Stato University Foe $<=6$ UNITS (Limited) | $N /$ | 38700 | 144.00 | 387.00 |
| Registration Foes-Total $>6$ units | Varies | \$863.50 | \$178.00 | \$863.50 |
| Registration Fees-Total < 6 units | Varies | \$530.50 | \$178.00 | \$530.50 |
| Duplicate Degree Tuition per unit (2) | $N / A^{*}$ | 150.00 | 150.00 | 150.00 |
| Non-resident Tuition per unit (3) | N/A | 246.00 | 246.00 | 246.00 |
| Non-resident Installment Finance Charge | N/A | 15.00\% | 15.00\% | 15.00\% |
| Missed Registration Fee Payment Deadline (non-rafundable) | N/A | 25.00 | 25.00 | 25.00 |
| Late Registration (non-rofundable) | 25.00 | 25.00 | 25.00 | 25.00 |

(t) Approved by the Associated Students, a referendum increased the Instuctionally Related Activity Fee to \$4Oyear from $\$ 20$, year.
(2) Duplicate degree tuition is \$150 per unit in place of the State University Fee. Students subject to DDT must also pay all other campus registration fees.
(3) Non-resident tultion is $\$ 246$ per unit in addition to the above registration fees.
(4) University Extended Education summer school fees vary by class.

OTHER FEES:

| Retumed NSF Check (non-refundable) | 20.00 | 20.00 | 20.00 | 20.00 |
| :---: | :---: | :---: | :---: | :---: |
| Student ID Card (new or replacement) | 5.00 | 5.00 | 5.00 | 5.00 |
| Parking (optional) Autos | 36.00 | 43.00 | 22.00 | 43.00 |
| Parking (optional) Motorcycles | 9.00 | 10.75 | 5.50 | 10.75 |
| Parking - daily | 1.50 | 1.50 | 1.50 | 1.50 |
| Parking Decal Hanger | 1.00 | 1.00 | 1.00 | 1.00 |
| Parking Decal Roplacement | 15.00 | 15.00 | 15.00 | 15.00 |
| Fingerprints | 8.00 | 8.00 | 8.00 | 8.00 |
| Admission Application (non-rafundable) | 0.00 | 55.00 | 55.00 | 55.00 |
| Late Admission Application | N/A | 15.00 | 15.00 | 15.00 |
| Transcripts - first copy | 4.00 | 4.00 | 4.00 | 4.00 |
| additional coples procossed at same time | 2.00 | 2.00 | 2.00 | 2.00 |
| Priority Processing of Transcript Request |  |  |  |  |
| or Enrollment Certification | 10.00 | 10.00 | 10.00 | 10.00 |
| Verification of Enrollment or Degree | 5.00 | 5.00 | 5.00 | 5.00 |
| Graduation Application $\frac{1}{}$ Diploma | 25.00 | 25.00 | 25.00 | 25.00 |
| Reapplication for Graduation | 10.00 | 10.00 | 10.00 | 10.00 |
| Priority Processing Graduation Clearance | 10.00 | 10.00 | 10.00 | 10.00 |
| Revised Graduation Evaluation Contract | 10.00 | 10.00 | 10.00 | 10.00 |

42 / Fees and Financial Aid

| Petition of Univ. Deadine/Requirement | 10.00 | 10.00 | 10.00 | 10.00 |
| :---: | :---: | :---: | :---: | :---: |
| Document Replacement | 5.00 | 5.00 | 5.00 | 5.00 |
| Challenge Exam per unit, maximum $\$ 10$ |  |  |  |  |
| per exam | NA | 3.00 | 3.00 | 3.00 |
| Writing Proficiency Screening Test (WPST) |  | 25.00 | 25.00 | 25.00 |
| Credontial Program Application Evaluation |  | 25.00 | 25.00 | 25.00 |
| music: |  |  |  |  |
| Instrument rental (per year) |  | 20.00 | 20.00 | 20.00 |
| Locker (per year) |  | 5.00 | 5.00 | 5.00 |
| UBRARY: |  |  |  |  |
| Overdue book(s) or materials | Fine | Fine | Fins | Fine |
| Lost or damaged book(s) or materials | Cost +56.00 | Cost+\$6.00 | Cost+\$6.00 | Cost $\$ \$ 6.00$ |
| HEALTH CENTER SERVICES: | Closed | Various \$ | Varlous \$ | Various \$ |
| Dopatment of Motor Vehicles |  | 25.00 | 25.00 | 25.00 |
| Child Dovelopment |  | 10.00 | 10.00 | 10.00 |
| Gyn-annual |  | 20.00 | 20.00 | 20.00 |
| Comprehensive |  | 25.00 | 25.00 | 25.00 |
| Routine |  | 25.00 | 25.00 | 25.00 |
| Sport |  | 10.00 | 10.00 | 10.00 |
| HOUSING: |  | + 200.00 |  |  |
| Rent daposit | 0.00 | 200.00 | 200.00 | 200.00 |
| Board daposit | 0.00 | 0.00 | 0.00 | 0.00 |
| Security dopost | 100.00 | 100.00 | 100.00 | 100.00 |
| Appllcatton (non-retundable) | 40.00 | 40.00 | 40.00 | 40.00 |

FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE ANINCREASE IN THE ABOVE FEE SCHEDULE IS POSSIBLE, INCLUDINGA GMADUATEPOSTEACCALAUAEATE STUDENTOIFFERENTLALOF SMOREGULARAND S54 LIMTED REGISTRATION FEE STATUS, PENDING APPAOVAL BY THE CALIFORNIA STATE LEGISLATURE.

Duplicate Degree Tuition for Postbaccalaureate Students
The California State University is required by law to charge Duplicate Degree Tuition (DDT) to any student who has earned a degree equivalent to or higher than the degree awarded by the program in which the student is enrolled or who has earned a baccalaureate or postbaccalaureate degree and is enrolled without a declared degree objective. DDT applies to students eaming a second baccalaureate or second master's degree. This fee is charged in the place of the State University fee.

Submission of an Affidavit of Eligibility may exempt from DDT, for a specific term the following categories of students:

1. A dislocated worker as certified by a state agency in accordance with Title 3 of the Federal Job Training Partnership Act.
2. A displaced homemaker as defined in accordance with the Higher Education Act of 1965, as amended ( 20 USC 1001 et seq.).
3. A person who is an enrollee in any program leading to a credential or certificate that has been approved by the Commission on Teacher Credentialing.
4. A recipient of benefits under the Aid to Families with Dependent Children program, the Supplementary Security Income of State Supplementary Program, or a general assistance program.
5. A nonresident student except those for whom nonresident tuition has been waived.
6. A California resident who is sixty years of age or older and approved for the Senior Scholars Program.
7. Children and dependents of deceased or disabled veterans.
8. Children of deceased law enforcement or fire suppression employees.
9. Approved CSU employees or their dependents.

DDT tuition and fees for Fall and Spring semesters are $\$ 131.00$ plus $\$ 150.00$ per unit. DDT tuition fees for Winter term are $\$ 29.00$ plus $\$ 150.00$ per unit.

Postbaccalaureate students may consult the Graduate Studies Office, (209) 6673129 , regarding program enrollment status, change of educational objective, and DDT exemptions.

## Nonresident Tuition

The nonresident tuition fee is payable by all students who have not been legal residents of the State of California for at least one year immediately preceding the residence determination date.

Tuition payable by nonresident and foreign visa students is in addition to fees required of residence students, except for enrollment in extension or summer session. Questions regarding residency classification for admission eligibility and tuition purposes should be directed to the Residency Clerk in the Admissions and Records Office.

Initial determination of residence status is made by the University officials prior to or at the time of registration, and fees must be paid at registration. Full refund of nonresident fees paid will be made if final determination by the University legal adviser indicates that a student is a legal resident for fee purposes..

For more detailed information on residency determination and exceptions to tuition, refer to "Determination of Residence," Appendix C.

No fees of any kind shall be required of or collected from those individuals who qualify for such exemption under the provisions of the Alan Pattee Scholarship Act.

## Refund of Fees

Details concerning fees which may be refunded, the circumstances under which fees may be refunded, and the appropriate procedure to be followed in seeking refunds may be obtained by consulting Section 42201 (parking fees), 41913 (nonresident tuition), 42019 (housing charges), and 41802 (all other fees) of Title 5, California Code of Regulations. In all cases it is important to act quickly in applying for a refund. Information concerning any aspect of the refund of fees may be obtained from the Senior Director of Fiscal Affairs, (209) 667-3241. (See also "Refund Regulations," Appendix E.)

## Debts Owed to the Institution

Should a student or former student fail to pay a debt owed to the institution, the institution may withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt until the debt is paid (see Sections 42380 and 42381 of Title 5, California Code of Regulations). For example, the institution may withhold permission to receive official transcripts of grades from any person owing a debt. If a student believes that he or she does not owe all or part of an unpaid obligation, the student should contact the campus Administrative Services office. The Administrative Services office, or another office on campus to which the student may be referred by the Administrative Services office, will review the pertinent information, including information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

## Financial Aid

The Financial Aid Office, Library Building Room 110, (209) 667-3336, administers federal and State financial aid programs available to help students meet their educational expenses. New students should review the Financial Aid information contained in the CSU Admission Application booklet. All applicants must complete the Free Application for Federal Student Aid (FAFSA) which may be obtained from high school counselors and college financial aid offices. Upon receipt of the FAFSA, the Financial Aid Office may request additional information. Application deadlines are observed, and students are encouraged to complete their applications as soon as possible, since funds are limited. Students interested in more information regarding financial aid programs or application procedures should inquire directly to the Financial Aid Office.

## Financial Aid Programs Available to Qualified Students

## Federal Pell Grant

The Pell Grant Program is a federally funded program available to qualified undergraduate students. These grants are designed to be the base award in a student's financial aid package to which other funds may be added according to total eligibility.

## Federal Supplemental Educational Opportunity Grant (SEOG)

These awards are federally funded and are granted to undergraduate students who demonstrate the greatest financial need.

## State University Grant

These State-funded awards cover a portion of the fees paid by eligible undergraduate and graduate students who are California residents.

## State Educational Opportunity Program Grant

Students who are admitted to the University through the Educational Opportunity Program and have financial need may be funded under this State program.

## Federal Work Study Program

Eligible students may be able to work on or off campus to earn all or a portion of their financial aid awards.

## Federal Perkins Loan (formerly National Direct Student Loan: NDSL)

The Perkins Loan is a federal program providing long-term, low-interest loans in amounts governed by established eligibility and availability of funds. Five percent simple interest is charged and repayment begins six months after the date the borrower ceases to maintain at least halftime enrollment. In some cases deferment of payment or full cancellation of the loan and interest may be possible.

## Federal Stafford Loan (formerly California Guaranteed Student Loan Program: CGSLP)

Loans are made available to students through private lending institutions such as banks, savings and loans, or credit unions. Repayment of loans and variable simple interest is deferred until six months after the date the borrower ceases to maintain at least halftime enrollment. Further information and application materials are available at the Financial Aid Office.

## Federal Parent Loan for Undergraduate Students (PLUS)

Loans are made through private lenders to parents ${ }^{*}$ of dependent undergraduate students. Repayment of loans at a variable simple interest begins immediately upon disbursement of funds. Further information and application materials are available at the Financial Aid Office.

## Scholarships

On-campus scholarship funds are provided through the generosity of individual donors and private agencies or corporations. The funds are generally awarded on the basis of demonstrated academic excellence. Some of these awards are limited to students in particular majors, community college transfers, or students entering directly from high school. Additional information on scholarship availability may be obtained at the Financial Aid Office.

## Student Assistant Work Program

This work program is funded through the State budget and is administered by the various academic departments on campus.

## Short-Term Loan Fund

Short-term loans to meet educational expenses are available to enrolled students. A maximum of $\$ 200$ may be borrowed with repayment in sixty days.

## Alan Pattee Scholarships

Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties are not charged fees or tuition of any kind at any California State University campus, according to the Alan Pattee Scholarship Act, California Education Code Section 68121. Students qualifying for these benefits are known as Alan Pattee scholars. For further information contact the Student Accounts Receivable Section of the State Accounting Office, (209) 667-3007.

## Student Affairs

The University provides services to address the student's need for support services and educational, social, cultural, and recreational activities. A fuller description of services may be obtained from the offices listed below.

## Retention Services

## Academic Advising

Classroom Building 116, (209) 667-3304
Once admitted to the University, students may obtain an assigned faculty adviser by visiting their major department. Students who have not declared majors receive advisement from the Academic Advising Center. If you are uncertain about choice of major or vocational goals, please seek assistance from your faculty adviser or the Counseling/Career Development Center.

Although advisers can assist you in planning your entire educational program, you are responsible for meeting all course prerequisites and all requirements for your degree, or credential. Specific days for programmatic advising are designated each semester in the Academic Calendar to provide a time for you to consult with your adviser. In addition, you may make appointments throughout the academic year to discuss your educational progress and goals.

## Orientation Programs

Entering students are invited to attend one of the University's New Student Orientations. Held throughout the year, these all-day programs provide a warm welcome and the opportunity to be advised by knowledgeable University faculty members. The orientations also give freshmen and transfers the chance to meet friendly upperclassmen, to tour the campus, and to find out about the many services, activities, and special programs available to Stanislaus students. Contact the Academic Advising Center for more information.

## Adult Reentry Programs

Classroom Building 116A, (209) 667-3304
These programs are established for adults who have deferred their formal education for five years ormore and wish to return to school. Adult reentry provides a variety of services including: orientation to the university environment, pre-admission academic advising and assessment, assistance with admission procedures, and continuing support and encouragement. The Senior Scholar Program grants a fee reduction to reentry students over the age of 60 . (See the Adult Students section under Admission to the University.)

## Counseling/Career Development/

Academic Support Services Center
Student Services Building 113, (209) 667-3381

## Career Development Programs

Because a career decision requires considerable time and effort, all students (not just upper division students) are encouraged to use the services available through the

Counseling/Career Development Center. Counselors employ a variety of tools, including interest inventories and ability and personality tests, to assist students in relating their educational backgroụ̂hd and personal skịlls and values to career and life goals. Services include:

## Career Counseling

Trained professionals help students develop complementary life/work goals. In conjunction with a counselor, students can develop effective job search techniques, identify career interests, and acquire important information abouthow these principles relate to the world of work.

## Career Information Library

The library contains a rich assortment of occupational literature, corporate information, videotapes of career options, job search techniques, and interview skills. Listings of job openings are updated daily to provide current information about career opportunities. Another source of information about current job openings is the bulletin board next to the Student Employment Service Office (Student Services Building 113).

## Career Workshops

During the Fall and Spring semesters, counselors conduct ongoing, weekly career workshops through the Counseling/Career Development Center. Workshop topics include: "Effective Job Search Techniques," "Resume Writing," "Developing Interview Skills," and "Career Interest Workshops."

## Career Days

Throughout the academic year, speakers from a variety of career areas meet with students to describe their fields. These representatives describe education, compensation, duties, methods of entering the field, advancement opportunities, and answer questions students have regarding their career.

## Career Fair/Teacher Fair/Summer Job Fair

In late April, representatives from companies and public agencies visit the campus to describe full-time career employment and summer employment opportunities. The vent is held in the CSUS Quad Area from 10:00 a.m. to 1:00 p.m. Check with the Counseling/Career Development Center for the exact date. A special workshop entitled, "How to Find a Summer Job" is offered through the Center during the Spring semester.

## On-Campus Job Recruitment

During the Fall and Spring semesters, employers representing business, education, public agencies, graduate programs, and the military interview seniors and graduate students on campus. Employers also provide one-hour information sessions which are open to all students.

## Guidance Information System

The GIS is a computer-based system which provides information about occupations, four-year colleges, graduate schools, and sources of scholarships and financial aid. It provides information which can help students make better decisions about the education required for occupations and/or graduate schools.

## Pathfinders

Pathfinders are alumni and friends of CSU Stanislaus who help students explore specific career fields. They host student visits at their places of employment, allow students to observe work activities, and share information to help serious students improve their knowledge of specific occupations.

## Placement File

The placement file is a compilation of material defining a student's personal, educational and employment background. The file includes evaluations of the candidate(recommendations) by former professors and/or employers. Placement files are initiated and compiled by students during the senior year or by graduate and credential candidates within a year of completing their programs.

## Student Employment Service

The Student Employment Service (SES) refers students to part-time and temporary employment on campus. Interested students must complete an application and receive assistance from the Student Employment Specialist. Off-campus position announcements are posted on a job board in the Student Service Building. Off-campus listings may be viewed on a self-serve basis.

## Career Placement Information

The Career Development Center may furnish, upon request, information about 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 salaries 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.

## Counseling Programs

## Personal Growth Presentations

This series of workshops assists members of the campus community with personal, career, and professional development. Workshops include: assertiveness training; understanding different personalitytypes; dealing with depression; stress management; effective communication; time management; dealing with personal loss; date rape; workshops for adult children of alcoholics or dysfunctional families; coping with burnout; dealing with difficult people; self-esteem.

## Legal Referral Program

The Legal Referral Program assists the student in need of legal advice by providing a half-hour of free consultation with an area attorney. Any subsequent cost is the responsibility of the student who negotiates additional services and costs with the attorney. The student must meet with a counselor before an appointment will be made with an attorney.

## Personal Counseling

Personal counseling services assist students with concerns related to marriage and family, emotional well-being, relationships, drug-related problems, and other matters of a personal nature. In addition, students may receive counseling to improve self confidence and increase the probability of academic and personal success.

## Disabled Student Services

## Student Services Building 130, (209) 667-3159

The University provides specialized support services for students with disabilities so that they can realize educational and vocational goals. Services are individualized to support the student's independence. They include: assistance with registration, orientation to campus, tutors and notetakers, reader services, interpreters, campus shuttle service, designated parking, testing accommodations, and liaison with faculty, University offices, and off-campus agencies.

## International (Foreign) Student Program

Student Services Building 130, (209) 667-3158
The International (Foreign) Student Program serves the personal, administrative, and educational needs of CSU Stanislaus students from other countries. The program represents international students and helps to establish and promote intercultural and personal relationships. In addition, assistance is provided to interpret and meet immigration regulations. Other services offered through the program include counseling on such matters as financial planning, part-time employment opportunities, housing, and personal adjustment to the university and community environment.

## Testing Services

Student Services Building 130, (209) 667-3157
Information on state and national testing programs, such as CBEST, EPT, ELM, GMAT, GRE, MSAT, NTE, SAT, and TOEFEL, are available in the Testing Services Office.

## Faculty Mentor Program

Innovative Center Building 101, (209) 667-3021
The Faculty Mentor Program is sponsored by the Chancellor's Office to provide students from historically under-represented groups in higher education a supportive educational environment. This program encourages individual "mentoring relationships" in order to foster a student's personal and professional growth.

The purpose of the Faculty Mentor Program is to create an extended learning environment in which faculty build a "mentoring relationship" with a select group of California State University, Stanislaus students. Students who interact frequently with faculty tend to be more satisfied with their educational experience than those who have less or no contact with faculty. Therefore, faculty can be instrumental in assisting students to explore goals and choose appropriate educational offerings consistent with those goals. The Faculty Mentor Program is voluntary, but the students willing to participate and make the investment of a few hours each week will receive a unique opportunity for growth by working closely with faculty mentors.

## Special Programs

Special Programs make college attendance a reality for under-represented ethnic, first-generation college, low income, or limited English speaking students. Special Programs provide a wide range of special admissions, transition assistance, and academic support services to help students succeed in college.

If you are interested in more information about Special Programs, please call or drop by the offices listed below.

## Educational Opportunity Program (EOP)

Student Services Building 145, (209) 667-3108
The Educational Opportunity Program (EOP) provides special admission to low income and minority students who are at a disadvantage because of poor academic preparation or inadequate financial resources. EOP applicants apply jointly for admission to the University and to the EOP program.

Students admitted under the auspices of EOP are eligible for special support services including academic advising, tutoring, assistance with study skills, and special workshops. EOP also provides financial aid grants to eligible students.

## Student Support Services (SSS)

Student Services Building 145, (209) 667-3220
The Student Support Services program assists low income, first generation col-lege-bound, and disabled students with academic support services. These services include: academic advisement, tutoring (one-to-one and small group), and workshops on such topics as taking tests, study skills, time management, and preparation for ELM/ EPT and CBEST. Students must satisfy eligibility requirements for admission to the University in order to be admitted to the program.

## Summer Bridge Program (SBP)

Student Services Building 145, (209) 667-3108
The Summer Bridge Program assists students in making the transition from high school to the more academically challenging environment of the university. Summer Bridge offers an intensive four-week residential program of classes, seminars, tutoring, and academic advising as an introduction to college life.

Upon admission to the University, students who are selected fortheSummerBridge program are notified by the EOP Office. Successful completion of the program may be a condition of admission for some EOP students. Admission to Summer Bridge is limited.

## Student Life

## Health Services

Health Center, (209) 667-3396
The University provides basic health services to all registered students through the Health Center. Staffing in the Health Center consists of a physician, a nurse practitioner, medical technologist, pharmacist, and clinical aides. The Health Center provides basic health care, including diagnosis, treatment of ambulatory illnesses and injuries, birth control and family planning, and allergy injections. Health problems not within the scope of the medical staff are referred off campus to physicians or medical centers. All referrals are the financial responsibility of the student.

## Supplemental Health Insurance

All students should carry supplemental health insurance to cover major accidents, illnesses, or medical referrals not handled by the Health Center. The University offers an inexpensive group policy; provision can be made for coverage of dependents. Forms are available at the Student Health Center (209) 667-3396.

## Student Life

Student Services Building 134, (209) 667-3144
The University provides programs and activities to enhance the quality of campus life outside of the classroom, from student government and clubs to intercollegiate and intramural athletics.

## On-Campus Student Housing

Residential Life Village, (209) 667-3675
The Residential Life Village is centrally located on campus, near the University Union, dining hall, classrooms, laboratories, computer rooms and library. Students may choose from a variety of living arrangements; there are four-bedroom apartments and two and four bedroom residential suites for 260 students. Each suite or apartment has a living room, bathroom, and one or two-person bedrooms; balconies overlook a central courtyard. The Village is designed to provide privacy and security for residents. Amenities include outdoor study areas, recreation room, laundry facility, computer lab; swimming pool, and covered bike storage.

## Off-Campus Student Housing

Residential Life Village, (209) 667-3675
Students may obtain brochures and area maps from the Housing and Residential Life Office. Apartment and apartment-mate listings are posted in the office. The office provides assistance with rental rates, deposits, and landlord conflicts. Call (209) 667-3675 for information concerning housing on or off-campus.

## Intramural, Leisure, and Sport Activities/Wellness Program

The Recreational Sports Program sponsored by Associated Students, Inc. offers an extensive selection of intramural sports and activities for all men and women at CSU Stanislaus. Students may participate in organized events such as basketball, frisbee, self-defense, swimming, volleyball, weight-lifting, football, softball. Physical education facilities, which include open gym, weight room, and the pool, are available for student use. For further information telephone (209) 667-3833.

## Student Activities

## University Union, (209) 667-3833

Student recreational, social, and cultural programming originates from the University Union (209) 667-3776 and the Associated Students, Inc. (209) 667-3543, whose offices are located on the second floor of the University Union. The Associated Students, Inc. office (209) 667-3833 assists students in planning and presenting activities such as dances, comedy nights, recreational classes, speakers, concerts, outdoor recreation, special events, and the Wellness Program. In addition, the Associated Students, Inc., administers campus clubs and Warrior Week. Activities are open to all members of the campus community.

## 52/Student Affairs

## Associated Students, Inc.

University Union, (209) 667-3543
The Associated Students, Inc., is the official student government of the University, providing services and programs not included in the University's regular instructional program. All students pay the student activity fee and are eligible to participate in all student-sponsored programs and activities and to run for student office. Elections are held yearly and all qualified students may run for office or apply to serve in appointed or volunteer positions.

The Associated Students, Inc. is responsible for managing and allocating student fee funds to student programs, services, and organizations such as child care subsidy, intramural sports, student advocacy, recycling, and book exchange.

## University Union

University Union 202A, (209) 667-3776
The University Union is a student-funded auxiliary organization established to provide a campus center for social, cultural, and intellectual activities. To this end, the Union sponsors various events throughout the school year including concerts, lectures, films, tournaments, exhibits, and other special events.

The University Union includes the Event Center, three conference rooms, the Game Room and TV Lounge, Campus Video and Copy Center, and the Information Desk and Mail Center. In the Game Room, students can play pool table tennis, foosball, airhockey, and video games. Softball equipment, volleyball equipment, and a variety of board games are also available for student use. Additionally, the Game Room has book lockers available for rent each semester. The Campus Video and Copy Center is located just off the main lobby of the Union. Campus Video has a selection of more than 3,000 videos available for rental at reasonable prices. Films range from the newest releases to foreign, classic, horror, action, and comedy. The Copy Center, located in the same area, handles a variety of copying needs including plain paper copies, overhead transparencies, and résumés. The Information Desk and Mail Center is located in the lobby of the University Union just across from the entrance to KIVA Bookstore. In addition to Information Desk services, postage stamps and UPS shipping services (including overnight delivery) are available.

The University Union also houses the Kiva Bookstore and Kiva Computers, Union Market Cafe, Tutoring Center, The Signal Newspaper Office, KCSS Radio Station, and Associated Students, Inc. offices.

For more information about University Union programs and services call (209) 667-2776.

## Policies and Procedures

## Note: Students are held individually responsible for knowing and complying with these regulations.

## General Education Credit

The Schedule of Classes and the catalog designate the current courses offered at CSU Stanislaus which are applicable to General Education requirements. Only courses so designated are approved for credit applicable to General Education. All enrolled undergraduates should therefore refer to the current catalog section entitled "General Education," which lists acceptable General Education courses.

## Class Attendance

Regularity in attending classes is assumed. Students are allowed no specified number of absences, but legitimate absences for which instructors will make allowances are illness, accident, death in family, and university activities which the student is obligated to attend. In such cases, the instructor may give the student opportunity to make up the work missed.

## Auditors

With the instructor's permission, admitted students may register in courses as auditors without credit. Auditors are not authorized in a full course. Enrollment will be permitted only after students otherwise eligible to enroll in the course on a credit basis have had an opportunity to do so. To add a class for audit, a registered student must file a program change form at the Admissions and Records Office window. Auditors must pay the same registration fees as other students and may not change their registration to obtain credit after the last day to add a course. A student registered for credit may not change to audit status after the last day to drop a course. An auditor may participate in class activities or take examinations with the instructor's consent. Regular class attendance is expected. An audited course will not be posted on the permanent academic record unless the student has formally registered for the course and, in the opinion of the instructor, has attended a substantial number of class meetings.

## Concurrent Enrollment

Any matriculated student pursuing a degree or credential at CSU Stanislaus who desires to enroll for a course at another institution should secure prior approval from the major adviser if credit is to be accepted. Acceptance of credit depends on policies set forth in the catalog section on "Evaluation and Acceptance of Credit," and it is the student's responsibility to find out whether a concurrent enrollment course will be accepted. Application forms are available from the Admissions and Records Office.

## 54 / Policies and Procedures

## Official Program Limits

A student who wishes to register for more than 16 units during a fall or spring semester must obtain the approval of the major department chair at the time of registration. Five units is the maximum for which a student may enroll during a Winter Term. Additional units in a Winter Term requires the approval of the College/School Dean. Enrollment for approved excess units is permitted beginning the first day of class.

Units taken for Credit by Examination do not count toward excess units; however, concurrent enrollment courses, audited courses, and courses in which a student is making up an incomplete grade are all counted as part of the student's total course load.

When courses in the 5000 series are included, a program normally may not exceed three courses or 12 units. Students with outside responsibilities are advised to reduce their study loads proportionately.

## Challenge Examinations

Matriculated students may fulfill certain requirements through Challenge Examinations. Normally, both subject and unit credit will be granted and counted toward the University's 124 semester unit graduation requirement. Such credit is not treated as part of the student's regular term work load and therefore does not require a petition for excess study load. Challenge Examination credit will not be counted toward fulfillment of the University's residence requirement and may not be counted toward the completion of major, minor, and credential requirements except with the approval of the major and/or minor adviser and the department chair.

A currently enrolled student who has special preparation may only challenge courses as determined and approved by the department. A student may receive Challenge Examination credit for two types of courses at the University.

1. Courses Regularly Offered by Examination. Special course sections for credit by examination may be offered in the Schedule of Classes by a department. Credit may be earned in these courses by:
a. enrolling in the course for Credit by Examination during a regular registration period;
b. taking the Challenge Examination at the time and place specified and passing it at the level deemed satisfactory by the department.
Grades of Credit (CR) or No Credit (NC) will be awarded.
2 Catalog Courses. A student who has special preparation may challenge selected catalog courses as determined by the department by:
a. securing a Request for Credit by Challenge Examination from the Admissions and Records Office, obtaining the necessary departmental approvals, paying the appropriate examination fee, and filing all copies of the completed request with the Testing Office.
b. taking the Challenge Examination at the time and place specified and passing it at the level deemed satisfactory by the department. Grades of Credit (CR) or No Credit (NC) will be awarded.

## Subject Requirements

Certain specific subject requirements (e.g., U.S. Constitution, State and Local Government, etc.) may be passed by Challenge Examinations under the following conditions:

1. An appropriate course is not offered by the University.
2. Special arrangements must be made with the appropriate department for the preparation of the necessary examination.
3. The student must secure a Request for Credit by Challenge Examination form, secure the necessary approvals, pay an examination fee, and file all copies of the completed request with the Testing Office.
4. The student must take the Challenge Examination at the time and place specified, and pass it at a level deemed satisfactory by the department.
Subject credit only is granted for this type of Challenge Examination. An appropriate notation certifying completion of the specific requirement will be placed on the student's permanent academic record.

## Individual Study Courses

At the option of the instructor, Individual Study courses may be available in certain fields to a student who has demonstrated capacity for independent study. A total of nine units of individual study credit earned at CSU Stanislaus is the maximum permitted toward a degree, credential, or other educational objective. These courses are numbered 4980,5980, and 6980 following the subject field prefix. Individual study courses are not offered to cover the content of courses which are already part of the University's regular program of instruction, even though the courses may not be offered every semester.

A student seeking to enroll for an Individual Study course must file the original copy of an approved Request for Course by Individual Study form at registration. Request forms are available at the Admissions and Records Office. The request for individual study must be approved by the student's individual study instructor, the instructor's department chair, major adviser, and the appropriate college/school dean, at the time the student registers for the course.

## Undergraduate Enrollment in Graduate Courses

Courses numbered 5000 through 6999 are graduate or professional postbaccalaureate courses. The only undergraduate students permitted to enroll in these courses are last term seniors within nine semester units of graduation, who have obtained the proper approvals. Students must file a request form with the Admissions and Records Office.

## Postbaccalaureate Credit

With the approval of the major adviser and department chair, undergraduate students graduating from CSU Stanislaus, who complete courses at CSU Stanislaus which are not required to fulfill any degree requirements may request postbaccalaureate credit for the course work by completing the Request for Postbaccalaureate Credit form. Only excess courses requested that are completed during the term in which the degree is earned will be considered as acceptable postbaccalaureate credit. Students graduating Spring semester may also request to have the preceding Winter term courses included as postbaccalaureate credit. Students graduating Winter term may also request to have any Fall semester courses included as postbaccalaureate credit. Request forms are obtained from and filed with the Admissions and Records Office.

## Declaration or Change of Educational Objectives

A student who selects or changes the degree objective at CSU Stanislaus after enrollment must file a Declaration or Change of Degree Objective form with the Admissions \& Records Office. To change and/or declare a degree objective officially, all appropriate signatures must be obtained on the form. Students admitted to a credential program will have their academic status updated by the Credentials Office.

## Adding and Dropping Courses

Courses may be added or dropped by a student via the Student Telephone Access Network (STAN) or on an official add/drop form properly signed and submitted to the Admissions \& Records Office during the scheduled add/drop period. Refer to the Schedule of Classes for specific information and deadlines. Unauthorized dropping of a course will result in a final grade of $\mathrm{U}, \mathrm{F}$, or NC . If a student attends a course without officially adding it by the deadline through the Admissions \& Records Office or STAN the student will not receive credit for the course.

The following regulations govern adding or dropping a course during the term:

1. Students may add courses by the last day to register or add a class as indicated in the Academic Calendar by either (a) filing an approved Add/Drop Form with the Admissions \& Records Office, or (b) adding via STAN. Students approved to add a course after the last day to register or add a class will be required to pay a $\$ 10$ late add fee. Adding courses after the Enrollment Census Date will not be allowed.
2. A course may be dropped on or before the last day to drop a course as indicated in the Academic Calendar either by (a) filing an approved Add/Drop Form with the Admissions \& Records Office by the last day to drop a course or (b) dropping the course via STAN by the published deadline. (See the Schedule of Classes for deadline dates.)
3. A student may not drop a course after the Enrollment Census Date (twentieth day of instruction in a semester; sixth day of instruction during Winter Term) as indicated in the Academic Calendar except when approved by the appropriate academic departments. When documented extreme circumstances beyond the student's control, e.g., accident, serious illness, change of working hours causing a class/work conflict, transfer out of the area, hospitalization, etc., make dropping from a course or withdrawing from the University necessary, and when continued enrollment would unduly penalize the student, the student may petition for an exemption to the regulation.
Dropping a course after the last day of a term will not be allowed.
Students who are entitled to a partial refund because of a reduced course load must have officially dropped courses by the published refund deadline by (a) submitting an approved Add/Drop or Withdrawal Form to the Admissions \& Records Office, or (b) dropping courses via STAN.

In any case, students should refer to the Schedule of Classes for complete information on adding or dropping courses for a particular term.

Students who drop all of their classes prior to census date are not considered enrolled for that term and may be required to reapply for admission to resume enrollment for the following term. (See policy on Admission Reapplication Require-
ment.) Students who drop all of their classes after the Enrollment Census Date are considered enrolled for that term and are eligible to register as a continuing student for the following term. This policy applies to both postbaccalaureate and undergraduate students.

## Instructor Disenrollment Privilege

Students who register for a class and do not attend the first class meeting should notify the instructor or the departmental office no later than 24 hours after the class meeting if they intend to remain in the class. Students who fail to provide such notification may be dropped administratively from the class by the instructor. The instructor also may administratively drop students who do not meet the catalog prerequisites for the class. These administrative drops shall be without penalty and must be filed by the instructor with the Admissions and Records Office no later than the twentieth day of instruction (census date).

By the last day to drop a course (census date), students should officially drop courses which they have no intention of completing rather than risk an " $F$ " or " NC " grade. Students should not assume the instructor will take disenrollment action.

At the end of the fourth week of instruction (census date) there shall be a campuswide enrollment update; any student who has never attended a particular course shall be dropped administratively from the course by the instructor. These administrative drops may be without penalty and must be filed by the instructor with the Admissions and Records Office no later than the census date, the twentieth instructional day in fall or spring semester (the sixth day of Winter Term). If the instructor fails to administratively drop a student who has not attended class, it is still the student's responsibility to timely drop the class through the Admissions and Records Office.

## Continuous Enrollment Requirement

Students who do not complete at least one course during one semester each calendar yeear risk the loss of rights to their original catalog year graduation requirements, as explained in the "Catalog Year for Graduation Requirements" section of this catalog under "General Requirements for Degrees."

## Leave of Absence

Students withdrawing from CSU Stanislaus who will not be registered for at least one semester each calendar year for reasons beyond their control (e.g., compulsory military duty, medical, pregnancy, etc.) may request a "leave of absence" to protect the right to degree or credential requirements which were fixed at the time of admission to the University or admission to a degree or credential program. Submission of written verification explaining the reason(s) for nonenrollment is required. Financial reasons for non-enrollment are not an acceptable justification for Leave of Absence approval. This Request for Leave of Absence form is obtained from and filed with the Admissions and Records Office. Granting a "leave of absence" to a student does not guarantee readmission to the University nor exemption from the regular application for readmission procedure, application fees, and filing dates. Students may also protect their rights to a former catalog year for graduation requirements by enrolling at least part-time for one semester each calendar year, as explained in the "Catalog Year for Graduation Requirements" section of this catalog under "General Requirements for Degrees."

## Planned Student Leaves

A Planned Student Leave is an interruption of students' formal education in which they voluntarily cease their enrollment at CSU Stanislaus to pursue other educationally related activities to complete or enrich their academic programs or to clarify their educational goals. The intent of this program is to make it possible for students to suspend their academic work, leave the campus, and later resume their studies with a minimum of procedural difficulty. It is not intended for students who only wish to attend another institution. Planned Student Leave request forms are available from the Admissions and Records Office. Enrollment at another institution of higher education during Planned Student Leave is subject to advance Concurrent Enrollment approval.

1. Eligibility: Any enrolled student is eligible to request a Planned Student Leave. Newly admitted students who have not yet registered are also eligible; the primary intent in such instances being to provide an opportunity for beginning students to pause between high school or community college and CSU Stanislaus enrollment.
2. Requests for Approval:
a. Each Planned Student Leave request must include a stated intent to reenroll at CSU Stanislaus within a specified period, and a plan for how the time is to be used in relation to an educational objective. Acceptable requests will be those for planned travel, national service, study, or other specific plans which will contribute to the student's educational objectives.
b. The request must be filed prior to the period of absence and is subject to the approvals of the student's assigned academic adviser, department chair, and the Admissions and Records Office.
c. Educational leaves may begin at any time. However, if a student chooses to begin a leave while course work is in progress the student is subject to all normal regulations and clearances (e.g., official withdrawal, financial aid termination, etc.)
3. Duration of Leave: A typical Planned Student Leave will be for one academic year. A student may request, in writing, an extension of leave prior to its termination. Under no circumstances shall successive leaves exceed two calendar years.
4. Return Responsibilities and Benefits: Students returning from an approved educational leave may be required to submit an application for readmission but will not be required to pay another application fee or submit to residency and health screening if terms of the leave have been satisfied. Returning students must specify on the application for readmission form that they are returning from an approved leave. Readmission is guaranteed providing the readmission application is filed according to the following schedule: fall, November; winter and spring, August-or 30 days after leave approval, whichever is later. A student will be guaranteed normal registration priority and rights to prior graduation requirements provided leave terms fully are met and proper return procedures are followed.
5. Compliance: A student on a Planned Student Leave who does not comply with the provisions of this policy and the conditions of the leave is subject to forfeiture of the advantages of this program.

## Withdrawal From CSU Stanislaus

Students must enroll at least part-time for one semester each calendar year to maintain rights to their original catalog year for graduation requirements, as explained in the "Graduation Requirements" section of this catalog under "General Requirements for Degrees."

Students may withdraw from CSU Stanislaus through the Enrollment Census Date (twentieth day of instruction in a semester; the sixth day for Winter Term) without having any transcript notation recorded by filing an approved Add/Drop or Withdrawal form in the Admissions \& Records Office. Students who withdraw from the University are deemed to be fully responsible for such action and are not permitted to re-enroll at the University before the next term. After non-enrollment at the University for two or more semesters, an Application for Admission must be submitted to request enrollment. (See policy on Admission Reapplication Requirement.) Students who take unauthorized leave may receive a final grade of $\mathrm{U}, \mathrm{F}$, or NC in each course for which they were registered.

Withdrawals after the Enrollment Census Date are permissible only for serious and compelling reasons, i.e., reasons clearly beyond the student's control. Approved withdrawals at this time result in the assignment of the "W" administrative symbol which carries no connotation of quality of student performance and is not used in grade-point-average calculation.

Withdrawals shall not be permitted during the final three weeks of instruction (last five days of Winter Term) except in cases such as accident or serious illness where the cause of withdrawal is due to circumstances clearly beyond the student's control and the assignment of an incomplete is not practicable.

## Incomplete Work

An incomplete signifies (1) that a portion of required course work has not been completed and evaluated in the prescribed time period due to unforeseen but fully justified reasons beyond the student's control, and (2) that there is still a possibility of earning credit. The student is responsible for obtaining the instructor's approval for the incomplete as well as determining the exact requirements that must be satisfied to remove the incomplete. The conditions for removal of the incomplete shall be put in writing by the instructor and given to the student, with a copy placed on file with the department chair. A final grade will be assigned when the work agreed upon has been completed and evaluated.

Any incomplete must be made up within the time limit set by the instructor; in any case, no more than one calendar year following the end of the term in which the incomplete was assigned. This limitation prevails whether or not the student maintains enrollment. Failure to complete the assigned work will result in an incomplete reverting to a grade of NC for grading options 1 and 2, and to a grade of $F$ for grading option 3. (See "Academic Standards" section of this catalog and Schedule of Classes for grading options.)

In cases of prolonged illness or any emergency which necessitates an extension of time to complete the course, the student may petition through the academic departments where the course was offered. Students may not be permitted to graduate until all incompletes are removed. Students are not to reregister in courses in which they have an incomplete.

## Satisfactory Progress Work

The SP (Satisfactory Progress) symbol is used in connection with courses that extend beyond one academic term. It indicates that work is in progress and has been evaluated and found to be satisfactory to date, but that assignment of a precise grade must await completion of additional work.

SP grades shall be removed within one year after issuance of the grade. An SP received on thesis may, have a two-year time limit. If the SP is not removed within these time limits, the grade will revert to NC for grading options 1 and 2, and to a grade of F for grading option 3. An extension of time may be granted only via appropriate petition to the academic department where the courses were offered for undergraduate students or the Graduate Studies Office for graduate students.

## Student Classifications

Class level:
Freshman
Sophomore
Junior
Senior
Postbaccalaureate
Admission status:
General Met all admission requirements
Probational Admitted with scholastic deficiency warning (see "Scholarship Standards")
Provisional Permitted to register pending official verification of admission status
Extension
Summer
Visitor
Enrollment status:
Continuing
Returning
0-29.9 acceptable completed semester units
30-59.9 acceptable completed semester units
60-89.9 acceptable completed semester units
90 or more acceptable completed semester units
Possesses acceptable baccalaureate or advanced degree

Permitted to register for extension course work only Permitted to register for summer session course work only Permitted to register for a single term only

Student who had credits attempted during the prior term A former student returning after an absence of one or more

New terms Student who is registering in a regular term for the first time

## Undergraduate Classification

## Full-time and Part-time Students:

All undergraduates are classified as full- or part-time according to the credit total listed below:

| Classification | Fall/Spring Credits | Winter Credits |
| :---: | :---: | :---: |
| Full-time | 10.0 or more | 3.0 or more |
| $3 / 4$ | $7.0-9.5$ | $2.0-2.5$ |
| $1 / 2$ | $5.0-6.5$ | 1.5 |
| $1 / 4$ | $4.0-4.5$ | 1.0 |
| Less than $1 / 4$ | $.5-3.5$ | .5 |

Note: 1. During the fall and spring semesters these classifications also apply to postbaccalaureate students enrolled for less than 4 credits of course work applicable to any graduate program.
2. During Winter Term these classifications apply to postbaccalaureate students enrolled for less than 2 units of course work applicable to any graduate program.
3. International students enrolled in 12 units are classified as full-time.
4. Veterans should refer to the section on Veterans status for classification information.

## Graduate Classification

Postbaccalaureate students enrolled for 4 or more credits of course work applicable to a graduate program are classified as full-time or part-time according to the unit totals shown below. Students must enroll for 2 or more units applicable to a graduate program during Winter Term to be classified in this category.

| Classification | Fall/Springs Credits | Winter Credits |
| :---: | :---: | :---: |
| Full-time | 7.0 or more | 2.0 or more |
| $3 / 4$ | $5.5-6.5$ | NA |
| $1 / 2$ | $4.0-5.0$ | NA |
| $1 / 4$ | NA | NA |
| Less than $1 / 4$ | NA | NA |

Note: International classified graduate students enrolledin 8 units are considered full-time and unclassified graduate students enrolled in 12 units are considered full-time students.

## Grade Reports To Students

Beginning Fall Semester 1995, students will no longer receive grade reports by mail. Students will be able to access a report of final grades through the Student Telephone Access Network (STAN) or by ordering an official transcript after the conclusion of each semester, term, and summer session.

## Change of Address

Students who change mailing or permanent addresses after admission or registration should immediately notify the Admissions and Records Office. This information is needed in order to ensure that registration information, correspondence, and other such materials reach the student without unnecessary delay.

## CSU Stanislaus Transcripts

Official transcripts of courses attempted at CSU Stanislaus are issued only with the written permission of the student concerned. Partial transcripts are not issued. Transcript fees are as follows: $\$ 4$ for a single copy; $\$ 2$ for each additional transcript prepared at the same time up to ten copies; $\$ 1$ for each additional transcript prepared at the same time exceeding ten copies. A verification of enrollment fee is $\$ 5$. A priority transcript or enrollment verification request fee is $\$ 10$. Transcripts from other institutions which have been presented for admission or evaluation become a part of the student's permanent academic file. Students desiring transcripts covering work attempted elsewhere should request them from the institutions concerned. Students should allow two weeks for transcript processing.

## Petitions/Appeal of University Requirements

Students may petition university deadlines, or for waiver, or substitution of certain university-wide academic requirements, or request a review of decisions affecting their academic status. Petition forms and information concerning regulations may be secured from the Admissions and Records Office, the Academic Advising Center, and/or the Graduate Studies Office. All such petitions must be reviewed and signed by the appropriate faculty, dean, and/or director as indicated on the back of the petition form. Undergraduate program students should file petitions with the Academic Advising Center or the Admissions and Records Office, and graduate program students should file petitions with the Graduate Studies Office. Generally, appeals concerning administrative deadlines that have passed should be directed to a School/College Dean. A $\$ 10$ petition processing fee is charged.

A request for waiver or substitution concerning a departmental major, minor, or other requirements should be directed to the appropriate department. No processing fee is charged.

An Appeals Committee on Student Petitions has been established as advisory to the Provost. Petition decisions concerning academic status and certain academic requirements may be referred to the Appeals Committee.

## Grade Appeal Procedure

Detailed grade appeal procedures are included in the "Faculty Handbook" and student handbook. The complete procedures are also reproduced in Appendix H of this catalog.

## Nondiscrimination Policy

The California State University does not discriminate on the basis of race, color, national origin, sex, physical disability or sexual orientation in the educational programs, athletics, or other activities it conducts.

## 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 California State University, Stanislaus. Such programs and activities include admission of students and employment. Inquiries concerning the application of Title IX to programs and activities of California State University, Stanislaus, may be referred to the Assistant to the President for Affirmative Action, 667-3011, who is assigned the administrative responsibility of reviewing such matters, or to the Regional Director of the Office for Civil Rights, Region 9, 50 UN Plaza, Room 239, San Francisco, California 94102. The California State University is committed to providing equal opportunities to men and women CSU students in all campus, programs including intercollegiate athletics.

## 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 Americans with

Disabilities Act (1990) and the regulations adopted thereunder prohibit such discrimination. The Assistant to the President for Affirmative Action has been designated to coordinate the efforts of California State University, Stanislaus to comply with the Acts and their implementing regulations. Inquiries concerning compliance may be addressed to this person at the Affirmative Action Office, 801 W. Monte Vista Avenue, Turlock, California 95382, 667-3011, or to the Regional Director of the Office for Civil Rights, Region 9, 221 Main Street, 10th Floor, San Francisco, California 94105.

## Human Immunodeficiency Virus (HIV/AIDS)

CSU Stanislaus current or potential students and employees with Human Immunodeficiency Virus (HIV) shall be afforded unrestricted classroom attendance, working conditions, use of University facilities and participation in co-curricular and extracurricular activities as long as they are physically and psychologically able to do so.

## Race, Color, or National Origin

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

Inquiries concerning the application of the Civil Rights Act of 1964 to programs and activities of California State University, Stanislaus, may be referred to the Assistant to the President for Affirmative Action, 667-3011, or to the Regional Director of the Office for Civil Rights, Region 9, 221 Main Street, 10th Floor, San Francisco, California 94105.

## Age, Marital Status, Religion, or Sexual Orientation

The California State University does not discriminate on the basis of age, marital status, religion, or sexual orientation. Inquiries concerning compliance may be addressed to the Assistant to the President for Affirmative Action, 667-3011, or to the Regional Director of the Office for Civil Rights, Region 9, 221 Main Street, 10th Floor, San Francisco, California 94105.

## Sexual Harassment Policy and Procedures

Refer to Appendix K.

## Use of Social Security Number

Applicants are required to include their Social Security account number in designated places on applications for admission pursuant to the authority contained in Section 41201 of Title 5, California Code of Regulations. The Social Security account number is used as a means of identifying records pertaining to the student as well as identifying the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution.

## Privacy Rights of Students in Education Records

Refer to Appendix I.

## Academic Standards

## Honors List of Students

Each semester CSU Stanislaus publishes a list of undergraduate honor students. To qualify for the list during the semester under consideration, a student must:

1. Register for and earn a minimum of 10 units of credit of graded course work at the University, and
2. Achieve a 3.5 grade point average for all course work attempted at the University that semester.

## Grading System

## Academic Grades

A/A- (Excellent): Student has demonstrated a high level of competence in meeting course objectives. Four grade points per unit of credit are awarded. (A yields 3.7 grade points.)

B+/B/B- (Good): Student has demonstrated a more than satisfactory level of competence in meeting course objectives. Three grade points per unit of credit are awarded. ( $\mathrm{B}+$ yields 3.3 grade points and a $\mathrm{B}-$ yields 2.7 grade points.)

C+/C/C- (Satisfactory): Student has demonstrated a satisfactory level of competence in meeting course objectives. Two grade points per unit of credit are awarded. C+ yields 2.3 grade points and a C-yields 1.7 grade points.

D+/D/D- (Unsatisfactory): Student has demonstrated only a barely passing level of competence in meeting course objectives so that it is not necessary to repeat the course for credit. One grade point per unit of credit is awarded. (D+ yields 1.3 grade points and a $\mathrm{D}-$ yields 0.7 grade points.

F (Failure): Student has not demonstrated a minimally passing competence in meeting course objectives. Credit is not merited. Zero grade points are assigned.

CR (Credit): Student has demonstrated at least a satisfactory C- level of competence in meeting course objectives (at least B - level in graduate courses). Not used in grade-point average calculations.

NC (No Credit): Student has not demonstrated minimally satisfactory competence in meeting course objectives. Credit is not awarded. Not used in grade-point average calculations.

## Administrative Symbols

U-Unauthorized Incomplete: The symbol U indicates that an enrolled student did not withdraw from the course but failed to complete course requirements. It is used for courses graded A-F when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible. In courses where the student is graded CR/NC, use of the U is inappropriate and NC is used instead. For purposes of grade-point average computation, the $U$ symbol is equivalent to an $F$.

I-Incomplete Course: Students have not completed course requirements due to reasons beyond their control. Must be made up within the time limit set by the instructor (no more than one calendar year following the end of the term in which the
grade was assigned). Failure to complete the assigned work will result in an incomplete reverting to a grade of NC for grading options 1 and 2 ; and to a grade of F for grading option 3. (See Grading Options below.) An extension of time may be granted via approved petition. Not used in grade-point average calculation.

RD-Report Delayed: No grade reported by the instructor. RD grades will revert to a NC or $U$ grade, depending on the course grading option, one semester after assignment.

W-Withdrawn from Course: Indicates that the student was permitted to drop the course after the twentieth day of instruction. It carries no connotation of quality of student performance and is not used in calculating grade-point average. (See Withdrawal from CSU Stanislaus in "Policies and Procedures" section of this catalog.)

SP-Satisfactory Progress: Indicates a term of satisfactory progress in a course or activity which may require more than one term to complete (e.g., master's thesis). SP grades shall be removed within one year after issuance of the grade. An SP received on thesis may have a two-year time limit. If the SP is not removed within these time limits, the grade will revert to NC for grading options 1 and 2 and to a grade of F for grading option 3. An extension of time may be granted only by approved petition. Not used in grade-point average calculation.

AU-Audit: The recorded grade if a student enrolls in a class and fulfills attendance requirement but is not receiving credit. Not used in grade-point average calculation.

## Grading Options

CSU Stanislaus courses carry different grading options, indicated below, which are listed in the Schedule of Classes.

1. Courses graded exclusively Credit/No Credit.
2. Courses graded A, B, C, D, F-with the student's option to receive a Credit or No Credit grade.
3. Courses graded A, B, C, D, F.

## Grade Point Computation

Grade point averages are computed by multiplying grade points in courses graded A, B, C, D, F, and U and dividing the total number of grade points by the number of graded units attempted. AU (Audit), CR (Credit), I (Incomplete), NC (No Credit), RD (Report Delayed), SP (Satisfactory Progress), and W (Withdrawn) enrollments are not included in this calculation.

| Grade | Plus (+) <br> Grade Points | Standard <br> Grade Points | Minus (-) <br> Grade Points |
| :---: | :---: | :---: | :---: |
| A | n/a | 4.0 | 3.7 |
| B | 3.3 | 3.0 | 2.7 |
| C | 2.3 | 2.0 | 1.7 |
| D | 1.3 | 1.0 | 0.7 |
| F | n/a | 0.0 | n/a |
| U | n/a | 0.0 | n/a |

## Credit/No Credit Grading

Any student may elect to be graded on a Credit/No Credit (CR/NC) basis in any course approved with a Credit/No Credit grading option. Courses approved for CR/ NC are indicated as such in the Schedule of Classes. In no case shall more than onethird of the required upper-division or graduate units or courses in a degree program be graded CR. No more than 24 CSU Stanislaus CR semester units, including Winter Term courses, but excluding credit from challenge examinations, may be applied toward a baccalaureate degree.

The student must elect the Credit/No Credit grading option by the twentieth instructional day of the Fall or Spring semester and by the sixth instructional day of the Winter Term unless the instructor agrees to establish a later date. Program change forms are available from the Admissions and Records Office. The Credit (CR) grade is earned for C - work or better ( B - or better in graduate courses) as judged by the instructor concerned. Credit (CR) and No Credit (NC) grades will have no effect on grade-point average.

Upper-division courses graded CR/NC taken at this or another institution may not be used to satisfy requirements for the student's major except for those courses identified as graded exclusively on a CR/NC basis.

The only courses with a CR/NC option which may be repeated are those in which the student previously received a grade of "No Credit." If a course previously taken for a grade is repeated for a grade of "credit," only the original grade will be used in computation of the grade-point average. (See Repeated Courses).
Note: Students planning to attend graduate or professional schools should be aware that CR may be counted as a C and NC as an F by some graduate admișsions officers.

## Scholarship Standards*

For the purpose of determining eligibility for a bachelor's degree, students must earn and maintain a grade point average of at least 2.0 (C). Failure to maintain standards of minimum competency will result in either Probation or Disqualification. (See Grade Point Computation.)

## Probation

Academic Probation: An undergraduate student is subject to academic probation if at any time the cumulative grade point average in all college-level work attempted or cumulative grade point average at CSU Stanislaus falls below 2.0. An undergraduate student shall be removed from academic probation when the cumulative gradepoint average in all college-level work attempted and the cumulative grade-point average at CSU Stanislaus is 2.0 or higher. Any veteran who remains on academic probation beyond two consecutive semesters without a significant improvement in academic standing will be ineligible for veterans educational benefits and will be reported to the Department of Veterans Affairs.

## Disqualification

An undergraduate student on probation becomes subject to academic disqualification when the student:

[^5]1. accrues, as a freshmen or sophomore (less than 60 credits completed), a cumulative CSU Stanislaus grade deficiency of 15 or more grade points; or
2. accrues, as a junior ( $60-89$ credits completed), a cumulative CSU Stanislaus grade point deficiency of 9 or more grade points; or
3. accrues, as a senior or postbaccalaureate student ( 90 or more credits completed) a cumulative CSU Stanislaus grade point deficiency of 6 or more grade points; or
4. earns $U$ or $F$ grades in 4 or more units of course work in a fall or spring semester.

A student on probation will be continued on probation if not eligible for removal from probation or subject to disqualification.

A student disqualified at the end of fall semester is eligible to attend Winter Term. In such cases the effective date of disqualification shall be the last day of the Winter Term. The Academic Advising Center may disqualify a student not on probation who has fewer cumulative grade points than cumulative credits attempted at the end of fall or spring semester, and whose cumulative grade point delinquency is so great that its removal within a reasonable period seems unlikely.

No student will be automatically disqualified. The Academic Advising Center will review the case of each student eligible for disqualification.

## Special Administrative Action

A student may be placed on administrative-academic probation for any of the followings reasons:

1. Withdrawal in two successive terms or in any three terms from more than half of the credits for which student is registered as of the end of the fourth week of a semester.
2. Repeated failure to progress toward the stated degree or other program objective, including that resulting from 15 credits of NC, when such failure appears to be due to circumstances within the control of the student.
3. Failure to comply, after due notice, with an academic requirement or regulation which is routine for all students or a defined group of students (e.g., failure to take tests, complete specified course work, etc.).
Written notification of such action shall provide the conditions for removal from probation and the circumstances which would lead to disqualification. Furthermore, a student who has been placed on administrative-academic probation later may be disqualified if:
4. The conditions for removal of administrative-academic probation are not met within the period specified, or
5. The student becomes subject to academic probation while on administrativeacademic probation, or
6. The student becomes subject to administrative-academic probation for the same or a similar reason for which the student has been placed on administrativeacademic probation previously, although not currently in such status.
Written notification of such action shall provide an explanation of the basis for the action.

## Reinstatement after Disqualification

Students who are disqualified may be considered for reinstatement by submission of a Reinstatement Petition to the Academic Advising Center. However, reinstatement generally is not approved for the semester immediately following
disqualification. Advising Center decisions may be petitioned to the University Appeals Committee.

A reinstated student who has not been enrolled at the University for two or more semesters must also apply for readmission at the Admissions and Records Office.

Students whose reinstatement petitions are approved will be readmitted on probation only, regardless of the grade-point average earned at any other institution.

## Repeated Courses

Courses may be repeated by undergraduate students and only the most recent grade earned will be used for credit and grade points. The grading option for the original effort and the repeated effort must be the same. This provision for repetition is not applicable when a course may be taken additional times for credit. The replacement grade policy also is not applicable to grades or administrative symbols which do not affect units allowed or grade point average (e.g., NC, I, RD, W, SP, AU).

Postbaccalaureate students doing work at the undergraduate level, such as pursuing a second major, are to be treated as undergraduates for purposes of repeating a course. Graduate students, by prior permission of the department, may repeat a course, but the original grade will be included in computing the grade point average.

A student should file a Notification of Repeated Course form at the Admissions and Records Office immediately after the course is repeated.

At admission to CSU Stanislaus, the repeated-course actions and policies of former institutions will be honored. This section concerning repeated courses applies only to CSU Stanislaus course work taken after Spring 1973.

## Academic Renewal

Courses with unsatisfactory grades either at CSU Stanislaus or at other institutions may be excluded from credit and grade point consideration if course repetition is inappropriate (e.g., change of major, or courses not offered at CSU Stanislaus), subject to all of the following provisions:

1. At least five calendar years must have elapsed since the course work was attempted.
2. The student must be an undergraduate who has completed at CSU Stanislaus 15 semester credits with a 3.0 grade point average, or 30 semester credits with a 2.5 GPA, or 45 semester credits with a 2.0 GPA .
3. A maximum of one academic year of course work may be disregarded; when such action is taken, all work attempted during those terms must be disregarded.
4. The student must provide evidence that past performance was due to extenuating circumstances and that additional enrollment would be necessary to qualify for a degree if the request were not approved.
5. The permanent academic record will be annotated, ensuring a true and complete academic history. A student must initiate such action using an appropriate petition form; upon satisfaction of all the above four provisions and obtaining approval of the faculty adviser, College/School dean, and the Provost/Vice President for Academic Affairs, Admission and Records personnel will implement the policy.
Students admitted to CSU Stanislaus will have the academic renewal actions and policies of former institutions honored.

# The California State University International Programs 

Office: Classroom Building 240B, (209) 667-3117<br>Director: Linda Bunny-Sarhad

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. Close to 11,000 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 36 recognized universities and institutions of higher education in 16 countries, the International Programs also offers a wide selection of study locales and learning environments.

The 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 the community college if they can meet this requirement. 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 course work prerequisites.

Additional information and application materials may be obtained on campus from the CSU Stanislaus Institute for International Studies, C240B, (209) 667-3117, or by writing to The California State University International Programs, 400 Golden Shore, Suite 122, Long Beach, California 90802-4275.

See the next page for a listing of affiliated institutions.

The affiliated institutions are:

| Australia | The University of Western Sydney |
| :---: | :---: |
| Brazil | Universidade de São Paulo |
| Canada | The universities of the Province of Quebec (13 institutions, including Université de Montréal, Concordia University, Université Laval, McGill University, Université du Quebec, Bishop's University, i.a.) |
| Denmark | The DIS Study Program (the international education affiate of the University of Copenhagen) |
| France | Institut des Etudes Françaises pour Étudiants Étrangers, Université de Droit, d'Economie et des Sciences d'AixMarseille (Aix-en-Provence) |
|  | Mission interuniversitaire de coordination des échanges franco-americains, Universités de Paris III, V, VI, VIII, X, XI, XII, XIII |
| Germany | The Ruprecht-Karls-Universität (Heidelberg) and Eberhard-Karls-Universität (Tübingen) |
| Israel | The Hebrew University of Jerusalem |
| Italy | CSU Study Center, Florence, Universitá degli Studi di Firenze, and La Accademia di Belle Arti di Firenze |
| Japan | Waseda University, Tokyo |
| Mexico | Universidad Iberoamericana, Mexico City |
| New Zealand | Lincoln University, Christchurch, and Massey University, Palmerston North |
| Spain | Universidad Complutense de Madrid and Universidad de Granada |
| Sweden | Uppsala Universitet |
| Taiwan | National Chengchi University, Taipei |
| United Kingdom | Bradbord University, Bristol University, Kingston University, Sheffield University, and University of Swansea |
| Zimbabwe | The University of Zimbabwe, Harare |

## Undergraduate Degrees and Programs

## General Requirements

## Undergraduate Degrees

The University grants the Bachelor of Arts, Bachelor of Science, and Bachelor of Vocational Education degrees.

## Winter Term

As an integral part of the 4-1-4 program at CSU Stanislaus, Winter Term courses are required for graduation as follows:

1. students entering as freshmen with less than 15 semester units must complete three Winter Terms;
2. students entering as freshmen with 15 or more units, entering as sophomores, or entering as juniors with less than 75 semester units must complete two Winter Terms;
3. students entering as juniors with 75 or more semester units or entering as seniors must complete one Winter Term.
Working students who can demonstrate the necessity of a part-time load during Winter Term may petition to enroll for two units of Individual Study. One-unit courses normally will not be accepted as meeting a Winter Term requirement. Students unable to complete a Winter Term course due to illness or other circumstances beyond their control, and thus unable to fulfill the Winter Term graduation requirement, may petition for an exception.

Winter Term requirements do not apply to students in graduate programs nor to continuing and transfer students who choose to retain the graduation requirements of catalogs prior to 1973-74. All students, of course, are encouraged to enroll in Winter Term courses.

## Catalog Year for Graduation Requirements (Catalog Rights)

An undergraduate matriculated student who has been in continuous enrollment in regular sessions pursuing a degree may elect to meet baccalaureate graduation requirements in effect 1) at the time of first entering a California Community College or CSU campus, 2) at the time of matriculation at CSU Stanislaus, or 3) at the time of graduation. For purpose of this regulation, "continuous enrollment" means attendance in at least one semester (or two quarters) each calendar year. Attendance in summer session or Winter Term is not applicable to this regulation. An absence for an approved educational leave, or for attendance not to exceed two years at another regionally accredited college, may be permitted. Students who do not enroll at least part-time for one semester each calendar year risk the loss of rights to their original catalog year for graduation requirements.

Program admission and completion requirements for a credential or an additional degree or major will be established by the catalog applicable at the time of subsequent program admission. (See "Evaluation and Acceptance of Credit.")

## Graduation Application

A prospective candidate for a baccalaureate degree should submit an application for graduation to the Admissions and Records Office when two semesters remain to complete requirements for the degree, or when a minimum of 90 units has been earned toward completion of the degree. In any case, a student should not apply later than the date indicated in the academic calendar.

## Faculty Approval

Approval of the major adviser, department chair, and the Director of Academic Advising is required before the University may award a degree.

## Graduation Honors

Graduation honors are awarded to students earning baccalaureate degrees at commencement on the basis of both their overall and CSU Stanislaus grade point averages achieved in their undergraduate work. Projected or estimated grade averages for degree candidates are excluded from grade point average calculations. To receive an honor, both averages must meet the standards as follows:

| Cum Laude | $3.40-3.59$ |
| :--- | :--- |
| Magna Cum Laude | $3.60-3.79$ |
| Summa Cum Laude | $3.80-4.00$ |

If there is a difference between the averages, the lower of the two will be used in determining the level of honors. (See Grading System Section.)

## Baccalaureate Degree Requirements

To qualify for a baccalaureate degree, a student must comply with all University regulations and satisfy specific requirements in the following areas:

1. Units-A minimum of 124 semester units is required. At least 40 units must be in courses recognized for upper-division credit.
2. Residence-A student must complete a minimum of 30 semester units at CSU Stanislaus. At least 24 of these 30 units must be earned in upper-division courses, at least 12 must be in the major, and at least 9 must be applicable to General Education-Breadth requirements (Title 5, California Code of Regulations, Sections 40403 and 40405). Credit in summer sessions or special sessions may be counted as residence credit on a unit-for-unit basis. Extension course credit or credit by evaluation will not be counted as residence credit.
3. Winter Term-A student must complete Winter Terms as indicated in the above section on Winter Term.

## Scholarship

Each student must complete with a minimum grade-point average of $2.0(\mathrm{C})$ or better:

1. all acceptable college units attempted,
2. all units attempted in the major field of study, and
3. all residence credit units attempted at the University.

## Mathematics Competency

A demonstration of mathematics skills competency is a requirement for a bachelor's degree. Satisfactory performance on the CSU Entry-Level Mathematics (ELM) examination fulfills this requirement. Further information regarding this examination, placement, possible exceptions, and completion of the General Education mathematics requirement may be obtained from the Mathematics Department. (See "Entry-Level Mathematics Requirement" under the "Admission" section of this catalog.)

## Upper Division Writing Proficiency

In addition to satisfactory completion of all General Education Communication Skills requirements, all students must demonstrate competency in writing skills as a requirement for graduation. To do so, they must complete the Writing Proficiency Screening Test(WPST) and then pass, with a minimum grade of C-or better, an upper division writing proficiency (WP) course. Students who have not met the graduation writing requirement must take the WPST before gaining admission to any of these classes. Peer tutoring to prepare for this test is available at the Writing Center. A course taken prior to the first semester in which WP status takes effect for that course may not be used to satisfy the writing competency requirement. Writing proficiency courses are designated in the Schedule of Classes with(WP). The following is a listing of WP courses and the semester WP status took effect:

| ANTH/WMST 3900 ........... F92 | HONS 3965 ....................... F90 |
| :---: | :---: |
| ANTH 4221 ....................... F93 | HONS 4965 ....................... F90 |
| ART 4570 ......................... W93 | LIBS 3000 ......................... F95 |
| ART 4960 ......................... W93 | MATH 4960 ...................... F95 |
| BIOL 4010/4012 ................. F94 | MUS 3200 ......................... W94 |
| CJ 4930 ............................. S94 | MUS 3370 ......................... S94 |
| CS 4100 ............................ F93 | NURS 3310 ....................... W94 |
| COMM 3140 ..................... F92 | PHED 3700........................ F93 |
| DRAM 3530 ...................... F92 | PHIL 3400 ......................... F92 |
| ENGL 3007 ....................... S81 | PHIL 3500 .........................F93 |
| ENGL 3009 ....................... F81 | PHIL 4200 .........................F92 |
| ENGL 3100 ....................... F92 | PHIL 4450 ......................... F92 |
| ENGL 4600 ....................... F92 | PHIL 4500 ......................... F92 |
| FREN 4810 ........................ S93 | PSCI 3010......................... S93 |
| GEOG 4710 ....................... F93 | PSCI 3304......................... F93 |
| GEOL 4500/4502 ............... F94 | PSCI/WMST 3700.............. S93 |
| GERM 4810....................... S93 | PSYC 4810 ........................ F95 |
| HIST 3000 ......................... F92 | PSYC 4820 ........................ F95 |
| HIST 4960 ......................... F92 | SOCL 3030 ........................ F94 |
| HIST 4990 ......................... F92 | SPAN $4810 . . . . . . . . . . . . . . . . . . . . . . ~ S 93 ~$ |

Not all writing proficiency courses are offered every term. Please check the Schedule of Classes to determine the term a WP course is offered. Courses will be added to the above list of WP courses. For current listings of WP courses, consult the department in which you wish to take a WP course or the WPST Coordinator. For further information, contact the WPST Coordinator, (209) 667-3247.

## General Education-Breadth Requirements ${ }^{1}$

As prescribed by Title 5, California Code of Regulations, Section 40405, the University's General Education requirements total a minimum of 51 semester units as described below, including at least 9 upper-division units. At least 9 of these 51 semester units shall be earned at the University. These course and unit requirements are distributed among the five areas of communication skills, natural sciences and mathematics, humanities, social sciences, and individual resources for modern living. This program includes required courses in United States history and government. However, credit earned in fulfillment of the upperdivision writing competency graduation requirement is not applicable to this 51unit General Education program. The University accepts certification of General Education-Breadth requirements by a California Community College or a CSU campus, according to CSU regulations. Upon request, the University will report completion of these requirements to another CSU campus.
A. Communication Skills ${ }^{2}$ ( 9 units minimum)

1. Oral Communication Requirement

COMM 2000 Public Speaking, 3 units or
COMM 2110 Group Discussion Processes, 3 units
2. Written Communication Requirement

ENGL 1001 Freshman Composition, 3 units
(Requires an EPT score of 149 or above.)

## 3. One course selected from the following

ENGL 2000 Critical Inquiry, 3 units, or
PHIL 2000 Philosophical Inquiry, 3 units

## B. Natural Sciences and Mathematics ${ }^{3}$ ( 9 units minimum)

Note: Complete at least one course from each of the 3 groups listed below. This must include a laboratory course from either group 1 or 2.

## 1. Physical Sciences Requirement

| ASTR 2100 | Descriptive Astronomy Lecture, 3 units, and |
| :--- | :--- |
| ASTR 2112 | Optional lab, 1 unit |
| CHEM 1000 | Chemistry in the Modern World, 3 units, and |
| CHEM 1002 | Optional lab, 1 unit |
| CHEM 1100 | Principles of Chemistry I, 5 units (includes lab) |
| CHEM 1110 | Principles of Chemistry II, 5 units (includes lab) |
| CHEM 2400 | Science of Winemaking, 4 units (no lab credit) |
| CHEM 2500 | Chemistry of Photography, 4 units (includes lab) |
| GEOL 2001 | Regional Geology of California, 3 units (includes lab) |
| GEOL 2100 | Principles of Geology, 3 units |
| GEOL 2102 | Principles of Geology Lab, 1 unit |
| GEOL 2200 | Historical Geology, 4 units (includes lab) |

[^6]PHSC 1300 Environmental Pollution, 3 units (no lab credit)
PHSC 2100 Atmosphere, Weather, andClimate, 3 units (nolab credit)
PHYS 1500 Energy and Matter, 3 units, and
PHYS 1502 Optional lab, 1 unit
PHYS 2100 Basic Physics I, 5 units (includes lab)
PHYS 2110 Basic Physics II, 5 units (includes lab)
PHYS 2250 General Physics I, 4 units, and
PHYS 2252 Optional lab, 1 unit
2. Biological Sciences

BIOL 1010 Principles of Biology, 3 units (no lab credit)
BIOL 1020 Special Laboratory Studies, 1 unit, taken
concurrently with BIOL 1010
BIOL 2310 Human Genetics, 2 units (no lab credit)
BIOL 2650 Environmental Biology, 3 units (no lab credit)
BOTY 1050 Introduction to Botany, 4 units (includes lab)
ZOOL 1050 Introduction to Zoology, 4 units (includes lab)
3. Mathematics ${ }^{4}$

MATH 1000 Math for Liberal Arts Students, 3 units
MATH 1030 Elementary Foundations of Mathematics I, 3 units
MATH 1100 Precalculus, 4 units
MATH 1410 Calculus I, 4 units
MATH 1500 Finite Mathematics, 3 units
MATH 1600 Statistics, 4 units
MATH 1610 Statistics for Decision Making, 3 units
MATH 1910 Calculus with Applications I, 3 units

## C. Humanities Requirement ${ }^{5}$ ( 9 units minimum)

Note: Include at least 3 units from group 1, and 3 units from group 2, below.

1. Arts

ART 1000 Introduction to Drawing, 3 units
ART 1100 Two-Dimensional Design, 3 units
ART 1200 Three-Dimensional Design, 3 units
ART 1340 Introduction to Ceramics, 3 units
ART 2515 Art History Survey-Ancient, 3 units
ART 2520 Art History Survey-Modern, 3 units
ART 2525 Art History Survey-Non-Western, 3 units (G)
ART 2530 Art Appreciation, 3 units
DRAM 1010 Introduction to Theatre, 3 units
DRAM 1110 Playgoing, 3 units
DRAM 1500 Acting for Non-Drama Majors, 3 units
DRAM 2300 Theatre Workshop I, 3 units
MUS 1000 Introduction to Music, 3 units
MUS 1190 Music Fundamentals, 3 units

[^7]MUS 2000 Music of World Cultures, 3 units (G)
MUS 2400 Orchestra, 1 unit
MUS 2410 Concert Chorale, 1 unit.
MUS 2430 University Chamber Singers, 1 unit
MUS 2440 Wind Ensemble, 1 unit

## 2. Literature/Philosophy

ENGL 1010 Introduction to Literature, 3 units
HUM 2000 Introduction to the Humanities, 3 units
PHIL 1010 Introduction to Philosophy, 3 units
PHIL 2200 Ancient Philosophy, 3 units
PHIL 2230 Modern Philosophy, 3 units
PHIL 2400 Contemporary Moral Issues, 3 units
3. Foreign Language
a. Any lower-division language or literature course taught in a foreign language.
b. ESL 1000 Beginning English and Grammar for ESL Students, 4 units
ESL 1005 Intermediate English and Grammar for ESL Students, 4 units
ESL 2000 English Grammar and Composition for Foreign Students, 3 units
D. Social, Economic, and Political Institutions and Human Behavior (12 units minimum)

1. United States History and Constitution/California State and Local Government:
Students may satisfy subject requirements in United States History and Constitution and California State and Local Government by passing departmental examinations in these fields. HIST 4640, Constitutional History of the United States, 3 units, will fulfill the U.S. Constitution portion of these requirements.

The Califormia Code of Regulations, Title 5, Section 40404, requires "...appropriate courses in the Constitution of the United States, and in American history, including the study of American institutions and ideals, and of the principles of state and local government established under the Constitution of this State...." Completion of one course under (a) and the course under (b) below satisfies these requirements.
a. One of the following United States history courses (which are not applicable to the upper-division General Education requirements):

HIST 2600 Problems in U.S. History, 3 units
HIST 3610 Colonial America, 3 units
HIST 3620 Early National America, 3 units
HIST 3630 America After the Civil War, 3 units
HIST 3640 Contemporary America, 3 units
b. One course covering United States Constitution and California State and local government:

PSCI 1201 American Government, 3 units
2. A minimum of one course from each group is required ${ }^{6}$
a. Human Institutions: Structures and Processes

COMM 2011 Approaches to Human Communication, 3 units
COMM 2200 Introduction to Mass Media, 3 units
ECON 2500 Principles of Economics I, 3 units
ECON 2510 Principles of Economics II, 3 units
HIST 1010 World Civilizations I, 3 units (G)
HIST 1020 World Civilizations II, 3 units (G)
PSCI 2000 Introduction to Political Science, 3 units
PSCI 2020 Politics and Society, 3 units
PSCI 2030 Global Politics, 3 units (G)
SOCL 1010 Introduction to Sociology, 3 units
b. Society and Culture

ANTH 2060 Introduction to Cultural Anthropology, 3 units (G)
ANTH 2080 Introduction to Physical Anthropology, 3 units
ANTH 2090 Introduction to Archaeology, 3 units
COGS 2100 Introduction to Cognitive Studies, 3 units
CJ 2250 Introduction to Criminal Justice, 3 units
ETHS 2000 Contemporary African American Studies, 3 units
ETHS 2100 Contemporary Chicano Studies, 3 units
ETHS 2200 Contemporary Asian American Studies, 3 units
GEOG 2010 Introduction to Natural Environment, 3 units
GEOG 2020 Introduction to Cultural Geography, 3 units (G)
GEOG 2400 World Regional Geography, 3 units
GEOG 2420 Third World Regions, 3 units
PSYC 2010 Introduction to Psychology, 3 units
WMST 2020 Introduction to Women's Studies, 3 units
E. Individual Resources for Modern Living (3 units minimum)

Note: Include one course from each group of courses:

1. CIS 2000 Introduction to Business Computer Systems, 3 units

HLTH 1000 Health in Today's Society, 3 units
NURS 2040 Better Health with Self Care, 2 units
PSYC 1000 Sexual Behavior, 3 units
PSYC 2030 Psychology of Adjustment, 3 units
SOCL 2000 Intergenerational Experiences and Life Course Developments, 2 units
WMST 2500 Women's Development and Lifestyle Choice, 3 units
2. PHED 1010-1999 Physical Education Activities, 1 unit ${ }^{7}$

## F. Upper-Division General Education Requirements (9 units minimum)

Each student is to complete a minimum of 9 units of upper-division level General Education course work. These courses may be taken no earlier than the term in which upper-division status (completion of 60 semester units) is attained.

[^8]78 / Undergraduate Degrees and Programs
Students will not be given upper-division General Education credit for course work in the discipline(s) of their major or concentration. The distribution of the 9 semester units must include 3 units from each of the three following areas:

1. Natural Science and Mathematics
a. Biology

BIOL 3000 Frontiers in Biology, 3 units
BIOL 3020 Introduction to Evolution, 3 units
b. Chemistry

CHEM 3070 The Chemicals in Your Life, 3 units
CHEM 3100 Environmental Chemistry, 3 units
c. Computer Science

CS 4000 Personal Computing, 3 units
d. Mathematics

MATH 3350 Applied Mathematical Models, 3 units
MATH 3400 Set Theory and Mathematical Logic, 3 units
e. Other Natural Sciences

NSCI 3000 Science for Self-Sufficiency, 3 units
f. Physics and Physical Sciences

ASTR 3000 Contemporary Astronomy, 3 units
GEOL 3000 Physical and Environmental Geology, 4 units
GEOL 3500 Earthquakes and Volcanoes, 3 units
PHSC 3500 Solar and Other Alternative Energies, 3 units
PHYS 3520 Modern Physics and Quantum Mechanics, 3 units
PHYS 3800 Fundamentals of Nuclear Energy, 3 units
2. Humanities
a. Art

ART 4545 Modern Art 1870-1945, 3 units
ART 4555 American Art, 3 units
b. Drama

DRAM 3020 Children's Theatre, 3 units
DRAM 4550 American Theatre, 3 units
c. English

ENGL 3920 Masterpieces of World Literature, 3 units
ENGL 3940 Literature of American Cultures, 3 units (G)
HUM 3000 Explorations in Humanities, 3 units
d. Foreign Languages

FREN 3930 French Literature in Translation, 3 units
GERM 3930 German Literature in Translation, 3 units
PORT 3930 Portuguese \& Brazilian Literatures in Translation, 3 units
SPAN 3930 Spanish Literature in Translation, 3 units
SPAN 3970 Contemporary Latin American Prose in Translation, 3 units
e. Music

MUS 3400 American Music, 3 units
MUS 3410 History of Jazz, 3 units
f. Philosophy

PHIL 3010 Classics of Western Philosophy, 3 units
PHIL 4401 Professional Ethics, 3 units
3. Social, Economic, and Political Institutions and Human Behavior a. Anthropology

ANTH 3000 Anthropology and Modern Social Issues, 3 units (G)
ANTH 3010 The Great Discoveries, 3 units
b. Business Administration (Not for Business majors)

ACC 3005 Personal Financial Planning, 3 units
CIS 3780 Microcomputer and Management Information Systems, 3 units
FIN 3210 Investment Management, 3 units
c. Cognitive Studies

COGS 4100 Philosophical Aspects of Cognitive Science, 3 units
d. Communication Studies

COMM/WMST 3100 Advanced Interpersonal Communication, 3 units
JOUR 3040 History of Journalism, 3 units
e. Economics

ECON 3100 Economic History of the United States, 3 units
ECON 4500 Economics of Investment, 4 units
f. Ethnic Studies

ETHS 4200 The Minority Experience, 3 units ( $G$ )
g. Geography

GEOG 3020 Human Ecology, 3 units
GEOG 3340 California Culture and Environment, 3 units
h. History

HIST 3090 Contemporary World History, 3 units ( G )
HIST 3400 The Great Teachings, 3 units (G)
i. Multidisciplinary

MDIS 4400 Politics of the Environment, 3 units
j. Politics and Public Administration

PSCI 3055 Marx on the Human Condition, 3 units
PSCI 3225 Civil Liberties, 4 units
k. Psychology

PSYC 3340 Human Development III: Adulthood \& Aging, 3 units
PSYC 4250 Drugs and Behavior, 3 units
L. Sociology

SOCL 3150 The Family, 3 units
SOCL 4520 Personality and Society, 3 units
m. Women's Studies

WMST 3550 Society and Gender, 3 units
G. Multicultural Requirement ( 3 units minimum)

Within General Education selections, students under a 1994-95 or a later catalog-year must complete at least 3 units of the following course work that addresses multicultural, ethnic studies, gender, or nonwestern cultures issues. Courses that fulfill both the multicultural and another General Education area requirement are indicated below and are crossreferenced above with a " $(\mathrm{G})$ ":

ANTH 2060 Introduction to Cultural Anthropology, 3 units (D.2.b.)
ANTH 3000 Anthropology and Modern Social Issues, 3 units (F.3.a.)
ANTH 3900 Women: A Cross-Cultural View, 3 units

## 80 / Undergraduate Degrees and Programs

ANTH 4165 The Family in Cross-Cultural Perspective, 3 units
ANTH 4211 The World in Change, 3 units
ART 2525 Art History Survey-Non-Western, 3 units (C.1.)
COMM 4160 Intercultural Communication, 3 units
ENGL 3940 The Literature of American Cultures, 3 units (F.2.c.)
ETHS 4200 The Minority Experience, 3 units (F.3.f.)
ETHS 4350 Multiculturalism: From Bias to Reality, 3 units
GEOG 2020 Introduction to Cultural Geography, 3 units (D.2.b.)
GEOG 3010 Cultural Geography, 3 units
GEOG 3580 Cultural Ecology of Southeast Asian People, 4 units
HIST 1010 World Civilizations I, 3 units (D.2.a.)
HIST 1020 World Civilizations II, 3 units (D.2.a.)
HIST $3090 \quad$ Contemporary World History, 3 units (F.3.h.)
HIST 3400 The Great Teachings, 3 units (F.3.h.)
MDIS 3400 Latin-American Cultures,
MUS $2000 \quad$ Music of World Cultures, 3 units (C.1.)
PSCI $2030 \quad$ Global Politics, 3 units (D.2.a.)
PSCI 3700 Ethnic and Gender Politics, 4 units
SOCL 3250 Social Issues in Cross-Cultural Perspective, 3 units
SOCL 4010 Race and Ethnic Relations, 3 units
WMST 3700 Ethnic and Gender Politics, 4 units
WMST 3900 Women: A Cross-Cultural Perspective, 3 units
WMST 4350 Multiculturalism: From Bias to Reality, 3 units

## Major

The major consists of a pattern of upper-division courses which are prescribed by the department, college, or school concerned, are exclusive of General Education requirements, and must be preceded by specified prerequisites in the major field of study and in support fields. Required courses in a major will total not less than 24 upper-division semester units in that discipline. More than one major may be completed. All requirements of the department of the major must be completed to qualify for a baccalaureate degree. Students seeking teaching credentials are advised to consult a credential adviser. (See "School of Education.")

As the University grows, new majors will be added. Freshmen may claim any additional majors developed and offered by the time they reach upper-division standing.

The University offers programs leading to the baccalaureate with a major in the following areas (available concentrations are indicated):

Anthropology<br>Ethnology<br>Physical Anthropology<br>Prehistoric Archaeology<br>Applied Studies<br>Art<br>Art History<br>Painting<br>Printmaking<br>Sculpture

## Biological Sciences

Botany
Entomology
Environmental Sciences
Genetics
Marine Biology
Microbiology
Zoology
Business Administration
Accounting
Finance
General Business
Management
Marketing
Operations Management
Chemistry
Environmental Sciences
Child Development
Cognitive Studies
Computer Information Systems
Decision Support Systems Management
Systems Analysi and Design
Computer Science
Criminal Justice
Corrections
Law Enforcement
Drama
Economics
English
TESOL
French
Geography
Applied Geography
Geology
Petroleum Geology/Exploration
Geophysics
History
Liberal Studies*

Accounting
Finance
General Business
Management
Marketing
Operations Management
Chemistry
Environmental Sciences
Child Development
Cognitive Studies
Computer Information Systems
Decision Support Systems Management
Systems Analysis and Design
Computer Science
Criminal Justice
Corrections
Law Enforcement
Drama
Economics
English
TESOL
French
Geography
Applied Geography
Geology
Petroleum Geology/Exploration
History
Liberal Studies*

## Mathematics

Mathematical Computing
Operations Research/Statistics

## Music

Nursing**
Organizational Communication
Philosophy
Physical Education
Athletic Training
Health
Wellness Management
Physical Sciences
Applied Physics
Earth and Space Sciences
Environmental Sciences

## Physics

Political Science
Public Administration
Psychology
Developmental Psychology
Experimental Psychology
Social Sciences
Interdepartmental Studies
International Studies
Urban and Community Studies
Sociology
Human Services
Spanish
Special Major
Vocational Education

## Special Major

Strongly motivated University students may design special academic programs leading to a degree not offered through existing standard degree programs. Students interested in a special major program should seek a volunteer faculty advisory committee consisting of three professors from at least two disciplines. A program designed jointly with this faculty committee is then submitted for approval on a Request for Special Major Program form.

Permission of the Special Major Coordinator will be required in all cases. If necessary, the University will suspend normal University rules (but not State laws or Trustee regulations) governing such requirements as majors, minors, and general studies. The proposal may be for a special major only or for a comprehensive program covering the student's undergraduate experience at the University. The applicant must present a program consisting of at least 30 semester units to be completed following the approval of the B.A./B.S. special major.

[^9]
## Minor

Completion of a minor for a baccalaureate degree may be required by the department. A minor is a pattern of prescribed course work consisting of a minimum of 8 upper-division semester units and a minimum of 15 semester units in courses acceptable to the major adviser and the department concerned. Departmental minors normally require one-half of the number of units required for a major within a department. More than one minor may be completed. As the University grows, new minors will be added. Freshmen may also claim any additional minors developed and offered by the time they reach upper-division standing.

The University offers the following minors:

Anthropology
Art
Art History
Biological Sciences
African American Studies
Business Administration
Chemistry
Chicano Studies
Cogntive Studies
Computer Information Systems
Computer Science
Criminal Justice
Drama
Economics
English
Environmental and Resource Studies
Ethnic Studies
Exceptional Children and Youth
French
Geography
Geology
German

Gerontology
History
Interpersonal Studies
Journalism
Latin American Studies
Mathematics
Microelectronics
Music
Philosophy
Physical Education
Physical Sciences
Physics
Political Science
Psychology
Public Administration
Recreation (currently inactive)
Russian and East European Studies
Sociology
Spanish
Speech Communication
Women's Studies

## Multiple Majors and/or Minors

Second majors, minors, and/or concentrations normally may not be comprised essentially of courses from the same discipline or requirements of the first major, minor, or concentration. If the second major, minor, or concentration has an abundance of courses from the first major, minor, or concentration, special approval will be required in order to grant the additional major, minor or concentration.

## Requirements For An Additional Baccalaureate Degree

Two baccalaureate degrees cannot be earned at the same time. A student may earn one degree and two majors with the second major posted to their academic record.

To qualify for an additional baccalaureate degree at CSU Stanislaus, students must:

1. Complete a minimum of 30 semester units in residence at CSU Stanislaus after requirements for the last degree have been met. Specific requirements include completing:
a. at least 24 upper-division units, and
b. at least 12 units in the new major.
2. Comply with all CSU Stanislaus graduation requirements, including:
a. the General Education requirements of the student's current catalog year,
b. satisfaction of the graduation writing competency requirement, and
c. other institutional and system requirements in effect at the time of acceptance for the second degree or at the date of completion.
3. Obtain approval of the major department chair.
4. Maintain at least a 2.0 (C) grade point average for all CSU Stanislaus residence course work taken while pursuing the additional degree.
5. Complete a major in a discipline other than that in which a previous degree was earned.
Rather than complete requirements for an additional degree, a postbaccalaureate student may complete only requirements for an additional major. This program must be completed under the supervision of an academic department.

## University Honors Program

For students of unusual curiosity, energy, and intelligence, the University provides an Honors Program. Its heart is an alternative General Education curriculum made up of a series of interdisciplinary seminars and sections of regular courses. The classes combine information and insight from various fields of study, and students take an active role in the shape and conduct of each one. The program also sponsors overnight backpacking expeditions, attendance at concerts, plays, and exhibits, and a week at the Shakespeare Festival in Ashland, Oregon. Students are encouraged to seek cultural and intellectual adventure.

Admission to the program is by invitation and is based on an assessment of a variety of factors such as grades, test scores, essays, and interviews. The program believes in taking risks and nurturing students who show exceptional promise. For further information and details about the Honors curriculum, please see "University Honors Program" section of this catalog.


# Graduate Studies 

Office: Library Building 151, (209) 667-3129<br>Dean:<br>Diana Mayer Demetrulias<br>Coordinator: Mary Coker



The University offers Master of Arts programs in Education, English, History, and Psychology; Master of Business Administration; Master of Public Administration; Master of Science programs in Marine Science and in Psychology; Master of Social Work; and Master of Arts and Master of Science in Interdisciplinary Studies; and certificate programs in TESOL and printmaking. Specific requirements within these degree programs will be found in the catalog sections of the departments concerned.

## Graduate and PostbaccalaureateApplication Procedures

All graduate and postbaccalaureate applicants (e.g., master's degree applicants, those seeking credentials, and those interested in taking graduate level courses for personal or professional growth) must file a complete graduate and postbaccalaureate application, including Part B. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the $\$ 55$ non-refundable application fee.

Applicants seeking financial aid should contact the Financial Aid Office, 6673336, for application materials.

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 CSU campus, it will be necessary for any applicant to submit separate applications (including fees) to each. Applications may be obtained from the Graduate Studies Office of any California State University campus. Direct contact with the graduate program department is recommended.

Application and admission to the University in no way imply admission to any master's or credential program. The student must additionally contact the appropriate department for instructions regarding specific departmental procedures.

## Transcripts

All applicants for graduate and postbaccalaureate admission must request two copies of complete official college transcripts be sent directly to the Admissions and Records Office from each college and university attended (other than CSU Stanislaus). You shỏuld arrange to have those official transcripts sent at the same time you submit your application.

## Continuing Baccalaureate Students

Students who hold a baccalaureate degree from this University and plan to continue postbaccalaureate or graduate study must apply for readmission. Such students must meet program admission criteria and are subject to the same enrollment requirements and application fees as other students.

## GraduateandPostbaccalaureateAdmission 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 campus 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:

1. Postbaccalaureate Unclassified-To enroll in courses for professional or personal growth, you must be admitted as a postbaccalaureate unclassified student. By meeting the minimum requirements, you are eligible for admission as a postbaccalaureate unclassified student. With prior approval, a maximum of 9 such units may be used toward a graduate degree program. Some departments may restrict enrollment of unclassified students due to 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
2. 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
3. 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
4. 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, as prescribed by the campus.

## Admission of Non-Resident Postbaccalaureate Students

Non-resident applicants normally are not admitted to "Postbaccalaureate Standing: Unclassified." Admission of non-residents to this classification must be by special action of the department and approval of the Dean of Graduate Studies.

## TOEFL Requirement (Graduate)

All graduate and postbaccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive minimum scores of 550 total and part scores of 54 on the Test of English as a Foreign Language (TOEFL). Some programs require higher scores.

## Master's Degree Program Requirements

The program requirements for master's degrees assume substantial undergraduate preparation in the field. A student lacking this preparation will need to exceed the minimum requirements indicated below.

The program for the master's degree is a coherent pattern of (1) courses specified for an approved field of concentration, and (2) additional courses selected to meet the student's particular needs. It consists of at least 30 units completed after the bachelor's degree and within seven years just preceding the granting of the master's degree. The Master of Arts degree must include a minimum of 30 units; the Master
of Science, a minimum of 36 units. Only graduate courses ( 5000 series) and approved upper-division courses are acceptable to meet the unit requirement. Other courses are counted in calculating the student's study load, but cannot be counted toward the unit or grade pint average requirements for the master's degree. The total program must include the following:

1. At least 21 units must be CSU Stanislaus residence credit, 6 units of which must have been taken at CSU Stanislaus prior to enrolling for the thesis or project.
2. Of the 30 units for the degree, not more than 9 units may consist of any combination of transfer credit. Credit by examination may be used to fulfill prerequisites, but may not apply toward the 30 units. Extension credit is not regularly used on master's degree programs; special cases recommended by the department may be evaluated by the Dean of Graduate Studies. Transfer, extension, and correspondence credit may be used toward a master's degree only if the institution offering the work would use it on a comparable master's degree program, and if it is recommended by the department and judged by the Dean of Graduate Studies to be particularly relevant to the individual student's program.
3. A last semester senior who is within 9 units of earning a baccalaureate degree may enroll in an upper-division or graduate level course(s) and apply to an advanced credential or master's degree objective by requesting postbaccalaureate credit during the term in which they intended to graduate. The student must submit a Request for Postbaccalaureate Credit form to the Admissions and Records Office. Approval of the department graduate adviser is required. This action must be taken at the time of registration; retroactive authorization will not be granted. The student must apply to the University and the program for postbaccalaureate work.
4. At least half of the units must be in courses designed primarily for master's degrees (numbered in the 5000 series). Most programs require more than 15 units of 5000 series course work.
5. Appropriate course work from a field other than the major may be required at the discretion of the major department.
6. Appropriate provision must be made for a thesis, a project, or comprehensive examination.
It is the student's responsibility to complete the specific courses included in the degree progrâm. Once a degree program has been approved by the student's graduate committee, it may be changed only on the written request of the student and the approval of the major adviser and the Dean of Graduate Studies.

## Graduate Writing Proficiency Requirement

All graduate students must demonstrate competency in writing skills as a requirement for a master's degree. A candidate for an advanced degree can satisfy the CSU writing requirement by (a) satisfactory completion of the course designated by the department as assessing writing proficiency in standard English or (b) satisfactory completion of an alternative plan adopted by the department and approved by the Graduate Council. Candidates should consult the appropriate department for specific details.

## Foreign Language Requirement

While skill in a foreign language is not a general University requirement for admission to or completion of the master's degree, certain programs require that reading mastery of one foreign language, usually equivalent to two years of collegiate study, be demonstrated before advancement to candidacy. Candidates should consult the appropriate department for specific details.

## Grade Requirements

All graduate students are subject to the regulations listed in the "Academic Standards" section. In addition, the following regulations apply specifically to graduate students:

1. No course with a grade below C - may apply on a master's degree program.
2. To be eligible for advancement to candidacy, a student must have earned a 3.0 grade point average on all upper-division and graduate course work completed after the date of beginning the first course to be included in the master's degree program.
3. To be eligible for the granting of the degree, a student must have maintained a 3.0 grade point average. Any grade earned in a course on the program continues to be computed in the grade-point average even if that course is later dropped from the program for any reason.

## Student Performance

Performance expectations for graduate students enrolled in undergraduate or dual-listed courses normally are such that graduate students complete at least one additional assignment. The standard of quality of their written and oral performance in the course would be significantly higher than that of an undergraduate. Performance expectations for undergraduate students enrolled in graduate-level courses should be the same as those for graduate students.

## Graduate Probation and Disqualification

Students admitted to "Postbaccalaureate Standing Unclassified" will be governed by the "Undergraduate Probation/Disqualification Policy." The following policy will govern candidates admitted to "Graduate Standing: Conditionally Classified," "Postbaccalaureate Standing: Classified," and "Graduate Standing: Classified."
Note: Each graduate and credential program will have additional probation disqualification regulations. Students should consult the department for specific details.

## Probation

1. A student who is enrolled in a graduate degree program in Conditionally Classified or Classified Standing shall be placed on academic probation if the student fails to maintain a cumulative grade-point average of at least 3.0 (grade of $B$ ) in all units applicable to the degree program.
2. A student who withdraws from all or a substantial portion of a program in two successive terms or in any three terms may be placed on probation by the department.
3. The department may place a student on probation for repeated failure to progress toward the degree objective.
4. Failure to comply, after due notice, with an academic requirement may result in the department placing the student on probation.
5. A student placed on probation shall be notified in writing and shall be provided with the conditions to be met for removal from probation as well as the circumstances which will lead to disqualification.

## Disqualification

A graduate or postbaccalaureate student shall be subject to disqualification if, while on probation, the student fails to raise his/her grade-point average to 3.00 within the time specified by the department.

The disqualification decision for Classified graduate students is the responsibility of the appropriate department. The disqualification decision for persons admitted to "Postbaccalaureate standing: Unclassified" status is the responsibility of the Dean of Graduate Studies, in consultation with the University Appeals Committee.

## Administrative Academic Disqualification

Consistent with guidelines issued by the Chancellor of The California State University, a graduate student may also be placed on probation or disqualified by appropriate campus authorities forrepeated withdrawal, failure to progress toward an educational objective, and noncompliance with an academic department.

## Appeal of Disqualification Status

A student who believes his/her disqualification was arbitrary, capricious, or discriminatory shall have the right of appeal. The "Postbaccalaureate Standing: Unclassified" student shall appeal to the an appeals committee through the Dean of Graduate Studies; students admitted to Graduate Standing shall appeal through the apprópriate department chair. The appeals committee shall consist of a faculty member from the department selected by the department chair, a faculty member from the department selected by the student, and a faculty member, who will chair the appeals committee, selected from outside the department by the Dean of Graduate Studies.
Note: Advanced credential and master's candidates should check carefully with the department about probation, disqualification, and appeals of disqualification since each department has the right to develop policy and procedures in addition to the University standards noted above.

## Catalog Rights

A person in continuous enrollment may elect the requirements in effect at the time of gaining Classified Standing or at the time of completing degree requirements. For purposes of this regulation, "continuous enrollment" is defined as attendance in at least one semester each calendar year. Attendance in Summer session or Winter term is not applicable to this regulation. An absence for an approved educational leave or for attendance, not to exceed two years, at a regionally accredited college may be permitted. Students who do not enroll at least part-time for one semester each calendar year risk the loss of rights to their original catalog year for graduation requirements. Please consult with the specific department graduate coordinator for individual program policy. Substitution for discontinued courses will be authorized by the major adviser and approved by the Dean of Graduate Studies.

## Workshop, Institute, and Course Work Taken Through Extension

These units normally will not be accepted in a master's or credential program. A student who wishes to use such course work must seek prior approval from the major adviser and Dean of Graduate Studies.

## Repeating Courses

Postbaccalaureate students doing work at the undergraduate level, such as pursuing a second major, are to be treated as undergraduates for purposes of repeating a course. Graduate students, by prior permission of the department, may repeat a course, as follows: the original grade will be included in computing the overall grade point average but will not be included in computing the grade point average for the master's degree.

## Units Completed in Postbaccalaureate Standing: Unclassified

The maximum number of units applicable to a degree earned as a Postbaccalaureate Unclassified student shall be 9 , including transfer units. The approval of the program coordinator and the Dean of Graduate Studies is required to exceed the 9unit limit. (Refer to "Policies and Procedures" section of this catalog for additional information on "Postbaccalaureate Credit.")

## Application to Graduate Degrees for Courses Numbered 3000-3999

Upper-division courses numbered 3000-3999 will not be awarded graduate credit unless they are included on a departmental list approved by the Graduate Council. Courses that are not listed can be awarded graduate credit only if, prior to enrollment in the course, the student receives the major adviser's recommendation and the approval of a petition by the Dean of Graduate Studies.

## Graduate Credit For Undergraduate Courses

Instructors expect a higher level of performance from graduate students enrolled in undergraduate courses. Additional reading, writing, and/or oral presentation are employed to meet this standard.

## Examinations

Besides regular course examinations, some master's degree programs at the University require qualifying examinations for classified standing and advancement to candidacy. In some instances, final oral and written comprehensive examinations at the conclusion of the program are required.

## Qualifying Examinations

Among the qualifying examinations used by some departments are the General Test and the Subject Test of the Graduate Record Examinations, a nationally standardized group of examinations prepared and scored by the Educational Testing Service. Graduate Record Examinations are given four times a year in various parts of the world; students taking the examination at any of the testing centers may request that their scores be sent to the University Testing Office. The University Testing Office administers the test on the University campus. Graduate admissions tests (GRE, GMAT, MAT, etc.) taken within five years of acceptance to graduate programs are considered as current. For information about dates, fees, and application procedures, consult the Testing Office or the Graduate Studies Office.

## Final Examinations

In addition to the qualifying examinations, all departments reserve the right to require written or oral comprehensive examinations when circumstances demand. A few departments require final comprehensive examinations of all candidates, and most departments requiring a thesis also require an oral defense of the thesis. Graduate students are urged to consult their graduate adviser about examination requirements.

## Validation of Outdated Course Work and Units

Course content and related units earned at another university more than seven years before completion of the degree cannot be used to meet degree requirements under any circumstances.

Credits earned at CSU Stanislaus more than seven years before completion of the degree may be used to meet degree requirements only under the following conditions: (a) the student must demonstrate a current proficiency in the subject matter of the course in an examination administered by the original instructor of record or, if unavailable, a qualified substitute appointed by the departmental Graduate Committee; (b) validation is available only on the approval of the department and final inclusion of validated course work in a degree program requires departmental recommendation and Dean of Graduate Studies approval. Validation of outdated course work and units may not result in more than one-third of the total units required for the degree.

## Thesis, Project, and Comprehensive Examination

The University has adopted the following definitions of the terms "thesis" and "project:"

1. A thesis is the written product of the systematic study of a significant problem. It clearly identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendation. The finished product must evidence originality, critical and independent thinking, appropriate organization and format, clarity of purpose, and accurate and thorough documentation. Normally an oral defense of the thesis will be required.
2. A project is a significant undertaking of a pursuit appropriate to the fine arts and applied disciplines. It is more than the presentation of a mere outline, plan depiction, description or demonstration, though it may include these. It must evidence originality and independent thinking, appropriate form and organization, and a rationale. It may take the form of a creative work such as a literary or musical composition, a group of paintings, a performance, or a film. It also may take the form of an application such as a business plan, market survey, handbook development, curriculum plan, computing system or other endeavor. It must be described and summarized in a written document that includes the project's significance, objectives, methodology, and a conclusion or recommendation. An oral defense or presentation of the project may be required.
3. The results of a written comprehensive examination, which has been prepared by either the appropriate department or faculty member, should demonstrate the student's ability to integrate the knowledge of the area, evidence critical and
independent thinking, and in general show the mastery of the subject matter. The results of the examination must evidence independent thinking, appropriate organization, critical analysis and accuracy of documentation.
No academic distinction is made among a thesis, a project, or comprehensive examination. Each is equally acceptable as a means of fulfilling the requirements for the master's degree. Specific departmental instructions or requirements should, however, be ascertained by the candidate before enrollment in courses numbered 5990.

Whether a student is preparing a thesis or a project, it should be noted that the quality of the work accomplished is a major consideration in judging acceptability. The finished product must evidence originality, appropriate organization, clarity of purpose, critical analysis, and accuracy and completeness of documentation.

Critical thinking and independent thinking should characterize every project. Mere description, cataloging, compilation, or other superficial procedures are not adequate.

The quality of the writing, format, and documentation must meet standards approved by the department granting the degree. Thesis format and writing must be consistent with the dictates of a style-book authorized by the department. The student must consult with the department and the Graduate Studies Office concerning these matters before beginning work on the thesis or project.

1. Registration for thesis or project requires a prospectus approved by the student's thesis committee. Instructions for developing and gaining prospectus approval are available from the department. A student planning to register or reregister for thesis after a break of two semesters attendance must be readmitted to the University.
2. A student whose thesis or project is planned to extend over more than the term of first enrollment in 5990 or 5960 may receive a Satisfactory Progress (SP) grade. The SP converts to " F " or "NC" after two years have expired.
3. Before a thesis or project is officially accepted by the Master's Committee, it must meet the above criteria on matters of format, documentation, and quality of writing.
4. No co-authored theses or projects are allowed. If two or more candidates are collaborating on research or a project, each must develop, write, and submit a separate and distinct thesis or project.
5. Student must bring either two (2) acceptable copies of the bound thesis, two (2) acceptable copies of the bound project, or one (1) acceptable copy of an unbound project to the Office of Graduate Studies no later than the last day of the term in which the student plans to graduate. Binding expenses are the student's responsibility. The Admissions and Records Office will not record a grade other than "SP" until the Dean of Graduate Studies has given final approval for the thesis or project. Contact the Office of Graduate Studies for detailed information on thesis and project requirements.
6. Receipt of an approved thesis or project is the equivalent to publication and the thesis or project will be available to the public in the University library, including worldwide interlibrary loan.
7. A student may arrange to have the thesis or project published in microfilm form, with an abstract of the thesis published in the quarterly periodical, Masters/ Abstracts. The University encourages this form of publication. Further details of the microfilming and copyright procedure may be obtained from the University Librarian.

## Master's Degree Thesis or Project Committee

1. The master's committee normally is composed of three members from the fulltime faculty.
2. Under certain circumstances, a retired or emeritus faculty member with an academic specialization and/or qualifications that are not held by another department member may serve as a volunteer third committee member, but not as the committee chair.
3. Normally, the chair of the master's committee and the second member are from the department in which the thesis or project is written.
4. When appropriate, the committee may add to the three-member master's committee one individual who is not a member of the University faculty. Such an individual must be approved by the other members of the thesis or project committee of the student's major department and the Dean of Graduate Studies.
5. The approval of master's committee appointments is the responsibility of the department in which the student is seeking the degree.

## Application for Graduation with a Master's Degree

A request that the master's degree be granted must be filed (including verification of payment of the graduation fee) at the Admissions and Records Office in the first two weeks of a term or first week of a summer session in which the work is to be completed.

Failure to complete requirements for the degree during the term of the application necessitates the filing of a new application for the term of actual completion.

## Honors at Graduation

To be eligible to receive the master's degree with distinction, a student must be nominated by the department and must have earned at least a 3.9 grade point average in the program for the master's degree.

## Second Master's Degree

The student must satisfy all admission, prerequisite, and program requirements of the new degree program. Units used in the first degree program may not be applied to the second. If a student seeks admission as a candidate for a second master's degree within one semester of the student's last CSU Stanislaus registration, no application fee is required; the student simply files a "Declaration or Change of Degree Objective" form with the Office of Admissions and Records. A student seeking a second degree is urged to contact the appropriate department for additional information.

## Duplicate Degree Tuition

By legislative mandate, duplicate degree tuition is charged to any student who has earned a degree equivalent to or higher than the degree awarded by the program in which the student is enrolled. This applies to students earning a second baccalaureate or a second master's degree. This fee is charged in place of the State University Fee.

Duplicate degree tuition does not apply to students enrolled in a credential or certificate program that has been approved by the Commission on Teacher Credentialing. Credential students pay only the regular University fees. Others who are exempt are dislocated workers; displaced homemakers; recipients of AFDC, SSI, or other general assistance program benefits; certain non-resident students; and, some students completing prerequisites for entry into a master's degree program.

Postbaccalaureate students may call the Office of Graduate Studies for further information. (Refer to "Registration and Other Fees" section of this catalog.)

# MA/MS Interdisciplinary Studies Program 

Office: Library Building 151, (209) 667-3129 Office of Graduate Studies<br>Director: Diana Mayer Demetrulias, Dean of Graduate Studies

Coordinator: Mary Coker
The MA/MS Interdisciplinary Studies program is offered to accommodate those students whose interests are interdisciplinary. Each program is a specially designed course of study, involving two or more disciplines, that relates to a coherent theme. The program is designed for exceptional, individual cases only, and provides an opportunity to pursue learning outside the framework of existing graduate programs both at CSU Stanislaus and other institutions of higher education.

The MA degree is awarded in all fields, especially in the arts, letters, and humanities. The MS degree is generally awarded in the sciences and normally requires more course units than the MA degree.

## Minimum Prerequisites for Program Admission

A student must, as a first step, apply for admission to the University. The application form may be obtained from the Office of Graduate Studies. After gaining admission to the University, the student must apply for admission to the MA/MS Interdisciplinary Studies program.

The successful student will normally meet all of the following criteria in order to be admitted to the MA/MS Interdisciplinary Studies program:

- A bachelor's degree from an accredited college or university.
- A minimum of 18 upper-division or graduate semester units in the primary field(s) of the proposed MA/MS Interdisciplinary Studies degree.
- A minimum GPA of 3.0 in upper-division and graduate work completed at all educational institutions.
- The submission of the scores on the Graduate Record Examination (General Test), along with the proposed program document.
The GRE scores, the undergraduate and postbaccalaureate grade point average, and undergraduate preparation are used as indicators for success in the graduate program. While no minimum GRE score on the General Test is established for program admission, the verbal, quantitative, and analytical scores are considered as three separate measures.


## Application Deadlines

The request to pursue a MA/MS Interdisciplinary Studies degree program must be submitted by the published deadlines. The University Interdisciplinary Committee generally reviews proposals five times during the academic year. Application deadlines are published in program information and are available in the Office of Graduate Studies.

Establishment of and consultation with a faculty committee, writing the program proposal, incorporation of revisions, and obtaining program approval is a time consuming process. Students are urged to allow a full semester for this process to occur. No more than nine units of completed course work prior to admission to the program may be included in the proposal.

Students are encouraged to attend an orientation session and to understand fully the program requirements before submission of the proposal. Orientation sessions are typically conducted in September, February, and May of each academic year.

## Program Requirements

- Program admission requirements must be met (completion of baccalaureate, GPA of 3.0, minimum of 18 upper division/graduate units in primary field, and submission GRE scores).
- Only 4000 and 5000 level courses may be counted toward the required units.
- At least 15 units for the MA and 18 units for the MS must be earned in 5000 level courses.
- A minimum of 6 units for MA and 9 units for MS must be taken in one or more disciplines other than the primary field of concentration.
- A maximum of 9 units of independent study may be included in a student's program.
- A 4000/5000 level research methods course appropriate for the discipline(s) must be included in the program.
- The CSU graduate writing proficiency requirement must be met.
- Six (6) units of project or thesis must included in the program. An oral defense is required for a thesis and may be required for a project.
- A maximum of 9 units of transfer credit may be included in the program. Extension, workshop, and institute credits are not acceptable.
- A maximum of 9 units completed prior to admission to the program may be included in the program.
- The CR/NC grading option is limited to field studies, practica, and internships and may not exceed 20 percent of the required course work.
- No grade below B may be applied to the degree.
- No course work taken more than 7 years prior to graduation may be applied to the program.


## Graduate Multidisciplinary Course Descriptions:

MDIS 5900 Introduction to Graduate Field Research Methods (3 units). To provide basic knowledge and skills requisite to conducting fieldresearch; covers philosophical foundations of social research, research design, methods, analysis, basic SPSS, and interpretation. Quantitative and qualitative approaches will be considered. Prepares students to conduct research directed to meeting requirements forM.A. Special Major thesis or projects. (Successful completion of research prospectus meets Graduate Writing Competency Requirement.) (Fall)

MDIS 5960 Graduate Project (1-6 units). A terminal graduate project; intended for M.A. Special Majors. Prerequisite: Consent of instructor and major adviser.

MDIS 5980 Individual Study (1-4 units). For postbaccalaureate students prepared for independent work and in need of advanced integrated studies. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MDIS 5990 Thesis (1-6 units). Thesis research; intended for M.A. Special Majors. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and approval of major adviser.

## Course Numbering System

## Course Level Identification

0001-0999 Prebaccalaureate (does not carry unit credit toward the 124 units required for a Bachelor's degree)
1000-2999 Lower-division courses designed primarily for freshmen and sophomores
3000-4999 Upper-division courses designed primarily for juniors and seniors, and certain selected courses for graduate students. These courses should be taken by freshmen and sophomores only under unusual circumstances approved by both the instructor and major adviser.
5000-5999 Graduate Courses for degrees. These courses are open only to qualified graduate students. (Last semester seniors within 9 semester units of graduation who have obtained the proper approvals may enroll for postbaccalaureate credit.)
6000-6999 Professional postbaccalaureate courses. These courses do not substitute for course credit in a credential sequence and will not be applied toward General Education, major, minor, or elective requirements for the bachelor's degree.
7000-7999 Noncredit courses. Not applicable to baccalaureate or advanced degrees, or to a credential program.
8000-8999 Extended Education Certificate program courses and those yielding continuing education units (CEUs). Not applicable to baccalaureate or advanced degrees, or to a credential program.
Only courses numbered 1000-4999 for undergraduate students carry unit credit toward the 124 units required for a Bachelor's degree.

## Special Course Numbers

For uniformity, certain types of courses have been listed under a single number by all departments and divisions as follows:

4910
4940, 5940, and 6940
2950, 4950, and 5950
4960
4980, 5980, and 6980
4990 and 5990
5960

Cooperative Education
Internship/Field Work
Selected Topics
Senior Seminars
Individual Study
Thesis
Graduate Project

## Explanation of Course Notations

The notations used in course descriptions listed under the various departments are as follows:

1. Courses offered for varying units are so indicated, e.g., (2-4 units).
2. A notation such as (Formerly 4500) at the end of a course description indicates the course was previously numbered 4500 and credit for both courses is not allowed.
3. To assist you in planning your academic program, many courses in this catalog are marked to indicate when they will be offered, e.g., Fall, Winter, Spring, or Summer. It is possible courses without those designations will not be offered during 1995-97. Please check the Schedule of Classes and with department offices for further information about course availability.

## College of Arts, Letters, and Sciences



| Interpersonal Studies | .Fred P. Hilpert |
| :---: | :---: |
| Journalism .......... | .Thomas J. Young |
| Latin American Stud | Julia Cruz |
| Liberal Studies . | Peter Finley |
| Marine Sciences | .Pamela Roe |
| Multidisciplinary Stud | Jay P. Christofferson |
| Russian and East Euro | H. Dieter Renning |
| Social Sciences ........ | John T. Wold |
| Social Work | .Ellen Dunbar |
| Special Major/Underg | Jay Christofferson |
| Urban and Communit | .Kenneth Entin |
| Women's Studies | .Richard L. Luevano |

## Mission of College of Arts, Letters and Sciences

The College of Arts, Letters and Sciences offers instruction in undergraduate and graduate fields which are vital to the mission of the University. Baccalaureate and masters degree instruction is intended to provide graduates with the knowledge and skills needed for their active and informed participation in the community, the nation, and the world and for personal growth. In addition, the College has major responsibility for the General Education program, which intends to insure a breadth of education in communication skills and critical reasoning, the sciences, the arts, the humanities, and the social and behavioral sciences.

To fulfill its commitment to quality instruction the College must:

- Foster excellence in degree programs and in the General Education program, affording all students the opportunity to develop intellectual confidence and to encounter a diversity of ideas, perspectives, cultures and technologies in their studies.
- Encourage and support the teaching excellence of its faculty and their creative, scholarly and artistic efforts.
- Support the curricular efforts of students by providing academic and career advising services and extra-curricular activities.



## Anthropology

Office: Classroom Building 215, (209) 667-3127
Chair: Kofi Akwabi-Ameyaw
Email: rkistler@toto.csustan.edu
Faculty: Kofi Akwabi-Ameyaw, Thomas E. Durbin, Susan Middleton-Keirn, Sari Miller-Antonio, Lewis K. Napton
Emeritus Faculty: Melvin H. Aamodt
The Department of Anthropology and Geography offers the Bachelor of Arts, Anthropology. Anthropology also may be selected as a discipline for the degree Bachelor of Arts, Social Sciences (see Social Sciences for further information) and as a concentration within Liberal Studies.

The Department of Anthropology and Geography supports the concept of international education and encourages students to investigate opportunities for overseas study. Certain courses offered at CSU International Programs study centers abroad are equivalent to courses in the Department of Anthropology and Geography and may be used to fulfill requirements for degree options offered by the Department and/or certain general education requirements. Students should consult the International Programs Bulletin (available at the circulation desk of the Library), a departmental adviser, and/or the campus International Programs Adviser for more information.

## Bachelor of Arts, Anthropology

The Anthropology major offers basic preparation for careers requiring contemporary cross-cultural understanding and awareness of cultural heritages. The major emphasizes archaeology, ethnology, physical and applied aspects of anthropology. It is also designed for students planning to teach social and biological sciences, and for students preparing for graduate work in anthropology and its various geographical areas/interdisciplinary specializations such as African Studies, Asian Studies, and Latin American Studies.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major ( 9 units):

ANTH 2060 Introduction to Cultural Anthropology, 3 units
ANTH 2080 Introduction to Physical Anthropology, 3 units
ANTH 2090 Introduction to Archaeology, 3 units
Note: A wide background in the Social Sciences, Humanities, and Biological Sciences is desirable. Students are encouraged to take introductory courses in related fields within these areas. Students preparing for graduate studies or research career in anthropology should include a course in statistics, computer science, and at least one language other than English.
3. Complete the major of not less than 30 upper-division units as approved by the major adviser; of these no more than eight units of CR-graded course work from courses graded exclusively CR/NC may apply toward the major. Completion of a minor is not required.

## The Major ( $\mathbf{3 0}$ units)

Complete a minimum of 30 upper-division units distributed as follows:

1. Ethnography and Ethnology (to include a minimum of 3 units in each category), 9 units
2. Physical Anthropology and Prehistoric Archaeology (to include a minimum of 3 units in each category), 9 units
3. ANTH 4500 Growth of Anthropology (required of all majors), 3 units
4. Elective upper-division units in Anthropology, 9 units

Note: Three units of approved upper-division work in computer science, taken outside of the Department of Anthropology and Geography, may be applied as part of your upper-division electives in Anthropology. See your adviser for approval of this option.

## The Minor

## Requirements (21 units)

Complete 21 units of anthropology course work, including at least 12 units of upper-division courses approved by the minor adviser.
Note: Students may specialize in one area of anthropology for the minor. No more than 8 units of CR-graded course work from courses graded exclusively CR/NC may apply toward the minor.

## The Concentrations

## Requirements ( $\mathbf{3 0}$ units)

To concentrate in one area within the Bachelor of Arts, Anthropology, complete the above major program taking all 9 upper-division electives in one of the following: Ethnology, Physical Anthropology, or Prehistoric Archaeology. Such concentrations will be recorded on students' transcripts.

## Liberal Studies Concentration

## Requirements ( 20 units)

Complete the required 20 -unit concentration from one of the three following anthropology sub-areas, as outlined below:

1. Ethnology ( 20 units)

Note: This concentration is recommended for students preparing for a teaching career.
a. ANTH 2060 Introduction to Cultural Anthropology, 3 units

Note: If used as credit toward completion of Liberal Studies Area A (Social Sciences), then a course in Cultural Geography must be taken in addition.
b. Ethnography and/or Ethnology, 17 units
2. Archaeology ( 20 units)
a. ANTH 2090 Introduction to Archaeology, 3 units
b. Prehistoric Archaeology, 17 units
3. Physical Anthropology ( 20 units)
a. ANTH 2080 Introduction to Physical Anthropology, 3 units
b. Physical Anthropology, 17 units

## Teaching Credentials

Anthropology majors interested in a Social Sciences waiver for a single subject credential should review the waiver requirements described in the "Social Sciences" section of this catalog. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed for the single subject credential.

## Anthropology Sub-Areas

## Lower Division

ANTH 2060 Introduction to Cultural Anthropology, 3 units
ANTH 2080 Introduction to Physical Anthropology, 3 units
ANTH 2090 Introduction to Archaeology, 3 units
ANTH 2950 Selected Topics in Anthropology, 1-5 units

## Upper Division

General Anthropology
ANTH 3000 Anthropology and Modern Social Issues, 3 units
ANTH 3010 The Great Discoveries, 3 units
ANTH 4500 Growth of Anthropology, 3 units
Ethnography
ANTH 3070 Peoples and Cultures of Africa, 3 units
ANTH 3101 Cultures of Asia and the Pacific, 3 units
ANTH 3200 Anthropological Studies of U.S. Culture, 4 units
ANTH 3301 The American Indian, 3 units
ANTH 3320 Native Peoples of Latin America, 3 units
ANTH 3400-3499 Modern Ethnographic Studies (topics vary), 1-4 units

## Ethnology

ANTH 3900 Women: A Cross-Cultural View, 3 units
ANTH 4030 Anthropology Through Film, 1-4 units
ANTH 4040 Crossing Cultural Boundaries: The Field Work Process, 4 units
ANTH 4130 Urban Subcultures: Chinatown, 1 unit
ANTH 4150 Comparative Religion, 4 units
ANTH 4165 Family in Cross-Cultural Perspective, 3 units
ANTH 4170 Economic Anthropology, 3 units
ANTH 4181 Political Anthropology, 3 units
ANTH 4200 Applied Anthropology and Social Change, 4 units
ANTH 4210 Medical Anthropology, 3 units
ANTH 4211 The World in Change, 3 units
ANTH 4221 Folk Literature and Arts, 3 units

## Prehistoric Archaeology

ANTH 3500-3599 Studies in World Prehistory (topics vary), 1-4 units
ANTH 3600 Method and Theory in Archaeology, 3 units
ANTH 4605 Archaeological Field Methods, 5 units
ANTH 4620 Science in Archaeology, 3 units
ANTH 4625 Directed Lab Research, 2 units
ANTH 4640 Archaeological Expedition, 2 units

| Physical Anthropology |  |
| :---: | :--- |
| ANTH 3750 | Human Evolution, 3 units |
| ANTH 3760 | Primates Past and Present, 3 units |
| ANTH 3780 | Primate Social Behavior, 3 units |
| ANTH 4700-4799 Studies in Physical Anthropology, 1-4 units |  |
| Linguistics |  |
| ANTH 3800 | Introduction to Linguistics, 3 units |
| Special Studies |  |
| ANTH 4900 | Directed Field Research, 1-5 units |
| ANTH 4910 | Cooperative Education, 2-4 units |
| ANTH 4940 | Internship in Anthropology, 1-6 units |
| ANTH 4950 | Selected Topics in Anthropology, 1-5 units |
| ANTH 4960 | Senior Seminar, 1-4 units |
| ANTH 4980 | Individual Study, 1-4 units |
| ANTH 4990 | Senior Thesis, 3-5 units |
| ANTH 5850 | Seminar in Graduate Research, 2 units |
| ANTH 5950 | Selected Topics in Anthropology, 1-5 units |
| ANTH 5960 | Graduate Projects, 3-6 units |
| ANTH 5980 | Individual Study, 1-4 units |
| ANTH 5990 | Thesis, 3-6 units |

## Course Descriptions

## Lower Division

ANTH 2060 Introduction to Cultural Anthropology (3 units). Introduction to the study of human culture and social institutions, with special emphasis on band, tribal, chiefdom, and state/peasant societies. (CAN ANTH 4) (Fall, Winter, Spring)

ANTH 2080 Introduction to Physical Anthropology (3 units). Introduction to physical (biological) anthropology; includes discussion of human and nonhuman primates, their behavior, evolutional history, anatomy, and variation. (CAN ANTH 2) (Spring)

ANTH-2090 Introduction to Archaeology (3 units). Introduction to prehistory and culture growth; the basic theories, methods, and goals of archaeology; cultural and historical reconstructions based on the interpretation of data recovered from worldwide archaeological contexts. (CAN ANTH 6) (Fall, Spring)

ANTH 2950 Selected Topics in Anthropology (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of anthropology. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

ANTH 3000 Anthropology and Modern Social Issues (3 units). An examination of the ways in which cultural anthropology can offer contemporary Americans a broad understanding of national/world events and problems. Issues treated include the Third World, race and racism, poverty and culture, education in modern society, the environment, and social change. (Fall, Spring)

ANTH 3010 The Great Discoveries (3 units). A survey of the great.discoveries of the biological and cultural nature of humankind: past, present, and future. A study of evidence for early humans, "lost" civilizations, the decipherment of ancient languages, Stone Age people "discovered" in recent times, and the many great discoveries concerning the development of culture and social institutions in the study of bands, tribes, and civilizations of humankind. (Fall, Winter, Spring)

ANTH 3070 Peoples and Cultures of Africa (3 units). An ethnographic survey of selected contemporary and traditional societies and cultures of sub-Saharan Africa. Emphasis is placed on the varied effects of Western European culture on the peoples studied as well as their traditional customs and cultures. Prerequisite: ANTH 2060 recommended or Junior standing.

ANTH 3101 Cultures of Asia and the Pacific (3 units). An ethnographic (cultural) survey of selected contemporary and traditional societies of Asia (China, India, Japan, and Southeast Asia) and the Pacific (Australia, Indonesia, Melanesia, Micronesia, the Philippines, and Polynesia). Emphasis is placed on the varied effects of Western European culture and/or the modernization process on the peoples studied as well as their traditional customs and cultures. Prerequisite: ANTH 2060 recommended or Junior standing. (Spring)

ANTH 3200 Anthropological Studies of U.S. Culture (4 units). In addition to their study of the world's exotic, remote, small-scale societies, anthropologists have recently begun to look at their own American culture and its institutions. This course uses films, class discussions, lectures, and contemporary authors to examine American culture, i.e., world view, values, religion, marriage, family, enculturation, political, medical, and economic systems from the perspective of anthropologists at home. Prerequisite: ANTH 2060 recommended or Junior standing.

ANTH 3301 The American Indian (3 units). An ethnographic (cultural) survey of selected contemporary and traditional Native American societies. Specifically included are the tribal peoples of North America (special emphasis is given California). Emphasis is placed on the varied effects of Western European cultures on the groups studied as well as their traditional customs and cultures. Prerequisite: ANTH 2060 recommended or Junior standing. (Fall)

ANTH 3320 Native Peoples of Latin America (3 units). An ethnographic (cultural) survey of selected contemporary and traditional native Latin American folk (peasant) societies of Mexico, the Caribbean, Central and South America. Specifically included are Nahua (Aztec), Zapotec, Maya, Quechua (Inca) and other groups. Emphasis is placed on the varied effects of Western European culture on the peoples studied as well as theirtraditional customs and cultures. Prerequisite: ANTH 2060 recommended or Junior standing.

ANTH 3400-3499 Modern Ethnographic Studies (1-4 units). Studies in the ethnography of various areas of the contemporary world. Course content may vary from term to term. Prerequisite: ANTH 2060 or Junior standing.

ANTH 3500-3599 Studies in World Prehistory (1-4 units). Studies of various prehistoric archaeology cultures. Course content may vary from term to term. Prerequisites: ANTH 2090 or Junior standing.

ANTH 3600 Method and Theory in Archaeology (3 units). Study of current methods in archaeology, emphasis on applied and theoretical procedures in data sampling, collection, and evaluation; survey of method and theory in excavation of archaeological sites; integration, analysis, and interpretation of archaeological phenomena. Prerequisite: ANTH 2090 or Junior Standing. (Spring)

ANTH 3750 Human Evolution (3 units). Survey of what is known about human history from the beginnings of the human family and beyond. Includes some information on what is known about early nonhuman primates, then continues on to discuss the various human forms uncovered from ancient sites. Prerequisites: ANTH 2080 or consent of instructor. Recommended: ZOOL 1050. (Spring)

ANTH 3760 Primates Past and Present (3 units). Introduction to and description of modern primates. Topics include diet, habitats, locomotion, and behavior. Discussion of their anatomy and its variation. Discussion of what is known about the evolutionary history of primates. Prerequisites: ANTH 2080 and consent of instructor.

ANTH 3780 Primate Social Behavior (3 units). Survey of living nonhuman primate groups and their classification; geographical distribution, feeding habits, reproduction, and'social behavior of these primates; the implications of nonhuman primate behavior for the understanding of human behavior. Prerequisite: ANTH 2080 or an introductory course in zoology or psychology.

ANTH 3800 Introduction to Linguistics ( $\mathbf{3}$ units). An introduction to the scientific study of language. Topics covered include dialect study, language acquisition, comparative linguistics, and modern theories of language. (Same as ENGL 3800)

ANTH 3900 Women: A Cross-Cultural View (3 units). Comparative study of traditional and changing roles of women in a wide range of contemporary cultures. (Same as WMST 3900) Satisfies upper division writing proficiency requirement. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4000 Current Trends in Anthropolgy (1-2 units). A symposium on anthropology featuring speakers on their special areas of research, including current anthropological theories. Topics differ each term. May be repeated for no more than 4 units of credit towards the major. Prerequisite: One lower division anthropology class recommended or consent of instructor.

ANTH 4030 Anthropology Through Film (1-4 units). Introduction to audio-visual presentation of other cultures through ethnographic films. May be repeated for a maximum of 6 units.

ANTH 4040 Crossing Cultural Boundaries: The Field Work Process (4 units). The practice of cultural anthropology in a research setting provides insights into the nature of the cross-cultural experience. This course examines that experience by using the original works of leading anthropologists. Other cultural anthropologists and their accounts will emphasize the processual nature of crossing cultural boundaries. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4130 Urban Subcultures: Chinatown (1 unit). Students will travel independently to this natural urban setting for a one-day guided lecture tour and field observation. San Francisco's Chinatown, the largest Chinese settlement outside Asia, provides a unique opportunity to experience first-hand the interface of an ancient and
modern culture. Historical and anthropological perspectives on the Chinese in America to be read prior to the field trip. A field journal and short paper are required to complete the course.

ANTH 4140 Urban Anthropology (3 units). Survey of processes and trends in urbanization from a cross-cultural perspective. Emphasis will be on cities of the Third World and multi-cultural urbanization in the west. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4150 Comparative Religion (4 units). Anthropological approaches to the study of religious systems, including magic, witchcraft, ritual, symbolism, and dynamic religious movements. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 4165 The Family in Cross-Cultural Perspective (3 units). Study of family life from a cross-cultural perspective. Topics covered include kinship structure; relationships between family members; the treatment of children, youth, the aged, and women; and the family's role in various cultures. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4170 Economic Anthropology (3 units). A survey of economic anthropology that discusses and analyzes the traditional economic systems of tribal, peasant, and civilized non-industrial societies. Special emphasis is placed upon their impact on and relevance to the economic systems of modern industrialized states. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4181 Political Anthropology (3 units). A survey of political anthropology that considers both past and present uncentralized (band, tribe, village, etc.) and centralized (chiefdom and state) political systems. Emphasis is placed upon the relationships between these various levels of political organization among contemporary peoples and on changes resulting from the incorporation of small scale societies into nation-states. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4200 Applied Anthropology and Social Change (4 units). Study of changes resulting from contact between small-scale and industrialized societies. Consideration will be given to processes of social change and organized attempts to introduce change. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4210 Ethnomedical Anthropology (3 units). Designed to provide an introductory overview of this new field within the discipline of anthropology, the course will trace the origins and scope of medical anthropology. Emphasis will be placed on both western and non-western cultures in order to examine the relationship between culture, health, and disease including the analysis of health care delivery systems and the roles of medical anthropologists within them. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 4211 The World in Change ( 3 units). A study of the modernization process throughout the world and the technological and agricultural development, industrialization and urbanization affecting the 5000 known cultural groups. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4221 Folk Literature and Arts (3 units). A survey of folk literature (oral traditions, mythology, legends, folk tales, etc.) and the traditional arts and material culture (art, symbols, cottage industries, etc.) of small-scale (tribal and folk or peasant) societies. Satisfies upper division writing proficiency requirement. Prerequisite: ANTH 2060 recommended or consent of instructor.

ANTH 4321 HistoricalArchaeology (5units). Methodology of historical archaeology. Theoretical orientation and field techniques applied to investigation of historical archaeology. Problem orientation, research designs, data acquisition and interpretation are emphasized. Prerequisite: ANTH 2090 and consent of instructor.
ANTH 4500 Growth of Anthropology ( 3 units). The history of exploration, discovery and development of viewpoints in anthropology. The stories of those men and women who found the fossil humans, the "lost" tribes, civilizations and languages, and established the science of Anthropology. Prerequisite: ANTH 2060 and consent of instructor. (Spring)
ANTH 4605, Archaeological Field Methods ( 5 units). Techniques of site survey, sampling, and excavation with special emphasis on application of systematic field procedures, problem design, excavation, and recording of archaeological evidence under controlled field conditions in the Central Valley. May be repeated for a maximum of 10 units. Prerequisite: ANTH 2090 or equivalent recommended or consent of instructor. (Fall)
ANTH 4620 Science in Archaeology (3 units). Survey of applications in archaeology of techniques and theories derived from the natutal and physical sciences. Study of dating and analytical techniques, laboratory investigations of faunal, floral, and inorganic materials derived from archaeological sites. Prerequisite: ANTH 3600 or consent of instructor.

ANTH 4625 Directed Lab Research (2 units). Application of laboratory methods in the study and analysis of archaeological specimens. Emphasis on lithic materials, pottery, animal bone studies. Written laboratory reports to be prepared by students. Recommended to be taken in conjunction with ANTH 4605, Archaeological Field Methods. Prerequisites: ANTH 2090 and consent of instructor. (Fall)
ANTH 4640 Archaeological Expedition (2 units). Practical experience in archaeological procedures under actual field conditions. The course may include study of known archaeological sites, survey of archaeologically unexplored areas, or excavation of specific sites. Instruction includes research design and methods of implementation, reconnaissance, mapping, recording, testing, and excavation of archaeological data. Related studies include field photography, instrument survey, faunal identification, microanalysis, and expedition logistics. Individual initiative is encouraged. Prerequisite: ANTH 2090 and 4605 recommended, or consent of instructor. (Fall)
ANTH 4700-4799 Studies in Physical Anthropology (1-4 units). Studies of various aspects of physical anthropology, such as human and nonhuman primate behavior, evolution and/or anatomy. Course content may vary from term to term. Courses offered on demand. Prerequisites: ANTH 2080 and consent of instructor.
ANTH 4900 Directed Field Research (1-5 units). Field research conducted in any subdiscipline of anthropology under the direction of a specific faculty member. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

ANTH 4910 Cooperative Education (2-4 units). Provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and department Co-op coordinator. May be repeated for a total of 8 units. Prerequisites: Sophomore standing and consent of departmental coordinator. (Fall, Winter, Spring)
ANTH 4940 Internship in Anthropology (1-6 units). This course is designed for students who are serving as interns in public or private agencies. Students serve internship as arranged between the agency and the department. Prerequisites: 9 upper-division units in anthropology and consent of instructor.
ANTH 4950 Selected Topics in Anthropology (Topics to be specified in Class Schedule) (1-5 units). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.
ANTH 4960 Senior Seminar (1-4 units). Seminar for seniors in anthropology. Review and discussion of selected topics in anthropology. Each student is expected to report on an individual project. Prerequisite: Consent of instructor.

ANTH 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

ANTH 4990 Senior Thesis (3-5 units). Methodology of anthropology. Research techniques applied to investigation of original problems. Problem orientation, research design, manuscript preparation and publication are emphasized. Prerequisite: Consent of instructor.

## Postbaccalaureate

ANTH 5850 Seminar in Graduate Research (2 units). The course considers the techniques used, problems encountered, and results of the current research of graduate students. May be repeated once. Prerequisite: Postbaccalaureate standing.

ANTH 5900 Directed Field Research (1-5 units). Field research conducted in any subdiscipline of anthropology under the direction of a specific faculty member. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. Available only for postbaccalaureate credit.

ANTH 5950 Selected Topics in Anthropology (1-5 units). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor. Available only for postbaccalaureate credit.

ANTH 5960 Graduate Project (3-6 units). A terminal graduate project typically completing the requirements of individual M.A. Special Major degree programs. Prerequisite: Consent of instructor. Available only for postbaccalaureate credit.

ANTH 5980 Individual Study (1-4 units). For students capable of independent study in one of the fields of anthropology. Topics and supervising instructors may vary. May be repeated for a total of 6 units. Available only for postbaccalaureate credit. Prerequisite: Consent of instructor.
ANTH 5990 Thesis (3-6 units). Thesis research. May be repeated for a total of 6 units. Available only for postbaccalaureate credit. Prerequisite: Consent of graduate adviser.


## Applied Studies

Office: $\quad$ Scienc̣e Building 239, (209) 667-3461
Coordinator: Louis A. Feldman
Faculty: The Applied Studies faculty is drawn from various departments, including Accounting, Communication Studies, Computer Information Systems,Economics, English, Mathematics, Management, Philosophy, Political Science, Psychology, and Sociology.

## Bachelor of Science, Applied Studies

The Bachelor of Science in Applied Studies prepares graduates for leadership roles in professional and technical fields. This program also provides a broad understanding of the liberal arts. Applied Studies students are prepared for advanced study in a number of programs: for example, Master of Business Administration, Master of Public Administration.

Students are urged to check the prerequisites of each course in this program. Course prerequisites assist students in selecting their course work. Those who do not have the formal prerequisites for a course, but feel that they may be qualified for other reasons must contact the course instructor to determine if they are eligible to enroll.

## Requirements

1. Complete a minimum of 20 semester units of approved course work leading to a technical degree or certificate.
2. Complete the following prerequisites to the major ( 15 units):

ACC 2110 Financial Accounting, 3 units
CIS 2000 Introduction to Business Computer Systems, 3 units
ECON 2510 Principles of Economics II, 3 units
MATH 1610 Statistics for Decision Making, 3 units
PHIL 4401 Professional Ethics, 3 units
3. Complete the major.
4. Complete University requirements for a Bachelor of Science degree (51 units minimum).

## Credit for Approved Course Work

Up to 30 semester units of credit towards the Bachelor of Science Degree in Applied Studies may be granted for approved, otherwise nontransferable course work applicable to a technical degree or certificate.

## The Major ( 27 units minimum)

1. Advanced communication, two of the following courses, 6 units:

ENGL 3007 Business and Technical Communication, 3 units
COMM 3120 Management Communication, 3 units

110 / Applied Studies
2. Administration, two of the following courses, 7 units:

MGT 3310 Management Theory and Practice, 3 units
PSCI 3304 Introduction of Public Administration, 4 units
3. Modern Organization, two or three of the following courses, $6-10$ units:

MGT 4000 Organization and Environment, 3 units
MGT 4360 Organizational Behavior, 3 units
PSCI 4300 Organization Theory, 4 units
SOCL 4800 Formal Organizations in Modern Society, 3, units
4. Public Policy, one or two of the following courses, 3-6 units:

ECON 4540 Public Finance and Fiscal Policy, 3 units
PSCI 4315 Public Policy Making, 3 units
5. Group Dynamics, elective courses, $0-4$ units:

PSYC 4821 Group dynamics Workshop, 1 unit
SOCL 4020 Sociology of Small Group Dynamics, 3 units
6. Leadership, one or two of the following courses, 3-6 units:

MGT 4340 Executive Leadership, 3 units
MGT 4610 Seminar in Human Resource Management, 3 units
7. General Graduate Record Examination:

This examination must be taken within the six month period before the anticipated date of graduation.


## Art

Office: Art Building 38, (209) 667-3431
Chair: Martin L. Camarata
Faculty: John A. Barnett, Martin L. Camarata, David Olivant, James Piskoti, C. Roxanne Robbin, Richard Savini, Hope B. Werness

The Department of Art offers the Bachelor of Arts degree in Art. Students may elect one of the following as part of their degree objective: Major in Studio Art; Minor in Studio Art; Emphasis in Art History; Minor in Modern Art History. Upon completion of core upper-division courses, students may elect a concentration in painting, printmaking, or sculpture. The Department offers a postbaccalaureate program in printmaking (see Certificate in Printmaking). The Department of Art is accredited by the National Association of Schools of Art and Design.

The program is designed to give art students a rich, well-balanced studio and art history background. The art curriculum prepares students for additional academic programs such as graduate school and teaching credential certification. Additionally, the department serves Liberal Studies students and offers a variety of general education experiences designed to foster creative and intellectual growth.

## Bachelor of Arts, Art Studio Concentration

The studio art courses and their structural sequence give the student mastery of significant skills, media exploration, modes of expression, and the individual development of artistic performance. Excellent studio facilities play a major role in stimulating a positive approach to creativity.

## Requirements

Complete University requirements for the Bachelor of Arts degree (51 units minimum).

## The Major

1. Complete the following prerequisites to upper division:

ART 1010 Drawing I, 3 units
ART 1020 Drawing II, 3 units
ART 1100 Two-Dimensional Design, 3 units
ART 1200 Three-Dimensional Design, 3 units
ART 2515 Art History Survey-Ancient, 3 units
ART 2520 Art History Survey-Modern, 3 units
2. Complete no less than 36 , upper-division units (including 9 units of studio electives).
3. Participate in an exhibition of graduating seniors.

## Upper Division

1. Complete upper-division course work in the four areas outlined below for a total of 21 units:
a. Drawing (3 units)

ART 3010 Drawing III, 3 units
ART 3020 Drawing IV, 3 units
b. Printmaking (6 units)

ART 3100 Relief Printmaking, 3 units
ART 3110 Intaglio, 3 units
ART 3120 Lithography, 4 units
ART 3130 Serigraphy, 4 units
c. Painting ( 6 units)

ART 3200 Painting: Color and Form, 3 units
ART 3210 Painting: Composition and Form, 3 units
ART 3220 Painting: Original Form, 3 units
d. Sculpture (6 units)

ART 3301 Figure Sculpture, 3 units
ART 3311 Modeling, 3 units
ART 3321 Carving, 3 units
ART 3330 Foundry, 3-4 units
2. Complete the following required courses ( 6 units):

ART 4545 Modern Art, 1870-1945, 3 units
ART 4550 Art Since 1945, 3 units
3. Select nine additional upper-division studio units in consultation with the student's adviser.

## Concentration in Studio Art

Students may choose an area of studio concentration in Painting, Printmaking, or Sculpture. Students completing a concentration will have the area of concentration noted on their permanent records.
Note: The Art Department strongly recommends a concentration for art studio majors who plan to attend graduate school (MA/MFA).
Requirements (19 units)

1. Complete nineteen upper-division units in one of the areas below in consultation with a faculty adviser.

## a. Painting

In addition to the requirements in the major, complete all 3000 level painting courses and then the following:

10 additional units in upper division studio painting
3 additional units in upper division studio drawing
3 units in upper division studio elective in a related area
3 units in upper division art history
b. Printmaking

In addition to the requirements in the major, complete all 3000 level printmaking courses and then the following:

10 additional units in upper division studio printmaking
3 additional units in upper division studio drawing
3 units in upper division studio elective in a related area
3 units in upper division art history

## c. Sculpture

In addition to the requirements in the major, complete all 3000 level sculpture courses and then the following:

10 additional units in upper division studio sculpture
3 additional units in upper division studio drawing
3 units in upper division studio elective in a related area
3 units in upper division art history

## Minor in Studio Art

## Requirements (27 units)

1. Complete prerequisites to the major as listed above in subsection two of the "Requirements" section, Bachelor of Arts, Studio Art (18 units).
2. Choose one course from each of the following areas:
a. Printmaking

ART 3100 Relief Printmaking, 3 units
ART 3110 Intaglio, 3 units
ART 3120 Lithography, 4 units
ART 3130 Serigraphy, 4 units
b. Painting

ART 3200 Painting: Color and Form, 3 units
ART 3210 Painting: Composition and Form, 3 units
ART 3220 Painting: Original Form, 3 units
c. Sculpture

ART 3301 Figure Sculpture, 3 units
ART 3311 Modeling, 3 units
ART 3321 Carving, 3 units
ART 3331 Foundry, 4 units

## Bachelor of Arts, Art (Art History Concentration)

Art History courses span the entire history of the visual arts, giving students a firm grounding in the history, methodology, and cultural background of Western and Non-Western art.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major (18 units):
a. Art History (9 units)

ART 2515 Art History Survey-Ancient, 3 units
ART 2520 Art History Survey--Modern, 3 units
ART 2525 Art History Survey-Non-Western, 3 units
b. Studio Courses (9 units)

ART 1010 Drawing I, 3 units
ART 1100 Two-Dimensional Design, 3 units
ART 1200 Three-Dimensional Design, 3 units
3. Complete the major of not less than 30 upper-division units.

Note: Students pursuing the Art History Concentration are encouraged to satisfy, in part, the General Education requirements in Area C, Humanities, by taking a foreign language.

The Major ( $\mathbf{3 0}$ units)

1. Select at least six courses in the following area ( 18 units):

ART 4515 Art of the Classical World, 3 units
ART 4520 Art of the Medieval World, 3 units
ART 4525 Italian Renaissance Art, 3 units
ART 4530 Northern Renaissance Art, 3 units
ART 4535 Art of the Baroque Age, 3 units
ART 4560 Pre-Columbian Art, 3 units
ART 4565 African Art, 3 units
2. Select two of the following classes ( 6 units):

ART 4540 Early Modern Art, 1800-1870, 3 units
ART 4545 Modern Art, 1870-1945, 3 units
ART 4550 Art Since 1945, 3 units
ART 4555 American Art, 3 units
3. Select one of the following courses ( 3 units):

ART 4580 Museum and Gallery Management, 1-3 units
ART 4950 Selected Topics in Art, 1-5 units
ART 4980 Individual Study, 1-4 units
4. Complete the required course ART 4570, Senior Seminar in Art History, 3 units

## Minor in Art History

## Requirements (18 units)

1. Complete a minimum of six units from the following lower-division courses:

ART 2515 Art History Survey-Ancient, 3 units
ART 2520 Art History Survey--Modern, 3 units
ART 2525 Art History Survey-Non-Western, 3 units
2. Select 12 units of upper-division course work in consultation with the minor adviser.

## Liberal Studies Concentration in Art

## Requirements (21 units)

1. Complete the following lower-division courses ( 6 units):

ART 1010 Drawing I, 3 units
ART 1020 Drawing II, 3 units
2. Select 15 units of upper-division art electives.

Note: The Department of Art will waive upper-division prerequisites for the Liberal Studies degree student.

## Teaching Credentials

An Art waiver is available to Art majors interested in a single subject credential. Students should contact the Art Department for requirements. Additionally, students should refer to the "School of Education, Teacher Education" section of this catalog for other single subject credential requirements. Students must plan their program carefully with their adviser to complete the waiver at the time of graduation.

## Graduate Programs

## Printmaking Certificate Program

The Department of Art also offers a one-year postbaccalaureate program leading to a Certificate in Printmaking. The workshop in the printmaking program is available to qualified graduate students. Students may select print courses for the program from department course offerings in consultation with the adviser.

## Admission Requirements

1. Bachelor of Arts degree with a major in art.
2. Minimum of two courses in printmaking at the undergraduate level.
3. Portfolio evaluation by printmaking faculty.
4. Interest in the field and seriousness of endeavor.

## Requirements for the Certificate

1. Complete a minimum of 14 units of studio electives in printmaking.
2. Submit a portfolio of prints to a faculty committee who will evaluate the work.
3. Participate in a group exhibition or a one-person exhibition of prints on campus or at a location acceptable to both the student and faculty.

## Course Descriptions

Admission to courses may be granted by consent of instructor. Upper Division courses may be repeated for credit with new projects assigned.

## Lower Division

ART 1000 Introduction to Drawing ( 3 units). Emphasis on introduction to drawing media and process as visual language for the general student.

ART 1010 Drawing I (3 units). Descriptive drawing by developing eye and hand control. Variety of media and techniques. (CAN ART 10)
ART 1020 Drawing II (3 units). Continued exploration of drawing. Emphasis on spatial concepts and expressive content using a variety of media and techniques. Prerequisite: Art 1010.

ART 1100 Two-Dimensional Design (3 units). Studio exploration of plastic elements as a basis for building a theoretical and practical vocabulary for twodimensional design and composition in color. (CAN ART 14)

ART 1200 Three-Dimensional Design (3 units). Introduction to sculptural form. Emphasis on creative and imaginary solving of problems of volume, mass, weight, space, texture and other three-dimensional concerns. Assignments will be given in a variety of materials with criticism on each project. (CAN ART 16)

ART 1340 Introduction to Ceramics ( 3 units). Study and exploration of basic materials and techniques of form construction. Studio practice in hand building skills, glazing, and firing processes with emphasis on individual design, aesthetics, and selfexpression. May be repeated once for credit; but only three units may be applied toward GE requirement. (CAN ART 6)

ART 2515 Art History Survey-Ancient (3 units). Survey of the major visual arts from prehistoric times to the renaissance. (CAN ART 2)

ART 2520Art History Survey-Modern (3 units). Survey of the major visual arts from the renaissance era to important movements of the 20th century. (CAN ART 4)

ART 2525 Art History Survey-Non-Western (3 units). Survey of the art of NonWestern cultures, concentrating on the sculpture, architecture, and crafts of the Orient, the Americas before Columbus, Africa, and Oceania.

ART 2530 Art Appreciation (3 units). Study of the basic elements of the visual arts (color, line, form, etc.) with emphasis on developing a critical appreciation of various modes of expression. Also stressed are techniques and media, functions and themes in art, the role of the artist, and major stylistic trends in the history of art. Not open to art majors.

ART 2950 Selected Topics in Art (Topics to be specified in Class Schedule) (1-5 units). Development of a selected topic in art. Topics will vary. Different topics may be taken for credit.

## Upper Division

ART 3010 Drawing III (3 units). Emphasis on figure as compositional element. May be repeated for a total of 6 units. Prerequisite: ART 1020.

ART 3020 Drawing IV (3 units). Development of expression techniques and media. Emphasis on independent student production. May be repeated for a total of 6 units. Prerequisite: ART 3010.

ART 3100 Relief Printmaking (3 units). Fundamental theories and practices involved in the process of relief printmaking and monotypes. Emphasis on materials, techniques, tools, and craftsmanship. May be repeated for a total of 6 units. Prerequisites: ART 1020, 1200.

ART 3110 Intaglio (3 units). Creative and technical investigation of intaglio printmaking. Exploration of major techniques of the etched plate; hard and soft grounds, aquatint and open-biting, engraving, multiple-plate color and photo-mechanical applications. Emphasis on the development of pertinent graphic images and the mastery of process and craft. May be repeated for a total of 6 units. Prerequisites: ART 1010, 1020, and 1100.

ART 3120 Lithography (4 units). Development of graphic images based on lithographic techniques and processes. Emphasis on the unique qualities of the lithographic print, including color. May be repeated for advanced work. Prerequisites: ART 1020, 1200.

ART 3130 Serigraphy (4 units). Fundamental theories and practices involved in silkscreen printing. Exploration of water-based screen printing processes using paper stencil, screen filler, crayon resist, stencil film and photo-mechanical techniques. May be repeated for a total of 8 units. Prerequisites: ART 1010, 1020, 1100.

ART 3142 Intaglio Color Printmaking (4 units). An exploration of the major techniques of intaglio color printmaking. Multiple plate, color-drop, and simultaneous viscosity color processes will be covered with emphasis on development of graphic images. Prerequisites: ART 1010, 1020.

ART 3200 Painting: Color and Form (3 units). Studio work in 2-dimensional media, aimed at developing a clear understanding of color, primarily as it is experienced in direct observation, and as the basic element in the creation of spatial form. Studio projects may include work from a nude model and field trips to museums. May be repeated for a total of 6 units. Prerequisite: ART 1000 or 1010.

ART 3210 Painting: Composition and Form (3 units). Studio work in 2-dimensional media, aimed at developing an understanding of compositional models and meanings, as they have evolved in the artistic styles of traditional and modern masters. Studio projects may include work from a nude model and field trips to museums. May be repeated for a total of 6 units. Prerequisite: ART 3200.

ART 3220 Painting: Original Form (3 units). Aimed at preparing the advanced student for the future challenges of independent studio work, by using the semester as a model experience of long-term artistic development. The student will become familiar with and fully conscious of the nature of the creative process itself, which will begin with a simple basis of personal interest and individual judgment, and evolve toward unique expressive form and creative artistic style. Prerequisite: ART 3210.

ART 3232Painting the Human Form (4 units). Study of the human form from direct observation of the studio model and in terms of the convergence of appearances and significant pictorial form. Prerequisite: ART 3200, 3210, 3220, 3010, and 3301.

ART 3270 Watercolor ( 3 units). Painting problems using watercolor medium. Control of technique with an emphasis on individual development and expression. May be repeated for a total of 6 units. Prerequisite: ART 3200.

ART 3301 Figure Sculpture (3 units). Assignments are geared to the imaginative use of the figure. Figure study will precede interpretive work. The purpose is to engage students in a fresh analysis of the figure as a spatial yet personal statement. May be repeated for a total of 6 units. Prerequisite: ART 1200.

ART 3311 Modeling ( 3 units). A series of assignments will be given in order to make the student experience the relationship of idea to structure. A variety of traditional and contemporary materials will be used in the additive process. Critiques on assignments will be given. May be repeated for a total of 6 units. Prerequisite: ART 1200.

ART 3321 Carving (3 units). Development of sculpture through the subtractive process. Emphasizes concept development, tools and techniques of stone or wood carving. Prerequisite: ART 1200.

ART 3330 Foundry (3-4 units). Techniques of both lost-wax and sandcasting will be used to translate sculpture ideas and processes into metal. Lab time required. Prerequisites: ART 1200, 2-3 sculptures suitable for casting.

ART 3350 Advanced Ceramics ( 3 units). An intensive study of special topics in ceramics. Individualized course content according to student's need. May be repeated for a total of 6 units.

ART 3700 Electronic Art and Design (3 units). Hands-on artistic experience of the essential forms of electronic "imaging." Electronic "painting," image-capture from video, animation, color and laser printing techniques. Instruction on introductory and
advanced levels. For art students with or without computer experience and for students with computer graphics experience, but little or no art experience. Prerequisite: ART 1100 or any lower division computer science course.

ART 4020 Advanced Drawing (4 units). Advanced problems and techniques in drawing. Emphasis placed on a professional attitude within a seminar framework. May be repeated for credit. Prerequisite: ART 3020.

ART 4100 Advanced Printmaking (4 units). Advanced projects in printmaking with emphasis on the development of personal imagery and the mastery of technique. Individual projects via consultation with instructor. May be repeated for credit. Prerequisites: Two courses from ART 3100, 3110, 3120, 3130.

ART 4200 Advanced Painting (4 units). Advanced problems and techniques in painting. Emphasis on personal concepts, individual development, and a professional attitude within a seminar framework. May be repeated for credit. Prerequisite: ART 3210.

ART 4220 Imagination (3 units). Imagination and its function in intuition and experience. Studio problems emanating from a search for the ecstatic and the pertinent, through variety and unity and chaos and order. Prerequisite: ART 3700.

ART 4250 Abstract Painting and Composition (4 units). Study and development of color, composition and methods of paint application in abstract forms of painting. Explore contemporary techniques with emphasis on major artists' styles and influence. Prerequisites: ART 3200, 3210, 3220.

ART 4300 Advanced Sculpture (4 units). Advanced assignments and critical analysis emphasizing independent production and a sound creative identity. Emphasis will be placed on a professional attitude within a seminar framework. May be repeated for credit. Prerequisites: Two upper-division sculpture courses.

ART 4515 Art of the Classical World (3 units). Architecture, sculpture, and painting of the Classical World including Aegean Art prior to the Golden age of Greece and Græco-Roman Art from the Fifth century up to 400 A.D. Prerequisite: ART 2515, 2530.

ART 4520 Art of the Medieval World (3 units). The architecture, sculpture, painting, and minor arts of Medieval Western Europe encompassing the Pre-Romanesque, Romanesque, and Gothic periods. Prerequisite: ART 2515, 2530.

ART 4525 Italian Renaissance Art ( 3 units). Painting, sculpture, and architecture of the 15 th and 16 th centuries in Italy. Emphasis is placed on understanding masterpieces of this period in their historical, aesthetic, and cultural contexts. Prerequisite: ART 2520, 2530.

ART 4530 Northern Renaissance Art (3 units). Architecture, painting, and sculpture in Northern Europe during the 15th and 16th centuries. Prerequisite: ART 2520,2530.

ART 4535 Art of the Baroque Age (3 units). Painting, sculpture, and architecture in Europe in the 17 th and 18 th centuries. Major artists from Italy and Northern Europe include Bernini, Caravaggio, Rubens, Rembrandt, and Vermeer. Prerequisite ART 2520, 2530.

ART 4540 Early Modern Art, 1800-1870 (3 units). A study of the major trends and artists from Neo-Classicism up toImpressionism. An investigation of the relationship of artists and movements to the cultural and intellectual milieu. Prerequisite: ART 2520, 2530.

ART 4545 Modern Art, 1870-1945 (3 units). An analysis and interpretation of the major artistic movements from 1870-1945. Emphasis will be placed on the changing aesthetic, theoretical, and artistic approaches of this period. Prerequisite: ART 2520, 2530.

ART• 4550 Art Since 1945 (3 units). (Formerly Contemporary Art.) Analysis of development of style trends in the visual arts from 1945 to the present. Prerequisite: ART 2520, 2530.

ART 4555 American Art (3 units). A study of American art from colonial times to the present. American art is seen against its broad historical and cultural background. Prerequisite: ART 2520, 2530.

ART 4560 Pre-Columbian Art (3 units). Painting, sculpture, and architecture of the Americas from their beginnings to the Spanish Conquest. Prerequisite: ART 2525, 2530.

ART 4565 African Art (3 units). Traditional sub-Saharan African Art. Emphasis is placed on seeing African Art as part of the broad cultural context involving such issues as philosophical, mythological and aesthetic concepts, religious beliefs and the functioning ritual context of all forms of African Art. Prerequisite: ART 2525, 2530.

ART 4570 Senior Seminar in Art History ( 3 units). Basic knowledge and skills requisite to advanced study of Art History-research methodology, writing and publication, survey of graduate education in the United States and discussion of broad aesthetic and art historical issues. Satisfies upper division writing proficiency requirement. Prerequisite: Senior standing.

ART 4575 Slide Library Management (1-3 units). This course will provide students with basic knowledge of the theories and methods of managing a slide library. These include: general knowledge of library methods and practices, cataloging and coding, filing and retrieval procedures, as well as photo-duplication processes. Prerequisites: Lower division Art Appreciation or Art History Survey. May be repeated for a total of six units.

ART 4580 Museum and Gallery Management (1-3 units). Experience hanging exhibitions in the University Art Gallery. Instruction in proper handling of art work, presentation research, and publication. Museum visits and readings about history and operation of museums. Prerequisite: Art major or minor.

ART 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 6 units. Prerequisities: Sophomore standing; consent of departmental coordinator.

ART 4940 Gallery/Museum Internship (4 units). An internship course to acquaint the student with a blend of research skills and practical information fundamental in operating a museum or an art gallery. Experience in commercial galleries/museums can be arranged for advanced students. Prerequisite: Art major with upper-division standing or consent of instructor.

ART 4950 Selected Topics in Art (Topics to be specified in Class Schedule) (1-5 units). Development of a selected topic in art. Topics will vary. Different topics may be taken for credit.

ART 4960 Senior Seminar (3 units). Study of issues confronting the contemporary American artist through an examination of current art criticism and theory. Preparation for professional artistic careers: resume, artist's statement, portofolio and slide preparation. Required for participation in Senior Exhibition. Satisfies upper division writing proficiency requirement. Prerequisite: Senior standing.

ART 4980 Individual Study (1-4 units). For the student capable of independent specialized work in studio and/or history and criticism. Students would normally be senior art majors with one year of study in the department. A written outline of the proposed independent study must be submitted and approved by the instructor under whom the student wishes to work. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Postbaccalaureate

ART 5020 Graduate Problems in Drawing (4 units). Graduate-level projects in drawing involving investigation of line, tonality, form, space. Development of visual concepts, mastery of advanced techniques, experimentation with various graphic media. Prerequisite: Graduate standing.

ART 5100 Graduate Problems in Printmaking (4 units). Exploration of advanced printmaking techniques in Intaglio, Serigraphy, and Lithography. Emphasis on development of visual concepts and personal imagery. Prerequisite: Graduate standing.

ART 5200 Graduate Problems in Painting (4 units). Advanced projects in painting: may include mixed media, as well as oil, acrylic, and watercolor. Emphasis is placed on aesthetic development and sophisticated utilization of the elements of color and design. Prerequisite: Graduate standing.

ART 5300 Graduate Problems in Sculpture (4 units). Graduate-level problems in various sculptural media, e.g., foundry, carving, modeling and figure sculpture. Development of conceptual and technical grasp of the elements of form, mass, texture, and surface finish. Prerequisite: Graduate standing.

ART 5410 Graduate Seminar in Visual Studies I (3 units). Graduate-level introduction to the methodological bases of Western art history, with special attention to reading and research of fundamental scholarly work; term paper. Prerequisite: Graduate standing.

ART 5420 Graduate Seminar in Visual Studies II (3 units). Selected problems in contemporary art. Emphasis on major trends in art and the role of criticism. Prerequisite: Graduate standing.

ART 5950 Selected Topics in Art (1-5 units). Innovative advanced projects for the graduate student.

ART 5960 Graduate Projects (3-6 units). Presentation or documentation of original creative work and research such as gallery exhibit, mural, media display or image development. Projects will include review, critique, and public showing of work done. Prerequisite: Consent of instructor.

ART 5980 Individual Study (1-4 units). For postbaccalaureate students with a degree major in art capable of independent specialized work in studio and/or history and criticism. A written outline of the proposed independent study must be submitted and approved by the instructor under whom the student wishes to work. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

ART 5990 Thesis (3-6 units). The course, required for a minimum of two semesters, is designed to provide a framework for independent studio research demonstrating creative ability and technical proficiency in the area of concentration, culminating in an exhibition of selected works. Prerequisite: Consent of instructor.


## Biological Sciences

Office: Science Building 103, (209) 667-3476<br>Chair: Wayne S. Pierce<br>E-mail: waynep@chem.csustan.edu<br>Faculty: Jay Christofferson, Glenn A. Hackwell, James<br>C. Hanson, Judith Keeler, Pete S. Mayol,<br>Wayne S. Pierce, Pamela Roe, Walter Tordoff III, Daniel F. Williams, Steven J. Wolf, Janey Youngblom<br>Emeritus Faculty: Steve J. Grillos

The Department of Biological Sciences offers programs of study in the life sciences for students seeking the Bachelor of Arts or the Bachelor of Science in Biological Sciences, or a Master of Science in Marine Science. Students may also elect to complete a concentration in Botany, Entomology, Environmental Sciences, Marine Biology, Microbiology, or Zoology as part of either the Bachelor of Arts or the Bachelor of Science program. Students should confer with their department adviser to determine which degree and program is best suited to their career objectives. (Advising by a biology faculty member is required of all biology majors prior to registration each semester. The department secretary coordinates scheduling of advising appointments.)

Students interested in marine biology and oceanography may elect course work at the Moss Landing Marine Laboratories for partial fulfillment of their in-residence major and degree requirements. Refer to the "Marine Sciences" section of this catalog for a description of Moss Landing course offerings.

Field trips are required in many courses; a few require overnight stays. Hazards can be encountered on field trips. Appropriate precautions need to be taken by students while in the field to minimize risks. If a student is unwilling to accept these risks, alternative courses which do not pose such risks should be selected in consultation with the adviser.

## Bachelor of Arts, Biological Sciences

The Bachelor of Arts is designed to provide breadth and background in the natural sciences and to allow sufficient flexibility to accommodate the diverse needs of the general student. Persons preparing for careers in such areas as agriculture, industry, and elementary teaching will find this degree adaptable to their career objective.

## Bachelor of Science, Biological Sciences

The Bachelor of Science is designed to provide the comprehensive background in the sciences required for students planning to seek a career in secondary teaching or additional training for graduate or professional schools. The degree includes course work usually required for admission to schools of medicine, dentistry, veterinary medicine, or lab technology, and for admission to graduate work in the biological sciences. Students planning to seek advanced or professional degrees should consult their department adviser early in their undergraduate program to determine what specific courses are required for these graduate and professional programs.

## Requirements for the Bachelor of Arts or the Bachelor of Science

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major:
a. Required courses in the major field (8 units):

BOTY 1050 Introduction to Botany, 4 units
ZOOL-1050 Introduction to Zoology, 4 units
b. Required courses in supporting fields ( $20-21$ units for the Bachelor of Arts Degree; 28-31 units for the Bachelor of Science Degree):
i. CHEM 1100, 1110 Principles of Chemistry I, II, 10 units
ii. CHEM 3010, 3012 Organic Chemistry, Lab, 4-5 units
iii. Bachelor of Arts Students ( 6 units):

Elective courses in Chemistry, Computer Science, Geology, Mathematics, Physics or Physical Sciences, 6 units
iv. Bachelor of Science Students (14-16 units):

Mathematics (statistics or calculus), 3-4 units
Physics (one-year sequence), 8 units. (A year sequence comparable
to PHYS 2100, 2102; 2110, 2112, or PHYS 2250, 2252, 2260, 2262.)

Elective course in Chemistry, Computer Science, Geology, Mathematics, Physics, or Physical Sciences (determined by professional goals of student), 3-4 units
3. Complete the major of not less than 25 upper-division units for the Bachelor of Arts or not less than 29 upper-division units for the Bachelor of Science, including course requirements as specified for the major. No more than eight units of CR-graded course work from courses graded exclusively CR/NC may apply toward the major.
4. Completion of a minor or concentration is not required.

## The Major (33-37 units)

1. Complete BIOL 3310, Cellular and Molecular Biology, 3 units
2. Complete a broad basic program taking units from each category as listed below ( 30 or 34 units):
a. Genetics (4-5 units)
i. BIOL 3350 Introductory Genetics, 3 units
ii. Select one course from the following:

BIOL 4820, 4830, 4840, 2 units, or 4842, 1 unit
b. Animal and Plant Sciences (8 units)
i. Select one course from Entomology or Zoology.
ii. Select one course from Botany or Microbiology.
iii. One of the above courses must deal with the diversity of organisms. (Acceptable courses are indicated by an asterisk ( ${ }^{*}$ ) in the course description section of the catalog.)
c. Ecology (4 units)

Select one course from the following:
BIOL 4680 Ecology, 4 units
BIOL 4650 Aquatic Biology, 4 units
BIOL 4630 Marine Biology, 4 units
BOTY 4600 Plant Ecology, 4 units
d. Physiology (4 units)
Select one course from the following:
BOTY 4200 Plant Physiology, 4 units
ZOOL 4230 Animal Physiology, 4 units
ZOOL 4280 Physiology of Human Systems, 4 units
3. Complete 10 units of electives in the Biological Sciences for the Bachelor of Arts Degree or 14 units of electives in the Biological Sciences for the Bachelor of Science Degree. A maximum of 8 units may be satisfied by courses at the lowerdivision level with the approval of the major adviser.
4. Completion of a concentration is optional.

## Elective Concentrations in the Major

## Requirements ( 16 units minimum)

Students wishing to have a specific concentration may do so by completing all the requirements for a major in biological sciences to include specific concentration requirements listed below. A minimum of 16 upper-division units must be completed within the area of concentration. Additional units within the concentration will be selected with the aid of the adviser. Units taken to complete a concentration also count where appropriate, within the major. The following concentrations are offered:

1. Botany

$$
\begin{array}{ll}
\text { BOTY } 3100 & \text { Survey of Nonvascular Plants, } 4 \text { units } \\
\text { BOTY } 3120 & \text { Morphology of Vascular Plants, } 4 \text { units } \\
\text { BOTY } 4200 & \text { Plant Physiology, } 4 \text { units }
\end{array}
$$

## 2. Entomology

ENTO 3000 Principles of Entomology, 4 units
ENTO 3330 Medical Entomology, 3 units
ENTO 3740 Insect Classification, 4 units
3. Environmental Sciences

A biological sciences major may complete additional requirements in the sciences and mathematics to qualify for an Environmental Sciences Concentration in addition to the Bachelor of Arts or Bachelor of Science degree in Biological Sciences. This program requires study in biological sciences, chemistry, computer science, mathematics, and physical sciences, along with an environmental seminar and investigation of an environmentally related problem. Further details are found in the "Environmental Sciences" section of this catalog.
4. Genetics
a. Complete the following required courses:

BIOL $3310 \quad$ Cellular and Molecular Biology, 3 units
BIOL 3350 Introductory Genetics, 3 units
BIOL 4842 Recombinant DNA Lab, 1 unit
b. Complete one of the following courses and corresponding lab:

CHEM 4400 and 4402 Biochemistry, 4 units, or
MBIO 3010 and 3032 Bacteriology, 5 units
c. Complete two additional advanced genetics courses, selected from:

BIOL 4820 Cytogenetics, 2 units, or
BIOL 4830 Evolution and Population Genetics, 2 units, or
BIOL 4840 Molecular Genetics, 2 units
d. If necessary, complete an additional course, with consent of adviser, to bring total units to a minimum of 16 upper division units.
5. Marine Biology

ZOOL•4420 Invertebrate Zoology I, 4 units (or MSCI 3240)
ZOOL 4430 Invertebrate Zoology II, 4 units (or MSCI 3250)
BIOL 4630 Marine Biology, 4 units (or MSCI 3030)
BOTY 3100 Survey of Nonvascular Plants, 4 units (or MSCI 3310)
One term of residence at Moss Landing Marine Laboratories or another marine station.
6. Microbiology
a. Complete the following required courses ( 5 units):

MBIO 3010 Bacteriology, 3 units
MBIO 3032 Bacteriology lab, 2 units
b. Select elective courses listed below to complete the concentration:

MBIO 4300 Medical Microbiology, 4 units
MBIO 4600 Food Microbiology, 3 units
MBIO 4700 Host Parasite Interactions, 3 units
MBIO 4950 Selected Topics, 1-4 units
BOTY 3500 Introductory Plant Pathology, 4 units
ENTO 3330 Medical Entomology, 3 units
ZOOL 4440 General Parasitology, 4 units

## 7. Zoology

Select at least one course from each of the following groups:
a. ZOOL 3610 General Vertebrate Zoology, 4 units

ZOOL 4620 Herpetology, 4 units
ZOOL 4630 Ornithology, 4 units
ZOOL 4640 Mammalogy, 4 units
b. ZOOL 4420 Invertebrate Zoology I, 4 units

ZOOL 4430 Invertebrate Zoology II, 4 units
ENTO 3000 Principles of Entomology, 4 units
ENTO 3740 Insect Classification, 4 units
c. ZOOL 4230 Animal Physiology, 4 units

ZOOL 4280 Physiology of Human Systems, 4 units

## Preparation for Graduate Work or Professional Degrees

Biological sciences majors interested in dentistry, medicine, optometry, and veterinary medicine should complete the following courses:

CHEM 3010, 3012 Organic Chemistry I and Lab
CHEM 3020, 3022 Organic Chemistry II and Lab
PHYS 2100 Basic Physics I
PHYS 2110 Basic Physics II
ZOOL $3130 \quad$ Vertebrate Embryology
ZOOL $3150 \quad$ Comparative Anatomy of Vertebrates (or equivalent)
Additional course work for specific professions will vary with the profession (i.e., for premedical students, CHEM 4010, CHEM 4020, CHEM 4400, CHEM 4420, ZOOL 4280 , and mathematics through calculus are recommended). Additional information may be found in the "Premedical and Health Professions" section of this catalog.

Students who intend to seek an advanced degree are encouraged to select a minor in the physical sciences or mathematics and to complete at least a college-level oneyear sequence or equivalent in French, German, or computer programming (BASIC
or FORTRAN). A year sequence in college physics and a year sequence in organic chemistry also should be completed. Students interested in an advanced degree in biochemistry, ecology, or molecular biology should elect a year sequence in calculus and a course in statistics.

Students interested in biological laboratory occupations following the baccalaureate degree in biological sciences should complete the following courses as part of their major:

BIOL 4310 Histological and Cytological Techniques, 4 units
CHEM 2010 Quantitative Analysis and Basic Instrumental Techniques, 4 units
MATH 1600 Statistics, 4 units
MBIO 3010 Bacteriology, 3 units
MBIO 3032 Bacteriology Laboratory, 2 units

## Minor in Biological Sciences

## Requirements ( $\mathbf{2 0}$ units)

1. Complete the following lower-division courses (8 units):

BOTY 1050 Introduction to Botany, 4 units
ZOOL 1050 Introduction to Zoology, 4 units
(equivalent courses may be substituted with approval of minor adviser)
2. Complete a minimum of 12 units of upper-division course work, as approved by minor adviser.

## Liberal Studies Concentration in Biological Sciences

## Requirements ( 21 units)

1. Complete the following lower-division courses ( 6 units):
a. BOTY 1050 Introduction to Botany, 4 units, or

ZOOL 1050 Introduction to Zoology, 4 units. (Either BOTY 1050 or ZOOL 1050 will satisfy the BIOL 1010, 1020 requirement in the Liberal Studies program.)
b. BIOL 2310 Human Genetics, 2 units, or

BIOL 2650 Environmental Biology, 3 units.
2. Select one upper-division course dealing with the diversity of biological organisms, 4 units (to be selected from either Botany, Entomology, Microbiology, or Zoology. Acceptable courses are indicated by an asterisk in the course description section of the catalog.)
3. Select 11 upper-division units of biological sciences electives. (Students are encouraged to select courses which provide breadth in biology.)

## Teaching Credentials

Majors in Biological Sciences interested in multiple subject or single subject credentials are referred to the "School of Education, Teacher Education" section of this catalog for a description of teaching credential programs.

Students planning to pursue a science teaching credential or a multiple subjects credential with an emphasis in biology should carefully plan their academic program with the assistance of a biology faculty adviser.

## Master of Science in Marine Science Marine Biology Concentration

The Department of Biological Sciences in conjunction with Moss Landing Marine Laboratories offers a Master of Science in Marine Science degree in areas of marine biology. Please contact the Department of Biological Sciences office for further information and for admission procedures to this degree program.

## Course Descriptions <br> Biology: Lower Division

BIOL 1010 Principles of Biology (3 units). Introduction to basic biological phenomena common to all living organisms. Cellular and molecular levels of organization, genetics, and the mechanisms of heredity in organic evolution, environmental associations, structure as it relates to function, and reproduction from the molecular to gross structural levels. (Lecture, 3 hours) (Fall, Winter, Spring)

BIOL 1020-1029 Special Laboratory Studies (Topics to be specified in Class Schedule) (1 unit). Basic laboratory and/or field studies in various biological areas. Satisfies laboratory requirement in natural sciences. Different topics can be taken for credit under this number, but may be taken only once for GE credit. (Laboratory, 3 hours) Prerequisite: BIOL 1010 or concurrent enrollment. (Fall, Winter, Spring)

BIOL 2310 Human Genetics (2 units). Basic principles of heredity and evolution particularly as they apply to humans. (Note: This course will not meet the upperdivision genetics requirement.) (Lecture, 2 hours) (Fall, Spring)

BIOL 2650 Environmental Biology (3 units). Basic ecological concepts as they apply to present-day resource management and human environmental problems, including wildlife, forest, soil, water, air, and mineral resources. Ecological aspects of air and water pollution, human population growth, pesticide use, and energy consumption. (Lecture, 3 hours) (Fall, Winter, Spring)

## Biology: Upper Division

BIOL 3000 Frontiers in Biology ( 3 units). Consideration of different topics of biology that are currently in the forefront of research and public awareness. Emphasis is on further development of biological principles learned in lower-division general education courses in natural sciences and in preparing people to deal with questions and decisions relating to biological developments affecting their lives. Topics vary from semester to semester but may include genetic engineering, ecology, cancer research, agricultural developments, disease treatment and control, wildlife and endangered species. (Lecture; 3 hours) Prerequisite: Completion of lower-division general education in natural sciences and mathematics. (Fall, Spring)

B1OL 3020 Introduction to Evolution (3 units). An introduction to organic evolution for students unacquainted with the subject. Its implications extend far beyond the confines of biology, ramifying into all phases of human life and activity. (Lecture, 3 hours) Prerequisite: Junior standing. (Fall, Winter)

BIOL 3100 Biological Illustration ( 3 units). Techniques of illustrating to include rough drafts and pencil drawings, ink renderings, graphs, maps, lettering, etc., with emphasis placed on biological materials. (Lecture, 2 hours; activity, 3 hours) Prerequisite: Consent of instructor. (Winter)

## 128 / Biological Sciences

BIOL 3310 Cellular and Molecular Biology (3 units). Basic concepts of cellular phenomena dealt with at the molecular level of organization. (Lecture, 3 hours) Prerequisites: BOTY 1050, ZOOL 1050, CHEM 1100, 1110, or equivalent. (Fall, Spring)
BIOL 3350 Introductory Genetics (3 units). Introduction to classical, molecular, and population genetics. Modern applications including genetic engineering and biotechnology will be discussed. (Lecture, 3 hours) Prerequisite: BOTY 1050, ZOOL 1050, CHEM 1100, 1110, or equivalent. (Fall, Spring)

BIOL 4010 Research and Technical Writing in Biology (3 units). Introduction to bibliographic research, design/interpretation of experiments, statistical testing of results, and preparation of technical reports in biology. Satisfies upper division writing proficiency requirement. (Lecture, 2 hours, laboratory, 3 hours) Prerequisites: BOTY 1050, ZOOL 1050, junior standing or consent of instructor, and completion of area A.2. of General Education requirements (written communication).

BIOL 4310 Histological and Cytological Techniques (4 units). Principles and practice of preparing tissues for microscopy study. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: Two years of college-level biology or equivalent. (Fall).

BIOL 4630 Marine Biology ( 4 units). Study of marine communities with emphasis on local communities. Ecology and natural history of plants and animals, and their adaptation to marine environments are stressed. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: BOTY 1050, ZOOL 1050 or equivalent, and one semester invertebrate zoology, or BOTY 3100, or consent of instructor. Satisfies ecology elective for the major. (Spring)

BIOL 4650 Aquatic Biology (4 units). The biota of fresh water with emphasis on the ecology, identification, physiology, and behavior of aquatic organisms. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: BOTY 1050, ZOOL 1050, and CHEM 1100, 1110, or equivalent. Satisfies the ecology elective for the major. (Spring)

BIOL 4680 Ecology (4 units). Basic interrelationships of plants and animals within their physical environments. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: BOTY 1050, ZOOL 1050, and statistics or calculus. Satisfies the ecology elective for the major. (Fall)

BIOL 4820 Cytogenetics ( 2 units). Chromosome structure and behavior, structural changes in chromosomes, euploidy, and aneuploidy as related to genetic and heritable abnormalities. (Lecture, 2 hours) Prerequisite: BIOL 3350. (**)

BIOL 4830 Evolution and Population Genetics (2 units). Basic concepts of evolutionary theory and population genetics. Emphasis upon the processes and mechanisms of evolution through genetic changes in populations. (Lecture, 2 hours) Prerequisite: BIOL 3350. (Fall)

BIOL 4840 Molecular Genetics ( 2 units). The nature of the gene and how it is replicated. The genetic code and control of protein synthesis. Genetics of viruses and bacteria and the regulation of gene function. (Lecture, 2 hours) Prerequisite: BIOL 3310, 3350. (Spring)

BIOL4842 Recombinant DNA Laboratory (1 unit). Isolation, analysis, and manipulation of DNA, emphasizing the techniques fundamental to genetic engineering. (Laboratory, 3 hours) Prerequisites: BIOL 3350 and consent of instructor.

BIOL 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 4 units. Prerequisites: Junior standing and consent of departmental coordinator. (Fall, Spring)

BIOL 4940 Internship in Biology (2-4 units). Supervised work in an agency or business related to the biological sciences. Six to twelve hours per week. A weekly one-hour seminar will be held to discuss career related topics and the work experience aspect of the course. Prerequisites: Junior or senior level biology major; consent of instructor. (Fall, Spring)

BIOL 4950 Selected Topics in Biological Sciences (Topics to be specified in Class Schedule) ( $\mathbf{1 - 5}$ units). Development of a selected branch of biological sciences. Topics vary each term, thus different topics may be taken for credit.

BIOL 4960 Biology Colloquium (1 unit). Presentation and discussion of selected biological phenomena through the study of biological literature and research. Topics will include both basic and applied research. May be repeated for a total of 6 units, 2 of which can be applied to the major. (Spring)

BIOL 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Spring)

## Postbaccalaureate

BIOL 5900 Directed Field Research (2-4 units). Field research conducted offcampus under the general supervision of a faculty member, but under the specific direction of someone from an outside agency. Prerequisite: Bachelor's degree and consent of instructor. (Fall, Spring)
BIOL 5980 Individual Study ( $1-4$ units). For qualified students in need of advanced or spècialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Spring)

BIOL 5990 Master's Thesis (3-6 units). Preparation, completion, and submission of an acceptable thesis or project for the master's special major degree. This course may be repeated for a total of 6 units. Prerequisites: Open only to graduate students with the consent of student's graduate adviser. (Fall, Spring)

## Botany: Lower Division

BOTY 1050 Introduction to Botany ( 4 units). Introduction to the fundamental aspects of plant biology; taxonomy, anatomy, morphology, physiology, and ecology. (Lecture, 3 hours; laboratory, 3 hours). Prerequisite: Grade of A or B in high school biology, satisfactory score on biology qualifying examination, or BIOL 1010. (CAN BIOL 6) (Fall, Spring)

## Botany: Upper Division

BOTY 3000 Principles of Plant Propagation (3 units). Techniques, facilities, and materials used in the propagation and maintenance of horticulturally important plants. The water, temperature, and light requirements of domesticated plants are also considered, as well as methods of pest/disease control. (Lecture, 2 hours; laboratory, 3 hours; field trips) Prerequisite: BOTY 1050 or equivalent. (Winter)

BOTY 3050 Plants, Agriculture, and Man (2 units). The use of plants in agriculture and the role of humans in their domestication. New approaches to food and energy production are examined in the context of impending natural resource limitations. (Lecture, 2 hours) Prerequisite: BOTY 1050 or equivalent. (**)
*BOTY 3100 Survey of Nonvascular Plants (4 units). Natural history and taxonomy of the algae, fungi, lichens, mosses, and liverworts. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisite: BOTY 1050 or equivalent. Satisfies the departmental diversity requirement. (Spring)
*BOTY 3120 Morphology of Vascular Plants (4 units). Comparative study of structure, development, ecology, and evolutionary importance of psilophytes, club mosses, horsetails, ferns, and seed plants. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisite: BOTY 1050 or equivalent. Satisfies the departmental diversity requirement. (Fall)

BOTY 3500 Introductory Plant Pathology (4 units). Nature, cause, and control of plant diseases with emphasis on economic agriculture crops. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: BOTY 1050 or equivalent. (**)
*BOTY 3700 Flowering Plants (4 units). Structure, kinds, taxonomic relationships, and classification of local flowering plants with practice in their collection and identification. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: BOTY 1050 or equivalent. Satisfies the departmental diversity requirement. (Spring)

BOTY 4200 Plant Physiology (4 units). Selected topics pertaining to metabolism, nutrition, and growth of plants. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: BOTY 1050 or equivalent, BIOL 3310, and CHEM 3010, 3012 or equivalent. Satisfies the physiology elective for the major. (Fall)

BOTY 4600 Plant Ecology (4 units). Study of the interrelationships between plants and their environment, with special emphasis on the structure, development, and causes of distribution of plant communities. (Lecture, 3 hours; laboratory, 3 hours, field trips) Prerequisite: One year of college-level biology, including BOTY 1050, CHEM 1100, 1110, or equivalent. Satisfies the ecology elective for the major. (Fall)

BOTY 4950 Selected Topics in Botany (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of botany. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

BOTY 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Entomology: Upper Division

*ENTO 3000 Principles of Entomology (4 units). Classification, control, life history, structure, ecology, and basic physiology of insects. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 1050 or equivalent. Satisfies the departmental diversity requirement. (Fall)
*ENTO 3330 Medical Entomology ( 3 units). Relation of insects, arachnids, and other arthropods to the causation of pathological conditions in man and other animals or to the transmission of organisms which are responsible for such pathological conditions. (Lecture, 2 hours; laboratory, 3 hours; field trips) Prerequisite: ZOOL 1050 or equivalent. Satisfies the departmental diversity requirement. (Spring)
*ENTO 3740 Insect Classification (4 units). Survey of major groups of insects with classification to family level, taxonomic categories and procedures, nomenclature and literature. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: Consent of instructor. Satisfies the departmental diversity requirement. (Spring)

ENTO 4950 Selected Topics in Entomology (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of entomology. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ENTO 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Microbiology: Upper Division

*MBIO 3010 Bacteriology ( 3 units). Morphology, physiology, cultivation, and control of bacteria and other selected microorganisms; their role as agents of change in the natural process important to industry, agriculture and health. (Lecture, 3 hours) Prerequisites: One year of college-level biology or equivalent, and CHEM. 1110 or equivalent. MBIO 3010, 3032 together will satisfy the departmental diversity requirement. (Fall, Spring) (**)
*MBIO 3032 Bacteriology Laboratory ( 2 units). Laboratory experiments and demonstrations to illustrate principles and techniques of bacteriology. (Laboratory, 6 hours) Prerequisite: MBIO 3010 or concurrent enrollment. MBIO 3010, 3032 together will satisfy the departmental diversity requirement. (Fall, Spring)

MBIO 4300 Medical Microbiology (4 units). Principles of medical microbiology, including pathogenic microbes, epidemiology, infection, disease and treatment. (Lecture 3 hours; Laboratory 3 hours) Prerequisites: MBIO 3010, 3032.
MBIO 4600 Food Microbiology ( 3 units). Basic concepts related to some biochemical changes by microorganisms in food, including milk and milk products, particularly food spoilage, food poisoning, food preservation, and measures to prevent food spoilage and poisoning. (Lecture, 3 hours) Prerequisite: MBIO 3010 or equivalent. (Spring)

MBIO4700 Host-Parasite Interactions (3 units). Conceptof host-parasite interactions with emphasis on those microorganisms associated with human health and welfare. Prerequisite: MBIO 3010 or equivalent.

MBIO 4950 Selected Topics in Microbiology (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of microbiology (bacteriology). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

MBIO 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Natural Science: Upper Division

NSCI 3000 Science for Self-Sufficiency ( 3 units). Theoretical and practical aspects of science related to a self-sufficient life style, including organic agriculture and pest control; plant propagation; food preservation; production of beer, wine, cheese, and other foods; human nutrition; transmission and control of infectious diseases; water treatment and waste disposal; environmental physiology; and production of energy. Prerequisite: Junior standing. (**)

NSCI 4960 Seminar in Environmental Science (1 unit). Environmental topics will be presented and discussed by faculty, students, and visiting scientists. May be repeated for a maximum of 4 units. Prerequisite: Upper-division standing or consent of instructor.

## Zoology: Lower Division

ZOOL 1050 Introduction to Zoology (4 units). Introduction to basic principles common to the animal kingdom. The course covers animal diversity; morphology and physiology of animal cells, tissues, and organ systems; animal reproduction and development; and principles of evolution and specialization. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: Grade of A or B in high school biology, satisfactory score on biology qualifying examination, or BIOL 1010. (CAN BIOL 4) (Fall, Spring)

ZOOL 2230 Physiology (3 units). Principles of functional anatomy and physiology of organ systems with special reference to human physiology. (Lecture, 3 hours) Prerequisite: BIOL 1010, or ZOOL 1050, or ZOOL 2250. Does not satisfy the physiology elective for the major. (Fall, Spring)

ZOOL 2235 Human Physiology (4 units). Principles of functional anatomy and physiology of organ systems with special reference to human physiology. Laboratory exercises and experiments illustrating the principles presented in lecture. Prerequisite: Concurrent enrollment in lab ZOOL 2245.

ZOOL 2242 Physiology Laboratory (1 unit). Laboratory experiments, exercises, and demonstrations illustrating the principles of physiology with special reference to human physiology. (Laboratory, 3 hours) Prerequisite: ZOOL 2230 or concurrent enrollment. (Fall, Spring)

ZOOL 2250 Human Anatomy (4 units). Gross morphology and anatomy of the organ systems of the human body with emphasis on functional anatomy. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: BIOL 1010 and 1020-1029, or ZOOL 1050. (CAN BIOL 10) (Fall, Spring)

ZOOL 2660 Birdwatching in Central California (3 units). Field experience in becoming familiar with the identification, habitats and habits of birds of Central California. Emphasis on identifying species in the field. (Lecture, 1 hour; activity, 4 hours; field trips). Prerequisite: Consent of instructor. (Winter)

## Zoology: Upper Division

ZOOL 3130 Vertebrate Embryology ( 5 units). Comparative study of embryological stages of various selected vertebrate forms and developmental microanatomy of their organ systems. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: ZOOL 1050 or equivalent. (**)

ZOOL 3150 Comparative Anatomy of Vertebrates (5 units). Comparative study of microanatomy and gross morphology of organ systems in representative vertebrates. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: ZOOL 1050 or equivalent. (**)

ZOOL 3600 Introduction to Ethology ( 3 units). A general survey of forms of animal behavior and methods of study. (Lecture, 3 hours) Prerequisite: BOTY 1050, ZOOL 1050 , or consent of instructor. (**)
*ZOOL 3610 General Vertebrate Zoology (4 units). Natural history, behavior, ecology, environmental physiology, and zoogeography of the vertebrates with emphasis on the ecological roles of vertebrates in their natural communities. Laboratory and field studies of local forms. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: One year college-level biology. Satisfies the departmental diversity requirement. (Fall)

ZOOL 3660 Birdwatching in Central California (3 units). Field experience in becoming familiar with the identification, habits and habitats of birds of Central California. Emphasis on identifying species in the field. (Lecture, 1 hour; activity, 4 hours; field trips) Prerequisite: ZOOL 1050 and consent of instructor. (Winter)

ZOOL 4151 Animal Cells and Tissues ( 4 units). Study of various animal cell types and tissues with emphasis on their microstructure and functional relationships. Photomicrography and microphotography will be part of the laboratory experience. (Lecture, 3 hours; laboratory 3 hours) Prerequisite: One year of college-level biology, including ZOOL 1050, plus CHEM 1110. (**)

ZOOL 4230 Animal Physiology (4 units). A physiological approach to the evolution of vertebrate organ systems. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BIOL 3310, and CHEM 3010, 3012, or equivalent. Satisfies the physiology elective for the major. Spring)

ZOOL 4280 Physiology of Human Systems (4 units). Human physiology presented at cellular and organ system levels: Membrane transport, nerve excitation, muscle contraction, cardiovascular physiology, kidney function, hormone function, reproduction, and digestion. Prerequisites: BIOL 3310 and one term of Organic Chemistry. Satisfies the physiology elective for the major. (Fall, Spring)
*ZOOL 4420 Invertebrate Zoology I (4 units). Structure, classification, distribution, and life histories of invertebrate groups including Protozoa, Porifera, Cnidaria, Acoelomates, Pseudocoelomates, and related phyla. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: Three college-level biology courses, including ZOOL 1050, or consent of instructor. Satisfies the department diversity requirement. (Fall)
*ZOOL 4430 Invertebrate Zoology II (4 units). Structure and classification, distribution, and life histories of invertebrate phyla, including Annelida, Arthropoda, Mollusca and related groups. This course will satisfy the diversity requirement. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: Three college-level biology courses, including ZOOL 1050, or consent of instructor. ZOOL 4420 recommended. (Spring)
*ZOOL 4440 General Parasitology (4 units). Parasitism with emphasis on parasites of man. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: Two years of collegelevel biology or equivalent. Satisfies the departmental diversity requirement. (Fall)
*ZOOL 4620 Herpetology (4 units). Anatomy, behavior, classification, distribution, ecology, evolution, and life histories of amphibians and reptiles. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 3150 or ZOOL 3610 or consent of instructor. Satisfies the departmental diversity requirement. (Spring)
*ZOOL 4630 Ornithology (4 units). Behavior, classification, economic importance, evolution, life histories, migration, and special modifications of birds. Identification in field and laboratory. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 3150 or 3610 or consent of instructor. Satisfies the departmental diversity requirement. (Spring)
*ZOOL 4640 Mammalogy (4 units). Classification, distribution, ecology, behavior, and form and function as they relate to life histories of mammals; identification in the field and laboratory. (Lecture, 2 hours; laboratory, 6 hours; weekend field trips). Prerequisite: ZOOL 3150 or 3610 or consent of instructor. Satisfies the departmental diversity requirement. (Spring)

ZOOL 4650 Field Study: Wood Duck (I unit). Students will become acquainted with the nesting biology of wood ducks during an introductory meeting and weekly field observations. Students will monitor several nest boxes placed near various waterways in Stanislaus County. Copies of field observations will be turned in weekly and at the end of the semester, along with final interpretation of data. May be repeated for up to 2 units. Prerequisite: ZOOL 1050 or consent of instructor. (Spring)

ZOOL 4950 Selected Topics in Zoology (Topics to be specified in Class Schedule) ( $\mathbf{1} \mathbf{- 5}$ units). Development of a selected branch of zoology. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ZOOL 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

[^10]

## Chemistry

Office: $\quad$ Science Building 217, (209) 667-3468<br>Chair: James E. Byrd<br>Email: jim@chem.csustan.edu<br>Faculty: John Almy, James E. Byrd, Hobart G. Hamilton, Jr., Alexander J. Pandell, Michael J.'Perona, Koni K. Stone, Evan M. Thompson<br>Emeritus

Faculty: Jimmy W. Hinkson
The Department of Chemistry offers programs of study for students seeking the Bachelor of Arts or the Bachelor of Science in Chemistry. Students may also elect to complete a concentration in Environmental Sciences as part of either the Bachelor of Arts or Bachelor of Science program. Students should consult with their department adviser to determine which degree and program is best suited to their career objectives.

## Bachelor of Arts Degree

The Bachelor of Arts program is designed for those seeking to enter professions requiring moderate training in chemistry combined with training in other areas. Examples are technical sales writing, chemical patent law, library work, and high school teaching, as well as health professions such as medicine, optometry, dentistry, medical technology, pharmacy, physical therapy, and veterinary medicine. Students are advised to take specific courses depending on their field of interest; for example, ZOOL 1050, CHEM 4020, 4400, and ZOOL 3130 or ZOOL 3150, or both, in preparation for dental, medical, or veterinary medical schools. Further information on the health professions area can be obtained from the Premedical and Health Professions Committee. (Please see "Admission to the University" section of this catalog.)

A single subject waiver program is available for chemistry majors who intend to declare science as a subject matter teaching area. Students must plan their academic program carefully with their adviser to complete the approved waiver program at the time of graduation.

## Bachelor of Science Degree

The Bachelor of Science program is accredited by the American Chemical Society (ACS) and provides comprehensive training in chemistry for students wishing to become professional chemists in industry or government, or who plan to attend graduate school. Students wishing to receive a degree accredited by the ACS must complete CHEM 4610, and either MATH 2510 or MATH 3250, in addition to the Bachelor of Science degree requirements listed below. Students obtaining an accredited degree are eligible to join the ACS immediately upon graduation.

## Requirements for the Bachelor of Arts or the <br> Bachelor of Science, Chemistry

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major; CR grades will not be accepted for chemistry course prerequisites.
a. Complete the following required courses in the major field (14 units):

CHEM 1100, 1110 Principles of Chemistry I, II, 10 units
CHEM 2010 Quantitative Analysis and Basic Instrumental Techniques, 4 units
b. Bachelor of Arts students complete the following required courses in supporting fields ( 21 units):
i. CS $1500 \quad$ Computer Programming I, 3 units, or equivalent by advisement.
ii. MATH 1410, 1420 Calculus I, II, 8 units
iii. PHYS 2100, 2110 Basic Physics I, II, 10 units, or

PHYS 2250, 2260 General Physics I, II, 8 units, and
PHYS 2252, 2262 General Physics Laboratory I, II, 2 units
c. Bachelor of Science students complete the following required courses in supporting fields ( 25 units):

CS 1500
MATH 1410, 1420 Calculus I, II, 8 units
MATH $2410 \quad$ Multivariate Calculus, 4 units
PHYS 2250, 2260 General Physics I, II, 8 units
PHYS 2252, 2262 General Physics Laboratory I, II, 2 units
3. Complete a major of not less than 24 upper-division units as specified for the Bachelor of Arts degree, or 31 upper-division units as specified for the Bachelor of Science degree; of these, no more than eight units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.
4. Completion of a minor is not required.

## The Bachelor of Arts Major (24 units)

1. Complete the following courses ( 17 units):

CHEM 3010, 3020 Organic Chemistry I, II, 6 units
CHEM 3012, 3022 Organic Chemistry Lab I, II, 2 units
CHEM 4010 Physical Chemistry I, 3 units
CHEM 4021 Additional Topics in Physical Chemistry, 1 unit
CHEM 4032 Physical Chemistry Laboratory, 1 unit
CHEM 4100 Instrumental Analysis, 4 units
2. Select a minimum of seven credit hours from the following courses:

CHEM 4020 Physical Chemistry II, 3 units
CHEM 4032 Physical Chemistry Lab, 1-2 units
CHEM 4200 Advanced Inorganic Chemistry, 3 units
CHEM 4212 Advanced Chemistry Laboratory, 2 units
CHEM 4300 Advanced Organic Chemistry, 3 units
CHEM 4400 Biochemistry I, 3 units
CHEM 4402 Biochemistry Laboratory I, 1 unit
CHEM 4420 Biochemistry II, 3 units
CHEM 4940 Chemistry Internship, 2-4 units
CHEM 4950 Selected Topics in Chemistry, 1-5 units
CHEM 4960 Research Seminar, 1 unit
CHEM 4961 Seminar on Directed Readings, 1 unit
CHEM 4980 Individual Study, 1-4 units

## The Bachelor of Science Major (31 units)

1. Complete the following courses ( 25 units):

CHEM 3010, 3020 Organic Chemistry I, II, 6 units
CHEM 3012, 3022 Organic Chemistry Laboratory I, II, 2 units
CHEM 4010, 4020 Physical Chemistry I, II, 6 units
CHEM 4032 Physical Chemistry Laboratory, 2 units
CHEM 4100 Instrumental Analysis, 4 units
CHEM 4200 Advanced Inorganic Chemistry, 3 units
CHEM 4212 Advanced Chemistry Laboratory, 2 units
2. Select a minimum of six credit hours from the following courses:

CHEM 4300 Advanced Organic Chemistry, 3 units
CHEM 4400 Biochemistry I, 3 units
CHEM 4402 Biochemistry Laboratory I, 1 unit
CHEM 4420 Biochemistry II, 3 units
CHEM 4610 Computer Methods in Chemistry, 2 units
CHEM 4940 Chemistry Internship, 2-4 units
CHEM 4950 Selected Topics in Chemistry, 1-5 units
CHEM 4960 Research Seminar, 1 unit
CHEM 4961 Seminar on Directed Readings, 1 unit
CHEM 4980 Individual Study, 1-4 units
PHYS 3520 Modern Physics and Quantum Mechanics, 3 units
PHYS 4450 Nuclear and Particle Physics, 3 units
PHYS 4530 Thermal and Statistical Physics I, 4 units
Note: The following courses are required for those students who wish to receive an ACS accredited degree:

CHEM 4610 Computer Methods in Chemistry, 2 units, and MATH 2510 Linear Algebra and Applications, 4 units, or MATH 3250 Ordinary Differèntial Equations, 4 units

## Chemistry Minor

## Requirements (18 units)

Successful completion of 18 units in Chemistry as approved by the department, including a minimum of 8 upper-division units, with a GPA of 2.0 or higher.

## Environmental Sciences Concentration

A Chemistry major may complete additional requirements in the sciences and mathematics to qualify for a concentration in Environmental Sciences. This program requires study in biological sciences, chemistry, mathematics, and physical sciences, along with an environmental seminar and investigation of an environmentally related problem. Further details are found in the "Environmental Sciences" section of this catalog.

## Liberal Studies Concentration in Chemistry

## Requirements ( 20 units)

Complete the following courses for a concentration in chemistry within the Liberal Studies degree:

CHEM 1110 Principles of Chemistry II, 5 units*
CHEM 3010, 3020 Organic Chemistry I, II, 6 units
CHEM 3012, 3022 Organic Chemistry Lab I, II, 2 units
Upper-division electives in chemistry as approved by the department, 7 units

## Teaching Credentials

The waiver program for satisfying the subject matter competency requirements for the single subject teaching credential in the sciences was being revised at the time the catalog went to press. Students enrolled in the program before January 1, 1995, can satisfy the subject matter competency requirements in physical science by completing the old waiver program or choose to complete the new waiver program. New students interested in a single subject teaching credential in the sciences must consult with their adviser about the content of the new program.

## Course Descriptions

Lower Division
CHEM 1000 Chemistry in the Modern World (3 units). Basic principles of chemistry as applied to the world around us. A descriptive course designed to satisfy both the General Education requirements of the non-science student and the chemistry requirement for the Multiple Subjects Waiver program. Not open to students with previous college chemistry. (Lecture, 3 hours) (Fall, Spring)

CHEM 1002 Chemistry in the Modern World Laboratory (I unit). An optional laboratory course to accompany CHEM 1000,2400 or 3070 . Experiments will illustrate some of the different types of chemistry relevant to the world we live in. These include polymers, the environment, soaps and detergents, medicinal and food chemistry. Prerequisite: Prior or concurrent enrollment in CHEM 1000, 2400 or 3070. (Fall, Spring)

CHEM 1100 Principles of Chemistry I (5 units). Fundamental principles of chemistry emphasizing atomic structure, periodic properties, theories of bonding, kinetic theory of gases, solution chemistry. Concurrent enrollment in lecture (CHEM 1100, 3 hours), laboratory (CHEM 1102, 3 hours) and discussion (CHEM 1104, 1 hour) is required. Prerequisite: Two years of high school algebra or consent of instructor. (CAN CHEM 2) (Fall, Spring)

CHEM 1110 Principles of Chemistry II ( 5 units). A continuation of CHEM 1100, emphasizing gaseous and ionic equilibria, electrochemical principles, thermodynamics, radio-chemistry, and descriptive chemistry of the elements. Concurrent enrollment in lecture (CHEM 1110, 3 hours), laboratory (CHEM 1112, 3 hours) and discussion (CHEM 1114, 1 hour) is required. Prerequisite: CHEM 1100 (CAN CHEM 4). (Fall, Spring)

CHEM 2000 Experiments for the Elementary School Classroom (2 units). The primary goal of the course is to teach students to develop chemistry experiments which can be used in the elementary school classroom. The scientific method and chemical principles will be stressed in experiments which use only common, readily available substances. Concurrent enrollment in lecture (CHEM 2000, 1 hour) and

[^11]laboratory, (CHEM 2002, 3 hours) is required. Prerequisite: CHEM 1000 or equivalent; or concurrent enrollment in CHEM 1000. (Fall, Spring)

CHEM 2010 Quantitative Analysis änd Basic Instrumental Techniques (4 units). Principles and practice of volumetric, gravimetric, and instrumental methods of analysis. Concurrent enrollment in lecture (CHEM 2010, 2 hours) and laboratory (CHEM 2012, 6 hours) is required. Prerequisite: CHEM 1110. (CAN CHEM 12) (Fall)

CHEM 2400 The Science of Winemaking (4 units). A basic and practical introduction to enology. Topics include alcohol, fermentation, viticulture, acids, bases, winemaking operations, distillation, history and an introduction to U.S., French and German wines. (Lecture, 4 hours) Prerequisite: None. (Winter)

CHEM 2500 Chemistry of Photography ( 4 units). The basic principles of chemistry will be developed and applied to an understanding of the photographic process. Topics to be covered include the chemistry of the formation of the latent image, development, and fixation in both black and white and color photography. Concurrent enrollment in lecture (CHEM 2500) and laboratory (CHEM 2502) required. Satisfies Liberal Studies area B-3. Prerequisite: None. (Winter)

CHEM 2950 Selected Topics in Chemistry (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of chemistry. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

CHEM 3010 Organic Chemistry I (3 units). Structure, properties, reactions, and stereochemistry of carbon compounds. Reaction mechanisms. Applications of spectroscopy to organic molecules. Carbohydrates, amino acids, and proteins. (Lecture, 3 hours) Prerequisite: CHEM 1110. (Fall, Spring)

CHEM 3012 Organic Chemistry Laboratory I(1 unit). Basic laboratory techniques, simple organic syntheses, isolation of natural products, multi-step syntheses, vapor phase chromatography, thin-layer chromatography, qualitative organic analysis, spectroscopic applications to structure determination. (Laboratory, 3 hours) Prerequisite: CHEM 1110. (Fall, Spring)

CHEM 3020 Organic Chemistry II (3 units). Continuation of CHEM 3010 (Lecture, 3 hours). Prerequisite: CHEM 3010. (Fall, Spring)

CHEM 3022 Organic Chemistry Laboratory II (1 unit). Continuation of CHEM 3012 (Laboratory, 3 hours). Prerequisite: CHEM 3012. (Fall, Spring)

CHEM 3070 The Chemicals in Your Life (3 units). Basic chemical principles will be used to describe the nature of various problems and processes important to contemporary society. These would include application of chemistry in agriculture, health, the environment, and the home. (Not applicable to the major or minor in chemistry.) Prerequisite: Any course applicable to the General Education requirement in the sciences. (Fall, Spring)

CHEM 3080 The Chemistry of Nuclear Energy (3 units). The course will consider many aspects of nuclear chemistry including forms of radiation, nuclear reactions, military applications and applications in chemistry, medicine, archeology and art. Particular emphasis will be placed on nuclear energy production. (Not applicable to the major or minor in Chemistry.) Prerequisite: A lower-division science course. (Winter)

CHEM 3100 Environmental Chemistry ( 3 units). Chemical principles will be applied to the study of environmentally related processes and phenomena such as acid rain, natural water chemistry, ozone depletion, the greenhouse effect, the treatment of drinking water, waste disposal, and photochemical smog. (Not applicable to major or minor in Chemistry.) Prerequisite: CHEM 1100, 1110. (Winter)

CHEM 4010 Physical Chemistry I ( 3 units). The three laws of thermodynamics, equilibrium, critical properties of gases, osmosis, phase rule, electrochemistry, chemical kinetics, molecular structure, and spectroscopy. (Lecture, 3 hours) Prerequisites: One year of calculus and one year of physics. (Spring)

CHEM 4020 Physical Chemistry II (3 units). Continuation of CHEM 4010 (Lecture, 3 hours) Concurrent enrollment in CHEM 4032 required. Prerequisites: MATH 1420, CHEM 4010. (Fall)

CHEM 4021 Additional Topics in Physical Chemistry (1 unit). An introduction to either chemical kinetics or molecular spectroscopy, depending upon the student's interest. The course is intended forB.A. chemistry majors and others desiring a survey of either of these topics, and is not open to B.S. chemistry majors. Prerequisite: CHEM 4010. (Fall)

CHEM 4032 Physical Chemistry Laboratory (1 or 2 units). Laboratory applications of the principles of physical chemistry. (Laboratory, 3 or 6 hours) Prerequisites: CHEM 4010 and concurrent enrollment in CHEM 4020, if the course is taken for 2 units. CHEM 4010 only, if the course is taken for 1 unit. (Fall)

CHEM 4100 Instrumental Analysis (4 units). Instrumental methods of chemical analysis including discussion of the theory and application of nuclear magnetic resonance, electron spin resonance, mass spectroscopy, infrared, Raman, visible ultraviolet and atomic absorption spectroscopy; flame photometry; X-ray diffraction; neutron activation and analysis; ESCA; specific ion electrode methods; gas, liquid, and ion-exchange chromatography. Concurrent eurollment in lecture (CHEM 4100, 2 hours) and laboratory (CHEM 4102, 6 hours) is required. Prerequisites: CHEM 2010, 3020 and 4010, or consent of instructor. (Fall)

CHEM 4200 Advanced Inorganic Chemistry (3 units). Atomic structure, periodic properties, theories of bonding, structure, introduction to coordination chemistry, and reactions of representative elements. (Lecture, 3 hours) Prerequisite: CHEM 4010 or consent of instructor. (Spring)

CHEM 4212 Advanced Chemistry Laboratory (2 units). An advanced level course involving modern synthetic and instrumental techniques with an emphasis on inorganic chemistry. Prerequisites: CHEM 4010, 4200, or consent of instructor. (Spring)

CHEM 4300 Advanced Organic Chemistry (3 units). Chemical kinetics, structurereactivity relationships, molecular orbital theory, orbital symmetry, reactive intermediates, rearrangements and neighboring group effects; nucleophilic aliphatic substitution, photochemistry. (Lecture, 3 hours) Prerequisite: CHEM 3020. (Fall)

CHEM 4400 Biochemistry I ( 3 units). Basic chemistry, metabolism and energy relationships of amino acids, proteins, nucleic acids, carbohydrates and lipids. Introductory enzymology. Prerequisite: CHEM 3020 or consent of instructor. (Fall)

CHEM 4402 Biochemistry Laboratory I (1 unit). An introduction to biochemical techniques including chromatography, purification of biological molecules, spectrophotometry, and fluorimetry. (Laboratory, 3 hours). Prerequisite: Concurrent enrollment in CHEM 4400 or consent of instructor. (Fall)

CHEM 4420 Biochemistry II (3 units). An in-depth continuation of CHEM 4400. Additional topics will include biosynthetic reactions, vitamins, membranes, hormones, molecular physiology, enzyme mechanisms, biochemical thermodynamics and photosynthesis. Prerequisite: CHEM 4400 or equivalent. (Spring)

CHEM 4610 Computer Methods in Chemistry (2 units). Computer programming applied to typical problems in chemistry. (Lecture, 1 hour, laboratory, 3 hours) Prerequisites: CHEM 2010, MATH 1420, and CS 1500, or equivalent. (Winter)

CHEM 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units. Prerequisites: Sophomore standing; CHEM 2010, 3020, 3022, and consent of the department's Co-op Coordinator. (Fall, Spring)

CHEM 4940 Chemistry Internship (2-4 units). This course is designed for students in chemistry who wish to apply their educational experience to a practical situation in a public or private agency. Prerequisites: CHEM 2010,3020, 3022 and consent of Department Internship Coordinator. (Fall, Winter, Spring)

CHEM 4950 Selected Topics in Chemistry (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of chemistry. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

CHEM 4960 Research Seminar (1 unit ). The presentation of research results or topical literature surveys by students and visiting scientists. May be repeated for a total of 2 units. Prerequisite: CHEM 3010 or consent of instructor. (Spring)

CHEM 4961 Seminar on Directed Readings (1 unit). The presentation and discussion by students of research papers taken from the current chemical literature. Prerequisite: Consent of instructor. (Spring)

CHEM 4980 Individual Study (1-4 units). For qualified students desiring to do research or to pursue the study of some specialized topic. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

142 / Chemistry

## Postbaccalaureate

CHEM 5980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)


# Child Development 

Office: $\quad$ Classroom Building 231, 667-3386
Coordinator: Victoria Cortez

The interdisciplinary child development program offers the degree of Bachelor of Arts, ChildDevelopment. The child developmentprogramalso offers a concentration for the Liberal Studies degree. (See the "Liberal Studies" section of this catalog for more information.)

## Bachelor of Arts, Child Development

The program leading to a Bachelor of Arts, Child Development provides students with a background of knowledge and skills in child growth and development. The degree is based in the Department of Psychology. Courses are selected from child development, psychology, and related fields and include laboratory and field experiences at the CSU Stanislaus Child Development Center as well as other applied settings.

All students are expected to: (1) complete a core of required courses; (2) complete one of the tracks described; and (3) complete a a capstone senior seminar and co-requisite internship. Tracks are designed to provide students with specialized knowledge and abilities in the following areas of child development: working as teachers and administrators of child development programs (Child Programs Track); pursuing advanced studies or research careers in education, psychology, social sciences, special education, and child development (Child Research Track); serving the social welfare and guidance needs of young children, parents, families, and the community (Child Services Track). A General Track is available for those students who wish to tailor their academic programs to a particular developmental focus. A general track plan must be developed with an academic adviser and submitted to the Child Development Committee for approval.

Stadents pursuing authorization to teach in public elementary schools must complete a Multiple Subjects Credential upon completion of their degree or concurrent with the completion of the Baccalaureate. Students wishing to obtain a Multiple Subjects Teaching Credential may wish to consider one of two routes: (1) students completing the Child Development major (or any other single subject major) may qualify for the Credential Program, in part, by passing the Multiple Subjects Assessment for Teachers-MSAT (formerly NTE); (2) alternatively, students may waive the MSAT by completing the Liberal Studies major and a concentration in their area of choice. The Liberal Studies concentration in child development is described in this section. Students may wish to consult their advisers before choosing their major.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree.
2. Complete the lower-division prerequisites to the major plus major requirements of not less than 37 units of approved upper-division course work as outlined.
3. Community college transfer students with an Associate of Arts in child development or early childhood education, upon advisement, may waive CDEV 3140, and complete the remainder of required course work, plus additional upperdivision course work for a total of 37 units.
4. Community college transfer students without an Associate of Arts in child development or early childhood education must complete course requirements as outlined for a minimum total of 37 units of approved upper-division course work.
5. All students must take at least one non-research child development laboratory course in residence at CSU, Stanislaus. All students must complete CDEV 3010, Child Abuse and Neglect, prior to enrollment in the following lab courses: CDEV 3020, CDEV 3181, or CDEV 3440.
6. Child development majors must take all courses counted toward the major for a letter grade if the letter grade option is available. In addition, no more than 6 units of credit-graded course work may apply toward the major.
7. Internships and field work courses may be repeated once each for credit toward the major. In addition, a maximum of 6 units of combined course work in field work and internships may be counted toward the major with approval by the major adviser.
Notes: a. Effective Winter 1996, Child Development courses are noted by the CDEV prefix. Child Development courses, prior to this date, are noted by a PSYC prefix.
b. The following courses are recommended for students who anticipate pursuing graduate work:
CDEV 4000 Child Development Research Methods, 3 units MATH 1600 Statistics, 4 units
PSYC 3000 Experimental Methods and Design, 4 units

## The Major ( 47 units):

1. Complete the following required lower-division courses ( 10 units):

BIOL 1010 Principles of Biology, 3 units and
BIOL 1020-1029 Special Laboratory Studies, 1 unit
PSYC 2010 Introduction to Psychology, 3 units
PSYC 2020 Introduction to Psychological Methods, 3 units
The following lower-division courses are also recommended:
ANTH 2060 Introduction to Cultural Anthropology, 3 units, or
ANTH 2080 Introduction to Physical Anthropology, 3 units
SOCL 1010 Introduction to Sociology, 3 units
2. Complete the following required upper-division core ( 22 units): a. Complete all of the following courses:

CDEV 3010 Child Abuse and Neglect, 1 unit
CDEV 3140 Human Development I: Childhood, 3 units
CDEV 3170 Early Cognitive Development, 3 units
CDEV 3180 Early Social and Emotional Development, 3 units
b. Select one of the following Application courses:

CDEV 3020 Child Guidance and Management, 3 units, or
CDEV 3181 Early Childhood Development, 3 units, or
CDEV 3440 Developmental Assessment, 3 units
c. Select one of the following Life Span courses:

CDEV 3240 Human Development II: Adolescence, 3 units, or CDEV 3340 Human Development III: Adulthood and Aging, 3 units
d. Select one of the following Family courses:

ANTH 4165 The Family in Cross-Cultural Perspective, 3 units, or ETHS 4000 The Mexican American Family, 3 units, or ETHS 4010 The Black American Family, 3 units, or SOCL 3150 The Family, 3 units
e. Complete both of the following capstone courses:

CDEV 4965 Child Development Senior Seminar, 1 unit and CDEV 4948 Child Development Senior Internship, 2 units
3. Complete one of the following tracks: ( 15 units)
a. Child Development Programs Track (Child Development Programs Certificate):
i. Complete the following (8 units)

CDEV 4180 Developmental Programs for Preschool Children, 3 units, and
CDEV 4190 Developmental Programs Laboratory, 1 unit
CDEV 4960 Organization \& Administration of Early Childhood Education Programs, 4 units
ii. CDC Internships ( 2 units minimum):

CDEV 4945 Internship at Child Development Center as Instructor's Aide, 1 unit, or
CDEV 4946 Internship at Child Development Center as Head Teacher, 2 units, or
CDEV 4947 Internship at Child Development Center as Assistant Administrator, 2 units
iii. CDEV 4940 Fieldwork in Child Development (2 units minimum)
iv. *Elective, upper-division, upon advisement, 3 units
b. Child Development Research Track (Child Development Research Certificate):
i. Complete the following: ( 10 units)

SSCI 3000 Library Resources for the Social Sciences, 2 units
PSYC 3000 Experimental Methods, 4 units
PSYC 3120 Human Development Research Lab, 1 unit
CDEV 4000 Child Development Research Methods, 3 units
ii. CDEV 4940 Fieldwork in Child Development (2 units minimum)
iii. *Elective, upper-division, upon advisement 3 units
c. Child Development Services Track (Child Development Services Certificate):
i. Complete the following: (9 units)

PSYC 4130 Psychological Disorder of Children, 3 units
PSYC 4150 Learning Disabilities, 3 units
SOCL 4790 Social Welfare Services, 3 units
ii. CDEV 4940 Fieldwork in Child Development (3 units minimum)
iii. *Elective, upper-division, upon advisement, 3 units
d. General Track: Select 15 units of upper-division classes from the following list of *electives. A general track plan must be developed with the student's academic adviser and submitted to the Child Development Committee for approval.
*Electives: Select elective course work from the courses listed below. Electives within the track may not be cross counted for the courses required within the major core. The total number of units to complete a track is 15 upper-division units. The total of upper-division units in the major must total 37 . Winter term and summer session courses may be substituted upon advisement:

ANTH 4165 The Family in Cross Cultural Perspective, 3 units
CDEV 3020 Child Guidance Management, 3 units
CDEV 3181 Early Childhood Development, 3 units
CDEV 3240 Human Development II, Adolescence, 3 units
CDEV 3340 Human Development III, Adulthood, 3 units
CDEV 3440 Developmental Assessment, 3 units
CDEV 4000 Child Development Research Methods, 3 units
CDEV 4180 Developmental Programs for Preschool Children, 3 units, and
CDEV 4190 Developmental Programs Lab, 1 unit
CDEV 4940 Field work in Child Development, 1-2 units (must be approved by adviser)
CDEV 4945 Internship at CDC as Instructional Aide, 1 unit
CDEV 4946 Internship at CDC as Head Teacher, 2 units
CDEV 4947 Internship at CDC as Administrative Assistant, 2 units
CDEV 4950 Topics in Child Development, 1-4 units
CDEV 4960 Organization and Administration of Preschool Programs, 4 units
CDEV 4980 Individual Study in Child Development, 1-3 units
CDEV 4990 Senior Honors Thesis, 3 units
COMM 3010 Language and Speech Development, 3 units
COMM 3400 Oral Interpretation of Children's Literature, 3 units
COMM 3610 Introduction to Communication Disorders, 3 units
DRAM 3020 Children's Theatre, 3 units, or
DRAM 4020 Performance for Children, 4 units
ENGL 4620 Children's Literature, 3 units
ETHS 4000 The Mexican American Family, 3 units
ETHS 4010 The Black American Family, 3 units
ETHS 4030 Asian American Families, 3 units
MUS 3340 Music in Elementary School, 3 units, or
MUS 3341 Music for the Classroom Teacher, 2 units
PHED 3400 Elementary Physical Education, 3 units
PSYC 3120 Human Development Research Laboratory, 1 unit
PSYC 3700 Introduction to Learning and Motivation, 3 units
PSYC 4110 Behavior Genetics, 3 units
PSYC 4130 Psychological Disorders of Children, 3 units
PSYC 4150 Learning Disabilities, 3 units
SOCL 3150 The Family, 3 units
SOCL 3160 Sociology of Youth, 3 units'

## Liberal Studies Concentration in Child Development

## Requirements/Recommendations

1. Upon advisement, community college transfer students with an Associate of Arts degree in Child Development or Early Childhood Education (ECE) may waive CDEV 3140 and complete the remaining required course work, plus additional course work, for a total of 22 units, 17 upper-division.
2. Community college course work in Child Development or Early Childhood Education may apply toward 5 units non-upper-division electives within the Child Development concentration.
3. Community college transfer students without an Associate of Arts in Child Development or ECE must complete course requirements as outlined above for a total of not less than 22 units, with no more than 5 lower-division units.
4. Students with child development concentrations must take all courses counted toward the concentration for a letter grade if the letter-grade option is available. In addition, no more than 3 units of credit-graded course work may apply toward the concentration.
5. All students must take at least one non-research child development laboratory course in residence at CSU Stanislaus. All students must complete CDEV 3010, Child Abuse and Neglect, prior to enrollment in the following lab courses: CDEV 3020,3181 , or 3440
6. Internships and field work courses may be repeated once each for credit toward the concentration. In addition, a maximum of 3 units of combined course work in field work and internships may be counted toward the concentration with approval by the major adviser.
7. Students obtaining academic competency prior to the credential program must earn grades of C or better in all classes within the concentration.

## The Concentration ( 22 units)

1. Complete the following upper-division core ( 16 units):
a. Complete all of the following courses:

CDEV 3010 Child Abuse and Neglect, 1 unit
CDEV 3140 Human Development I: Childhood, 3 units
CDEV 3170 Early Cognitive Development, 3 units
CDEV 3180 Early Social and Emotional Development, 3 units
b. Select one of the following Application courses:

CDEV 3020 Child Guidance and Management, 3 units, or
CDEV 3181 Early Childhood Development, 3 units, or
CDEV 3440 Developmental Assessment, 3 units
c. Select one of the following Family courses:

ANTH 4165 The Family in Cross-Cultural Perspective, 3 units, or
ETHS 4000 The Mexican American Family, 3 units, or
ETHS 4010 The Black American Family, 3 units, or
SOCL 3150 The Family, 3 units
2. Electives: Select 6 units of electives from the following courses. Electives may not be cross counted for the courses required within the concentration core. The total number of units to complete a child development concentration is 22. Winter term and summer session courses may be substituted upon advisement:

148 / Child Development
ANTH 4165 The Family in Cross Cultural Perspective
CDEV 3020 Child Guidance and Management, 3 units
CDEV 3181 Early Childhood Development, 3 units
CDEV 3240 Human Development II, Adolescence, 3 units
CDEV 3340 Human Development III, Adulthood, 3 units
CDEV 3440 Developmental Assessment, 3 units
CDEV 4000 Child Development Research Methods, 3 units
CDEV 4180 Developmental Programs for Preschool Children, 3 units, and
CDEV 4190 Developmental Programs Lab, 1 unit
CDEV 4940 Field work in Child Development, 1-2 units (must be approved by adviser)
CDEV 4945 Internship at CDC as Instructional Aide, 1 unit
CDEV 4946 Internship at CDC as Head Teacher, 2 units
CDEV 4947 Internship at CDC as Administrative Assistant, 2 units
CDEV 4948 Child Development Senior Internship, 1 unit, and
CDEV 4965 Child Development Senior Seminar, 2 units
CDEV 4950 Selected Topics in Child Development, 1-4 units
CDEV 4960 Organization and Administration of Preschool Programs, 4 units
CDEV 4980 Individual Study in Child Development, 1-3 units
CDEV 4990 Senior Honors Thesis, 3 units
COMM 3010 Language and Speech Development, 3 units
COMM 3400 Oral Interpretation of Children's Literature, 3 units
COMM 3610 Introduction to Communication Disorders, 3 units
DRAM 3020 Children's Theatre, 3 units, or
DRAM 4020 Performance for Children, 4 units
ENGL 4620 Children's Literature, 3 units
ETHS 4000 The Mexican American Family, 3 units
ETHS 4010 The Black American Family, 3 units
ETHS 4030 Asian American Families, 3 units
MUS 3340 Music in Elementary School, 3 units, or
MUS 3341 Music for the Classroom Teacher, 2 units
PHED 3400 Elementary Physical Education, 3 units
PSYC 3120 Human Development Research Laboratory, 1 unit
PSYC 3700 Introduction to Learning and Motivation, 3 units
PSYC 4110 Behavior Genetics, 3 units
PSYC 4130 Psychological Disorders of Children, 3 units
PSYC 4150 Learning Disabilities, 3 units
SOCL 3150 The Family, 3 units
SOCL 3160 Sociology of Youth, 3 units

## State of California Children's Center Permits

California requires that individuals who serve as Teachers and Administrators of funded child development programs hold permits issued by the California Commission for Teacher Credentialing. See your academic adviser for course work that is likely to meet these requirements. Applications for the Child Center Permit may be picked up in the University Credentials office.

## Course Descriptions

## Upper Division

CDEV 3010 Child Abuse and Neglect (1 unit). (Same as PSYC 3010) Child maltreatment will be examined from a variety of perspectives, including those of victims, perpetrators, mental health professionals, child care workers and teachers, the legal system and public policy makers. Issues addressed will include definitions, causes, consequences, assessment, reporting, treatment and prevention of child abuse and neglect. Course content will cover all areas required by the State of California under AB 141.

CDEV 3020 Child Guidance and Management (3 units). (Formerly PSYC 3020) Students will study theoretical models of guidance and management with implications for academic, home, and clinical settings. Direct application with a laboratory setting. Prerequisites: PSYC 2010, CDEV or PSYC 3010, and CDEV or PSYC 3140. (Fall)

CDEV 3140 Human Development I: Childhood (3 units). (Same as PSYC 3140) Basic principles of human development as they apply to infancy and childhood. Discussion of current developmental research and applications. Prerequisite: PSYC 2010 or consent of instructor. (Fall, Spring)

CDEV 3170 Early Cognitive Development (3 units). (Formerly PSYC 3170) Theoretical, empirical, and applied issues in intellectual development, including development of perception, concepts, reasoning, communication, and memory. Various theorists such as Piaget, Montessori, and T.G.R. Bower will be discussed in different semesters. Prerequisite: CDEV or PSYC 3140 or consent of instructor.(Fall, Spring)

CDEV 3180 Early Social and Emotional Development (3 units). (Formerly PSYC 3180) Examination of the child's interpersonal, emotional, and personality development, emphasizing theoretical issues and research. Specific topics addressed will include attachment, aggression and pro-social behavior, parent-childrelationships, and gender differences. Prerequisite: CDEV or PSYC 3140 or consent of instructor. (Fall, Spring)

CDEV 3181 Early Childhood Development (3 units). (Formerly PSYC 3181) Laboratory analysis of children's social, cognitive, physical andemotional development and individual differences. Participation in the Child Development Center's programs; implications for developmentally-appropriate programs and techniques. Prerequisites: CDEV or PSYC 3010, CDEV or PSYC 3140 and concurrent or previous enrollment in CDEV 3170 and 3180.

CDEV 3240 Human Development II: Adolescence (3 units). (Same as PSYC 3240) Examines basic developmental issues in adolescent development, including physical and psychological effects of puberty; cognitive, social, and personality development; and psycho-social problems. Discussion of current developmental research and application. Prerequisites: PSYC 2010 or consent of instructor.

CDEV 3340 Human Development III: Adulthood and Aging (3 units). (Same as PSYC 3340) Basic principles of adult development and aging from maturity to death are examined. Biological, psychological, and sociological aspects of development and aging are considered through discussion of relevant theory, research, and application. Prerequisites: PSYC 2010 or consent of instructor.

CDEV 3440 Developmental Assessment (3 units). (Formerly PSYC 3440) Introduction to basic issues and considerations in developmental assessment. Rationale for assessing perceptual-motor and cognitive abilities, emergent language abilities, and personal social maturity in children. Application of assessment procedures. Prerequisites: CDEV or PSYC 3010, CDEV or PSYC 3140, and concurrent or previous enrollment in CDEV 3170 and 3180. (Spring)

CDEV 4000 Child Development Research Methods ( 3 units). This course will cover the strategies and techniques involved in research with children. Issues of focus will include ethical concerns, methods for data acquisition, and designs for assessing developmental change. Prerequisite: PSYC 2020 or consent of instructor.

CDEV 4180 Developmental Programs for Preschool Children (3 units). (Formerly PSYC 4180) An application of developmental theory to planning programs for individuals and groups of preschool-aged children. Includes: observing and recording child(ren)'s behavior, assessment of developmental needs, planning and implementing programs based upon assessment, evaluation of child(ren)'s development, and evaluating success of program. Prerequisites: CDEV or PSYC 3010, CDEV 3170, 3180, and one of the following application courses: CDEV 3020, 3181 or 3440. Concurrent enrollment in CDEV 4190 required. (Spring)

CDEV 4190 Developmental Programs Laboratory (1 unit). (Formerly PSYC 4190) Laboratory work in the Child Development Center. Prerequisites: PSYC 3010, 3181; concurrent enrollment in PSYC 4180 required. (Spring)

CDEV 4940 Field Work in Child Development (1-2 units). Work performed in schools, agencies, and institutions under joint supervision of the department and agency where assigned. May be repeated for credit. See catalog heading "Requirements for the Bachelor of Arts Degree in Child Development" for details regarding application to the major. Prerequisite: Consent of instructor. (Fall, Spring)

CDEV 4945 Internship at Child Development Center as Instructional Aide (1 unit). (Formerly PSYC 4945) Internship in program preparation. Participation at the Child Development Center as teacher's aide; assistance with curriculum planning, presentation and evaluation, under direct supervision of CDC director. May be repeated for credit. See catalog heading "Requirements for the Bachelor of Arts Degree in Child Development" for details regarding application to the major. Meets partial satisfaction of the requirements for administration for the Department of Social Services Community Child Care Division. Prerequisite: Consent of instructor. (Fall, Spring)

CDEV 4946 Internship at Child Development Center as Head Teacher (2 units). (Formerly PSYC 4946) Internship in program preparation for teaching. Participation at the Child Development Center as head teacher under direct supervision of CDC director.

May be repeated for credit. See catalog headings "Requirements for the Bachelor of Arts Degree in Child Development" or "Requirements for the Bachelor of Arts Degree, Psychology" for details regarding application to the respective major. Meets partial satisfaction of the requirements for administration for the Department of Social Services Community Child Care Division. Prerequisite: Consent of instructor. (Fall, Spring)

CDEV 4947 Internship at Child Development Center as Assistant Administrator (2 units). (Formerly PSYC 4947) Internship at the Child Development Center as Assistant Administrator under direct supervision of CDC director. May be repeated for credit. See catalog heading "Requirements for the Bachelor of Arts Degree in Child Development" for details regarding application to the respective major. Meets partial satisfaction of the requirements for administration for the Department of Social Services Community Child Care Division. Prerequisite: Consent of instructor (Fall, Spring)

CDEV 4948 Child Development Senior Internship (2 units). (Formerly PSYC 4948) Students will intern in a University or community agency based on their chosen track in the Child Development major. Must be taken concurrently with CDEV 4965. Prerequisites: CDEV or PSYC 3010, CDEV 3170, 3180 and senior standing. (Spring)

CDEV 4950 Selected Topics in Child Development (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a specific area in child development. Topics will vary depending on instructor. Different topics may be taken for a total of 6 units. Prerequisite: Prior consent of instructor.

CDEV 4960 Organization and Administration of Early Childhood Education Programs (4 units). (Formerly PSYC 4960) An overview of administration in early childhood éducation programs. Topics to be covered include program organization ' and curriculum development, staffing, budget, legal and parent-relation responsibilities of program directors. Prerequisite: PSYC 4180 and 4190. (Winter)
CDEV 4965 Child Development Senior Seminar (1 unit). (Formerly PSYC 4965) Capstone seminar for Child Development majors participating in senior internships. Includes discussion of career and professional issues, diverse applications of child development, and discussion and evaluation of internship experiences. Co-requisite: CDEV 4948; prerequisites: CDEV or PSYC 3010, CDEV 3170, 3180, and senior standing. (Spring)

CDEV 4980 Individual Study (1-4 units). For students capable of independent work and desirous of specialized study. May be repeated for a total of 6 units. Prerequisite: Prior consent of instructor. (Fall, Spring)

CDEV 4990 Senior Honors Thesis (3 units). The Senior Honors Thesis is an independent research project in child development and is limited to qualified majors in their senior year. It is supervised by a committee of at least two faculty and is expected to be of publishable quality. Can be taken for a maximum of 6 units total, 3 of which may count toward the major. Prerequisites: Major in child development, senior standing, invitation of instructor. (Fall, Spring)


# The Child Development Center 

Office: Educational Services Building, (209)667-3036<br>Director:<br>Rita Asher<br>Assistant Director: Diane Williams

The California State University, Stanislaus Child Development Center (CDC) is an instructional facility established to teach university students about child development-theory and applications, program design, and research. About 200 students from varied disciplines such as: music, education, communication studies, psychology, and child development, participate at the CDC each semester. Through participation in successive laboratory courses, students acquire the skills necessary for observing children and recording their behaviors, implementing planned activities, planning and implementing their own activities, and for implementing original research projects.

The CDC provides 14 internships to CSU Stanislaus students. Interns receive a salary for a portion of their responsibilities as well as units and a letter grade each semester. CSU Stanislaus has the only child development laboratory in the CSU that employs students as its head teachers, instructional aides and administrators. As students complete their course work and gain experience, they are encouraged to compete for increasingly challenging positions. Those who continue to participate at the CDC gain experience teaching young children,-supervising college students, and sharing administrative duties. All Child Development Center staff positions are coordinated with university courses to provide excellent supervised practicum experiences. Laboratory and salaried experiences at the Child Development Center are applicable for California Instructional and Supervisory Permits and meet requirements for administrative training for the California Department of Social Services Community Child Care Division. For additional information regarding the internship program, contact Dr. Rita Asher, Director.

The Child Development Center serves children between the ages of 2 months to 5 years within six licensed child care programs. Children are admitted to the CDC from a waiting list on a first-come first-served basis with enrollment priority given to continuing children in order to maintain the continuity necessary for instruction and research. Priority for enrollment vacancies is given to dependents of CSU Stanislaus students, faculty, and staff during June and July. For additional information regarding the children's programs at the Child Development Center, contact Mrs. Diane Williams, Assistant Director.


## Cognitive Studies

Department Office: Computer Science Bldg 102a, (209) 667-3185

Coordinator's Office: Computer Science Bldg 104, (209) 667-3722 or 3386 cogs@csustan.csustan.edu
E-mail:
FAX:
(209) 667-3333

Coordinator: Lin S. Myers (Psychology)
Core Faculty: Martin L. Camarata (Art), Thomas J. Carter (Computer Science), Lin S. Myers (Psychology), John J. Sarraille (Computer Science), James A. Tuedio (Philosophy), James A. Wakefield (Psychology).
Adjunct Faculty: Roberta T. Anderson (Communications Studies), Annhenrie Campbell (Accounting), Juan M. Flores (Teacher Education), James M. Goodwin (Director of Multimedia Software Laboratory, Computer Science, University of Aizu, Japan), David H. Lindsay (Accounting), Richard Savini (Art), George E. Settera, Jr. (English), Nancy J. Taniguchi (History), Joan A. Wink (Teacher Education).

The Cognitive Studies degree program offers an integrative approach to the study of cognitive processing. The program draws from the fields of Neuroscience, Computer Science, Linguistics, Art, Philosophy, Psychology, Biology, and Physics. Cognitive Studies emphasizes strategies for investigating how real and artificial brains process images and language, form concepts, and solve problems. Though several discipline based courses provide important background knowledge and serve as points of departure for cognitive explorations, the degree program features integrative courses at the introductory and advanced levels. Central themes in the courses include the relationship between consciousness and cognitive processes, the emergence of adaptive pattern-recognition schemes, non-linear methods for modeling complex systems, the use of language, symbols, and images for representing and manipulating knowledge, memory and decision processes, the relation of thought to action, and the latest advances in machine intelligence.

Adequate investigation of these phenomena requires a synthesis of methods and considerable exposure to important new technological capacities. Thus, in addition to the broad-based conceptual analysis of intelligent systems, students will be trained in a diversity of electronic media, including telecommunications networks, artificial sensory and motor systems, data base management, and problems associated with human/machine interfaces. Students completing this program should expect to gain an appreciation for the general way in which empirical evidence, simulation, and conceptual analysis work together to enrich our understanding of the cognitive processes underlying intelligence and the ability to solve complex problems. The graduate in Cognitive Studies will have preparation for work in fields utilizing the modern information technologies, or for advanced studies in cognitive science and graduate programs concerned with cognitive development and performance.

## Bachelor of Arts, Cognitive Studies

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 15 units):
a. Cognitive Studies ( 6 units):

COGS 2100 Introduction of Cognitive Studies, 3 units
COGS 2300 Cognitive Simulations, 3 units
b. Background Issues ( 9 units):

BIOL 1010 Principles of Biology, 3 units
PHIL 2230 Modern Philosophy, 3 units
PSYC 2010 Introduction to Psychology, 3 units
3. Complete the major of 32 units, as approved by the major adviser.

## The Major ( 32 units)

| 1. Required Courses (17 units): |  |
| :--- | :--- |
| COGS 3100 | Communications Networks, 3 units |
| COGS 3150 | Nonlinear Systems and Chaos, 4 units |
| COGS 4960 | Seminar: Cognitive Science, 3 units, or |
| COGS 4990 | Senior Project, 3 units |
| PHIL 3500 | Philosophy of Mind, 4 units |
| PSYC 3100 | Introduction to Physiological Psychology, 3 units |

2. Electives ( 15 units minimum):
a. Cognitive Science (one course minimum):

COGS 3200 Human Factors, 3 units
COGS 4680 Neural Nets and Intelligent Machines, 4 units
COGS 4950 Selected Topics in Cognitive Studies, 1-5 units
CS 4450 Coding and Information Theory, 3 units
CS 4480 Artificial Intelligence, 3 units
PSYC 3102 Introduction to Physiological Psychology Laboratory, I unit
PSYC 3400 Perception, 3 units
PSYC 4520 Principles of Sensory Processes, 4 units
b. Consciousness and Creativity (one course minimum):

ART 3700 Electronic Art and Design, 3 units
ART 4220 Imagination, 3 units
COGS 4100 Philosophical Aspects of Cognitive Science, 3 units
COGS 4700 Intelligence, 3 units
PHIL 4150 Cognitive Phenomenology, 3 units
PSYC 3170 Early Cognitive Development, 3 units
PSYC 4400 Cognitive Processes, 3 units
PSYC 4800 Origins of Human Consciousness, 3 units
c. Language and Meaning (one course minimum):

ENGL 3750 Introduction to Linguistic Theory, 4 units
COGS 3300 Cognition and Verbal Behavior, 3 units
COGS 4200 Science, Technology, and Human Values, 3 units
CS 4410 Automata, Computability and Formal Languages, 3 units
PHIL 4260 Twentieth Century Philosophy, 3 units
PHIL 4300 Philosophy of Language, 3 units

## Degree Minor

## Requirements (18 units)

The Cognitive Studies Minor is designed to accommodate students who desire a breadth of exposure to exciting empirical and theoretical developments in the study of cognitive processing. 1. Required Courses (6 units):

COGS 2100 Introduction to Cognitive Studies, 3 units
COGS 2300 Cognitive Simulations, 3 units
2. Upper Division Electives ( 12 units minimum):
a. Cognitive Science (one course minimum):

COGS 3150 Nonlinear Systems and Chaos, 4 units
COGS 3200 Human Factors, 3 units
COGS 4680 Neural Nets and Intelligent Machines, 4 units
COGS 4950 Selected Topics in Cognitive Studies, 1-5 units
CS 4450 Coding and Information Theory, 3 units
CS 4480 Artificial Intelligence, 3 units
PSYC 3100 Introduction to Physiological Psychology, 3 units
PSYC 3102 Introduction to Physiological Psychology Laboratory, 1 unit
PSYC 3400 Perception, 3 units
b. Consciousness and Creativity (one course minimum):

ART 3700 Electronic Art and Design, 3 units
ART 4220 Imagination, 3 units
COGS 4100 Philosophical Aspects of Cognitive Science, 3 units
COGS 4700 Intelligence, 3 units
PHIL 4150 - Cognitive Phenomenology, 3 units
PSYC 3170 Early Cognitive Development, 3 units
PSYC 4400 Cognitive Processes, 3 units
PSYC 4800 Origins of Human Consciousness, 3 units
c. Language and Meaning (one course minimum):

ENGL 3750 Introduction to Linguistics Theory, 3 units
COGS 3100 Communication Networks, 3 units
COGS 3300 Cognition and Verbal Behavior, 3 units
CS 4410 Automata, Computability and Formal Languages, 3 units
PHIL 3500 Philosophy of Mind, 3 units
PHIL 4300 Philosophy of Language, 3 units
PHIL 4260 Twentieth Century Philosophy, 3 units

## Course Descriptions Lower Division

COGS 2100 Introduction to Cognitive Studies (3 units). Introduction to issues and methods relevant to the study of natural and artificial cognitive processes. Includes a survey of key developments fueling the Cognitive Revolution along with the major models influencing research on artificial intelligence, nonlinear dynamics (chaos theory), the brain/mind relationship, and their applications to human behavior and information processing.

COGS 2300 Cognitive Simulations ( 3 units). Introduction to empirical modeling of natural and artificial cognitive processing, utilizing simulation of such systems as Turing machines, neural networks, nonlinear systems and parallel processing modes of problem solving. Analysis of the theories and assumptions of artificial intelligence research. Applications of new computer technologies designed to replicate natural cognitive processing techniques.
COGS 3100 Communication Networks ( 3 units). The emergence of telecommunications networks is creating new environments for human interactions that are rapidly altering occupational and social dynamics. This course introduces students to the diversity of network technologies and provides them with sufficient hands-on skills to work in this field. Topics include resource sharing, resource access, and communication. Prerequisite: COGS 2100, 2300, Math 1500 or consent of instructor.

COGS 3150 Nonlinear Systems and Chaos (4 units). This course deals with the quantitative methods needed for work with nonlinear systems from many fields. Together with its laboratory, the course provides experience with phase space maps, Poincare sections, basins of attraction, and strange attractors, and with fractals and fractal dimensionality. It emphasizes systems best described by discrete mathematics. Prerequisite: COGS 2300 or consent of instructor.

COGS 3200 Human Factors ( 3 units). The human/machine interface provides the domain for human factors research and applications. The interaction between individual cognitive abilities and machines is a critical concern in the design and development of new technologies. This course provides the basic skills needed to optimize human performance. Prerequisite: COGS 2100 and 2300.

COGS 3300 Cognition and Verbal Behavior (3 units). Cognitive factors affecting the development and complexity of verbal behaviors are examined within the context of brain function and language environments. Prerequisite: COGS 2100 and 2300.

COGS 4100 Philosophical Aspects of Cognitive Science (3 units). Intensive examination of the conceptual foundations of Cognitive Science, with an emphasis on the philosophical aspects of current theoretical issues. Analysis will focus on behaviorism and functionalism as models for understanding human cognition. Constructive criticism of the representational model of mind; discussion of the significance of receht developments in neuroscience, and of the connectionist movement in artificial intelligence. Prerequisite: COGS 2100 or consent of instructor.

COGS 4200 Colloquium on Science, Technology, and Human Values (3 units). This seminar explores the impact of science and technology on human behavior and values. Students will study the origins and principles of human valuation, the crosscultural and individual differences in human values, how science and technology have influenced and altered human values in the past, and how current developments pose new challenges to humanity. Prerequisite: Consent of instructor.

COGS 4680 Neural Nets and Intelligent Machines (4 units). This course with its associated laboratory deals with the current designs of cognitive machines that exploit the kind of adaptive parallel processing and self-organizing networks used by brains for learning, memory, visual imaging, and pattern recognition. The laboratory will emphasize the exploration of cognitive models using computer simulation. Prerequisite: COGS 2300 or consent of instructor.

COGS 4700 Intelligence ( 3 units). The origins and assessment of intelligence and its role in cognitive functions are examined within the psychometric and neuroscientific frameworks. Prerequisite: COGS 2100 and 2300.

COGS 4950 Selected Topics in Cognitive Studies (1-5 units). Development of a selected branch of cognitive studies. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

COGS 4960 Seminar in Cognitive Science ( 3 units). Seminar will focus on current developments in the neurosciences and cognitive psychology. Prerequisite: Consent of instructor.

COGS 4980 Individual Study (1-4 units). For students capable of independent work who need advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and coordinator of the Cognitive Studies program.


## Communication Studies

Office: Classroom Building 108, (209) 667-3371<br>Chair: Fred P. Hilpert, Jr.,<br>Faculty: Richard Alter, Roberta T. Anderson, Fred P. Hilpert, Jr., Marjorie Jaasma, Sheryl Lindsley, John R. Sumser, Jerry L. Weedon, Thomas J. Young<br>Emeritus Faculty: Max C. Norton

The Department of Communication Studies offers the degrees of Bachelor of Arts, Organizational Communication, and degree minors in journalism and speech communication.

The University offers the degree Bachelor of Arts, Social Sciences, with an interdepartmental major in Speech and any other two disciplines within the social sciences. (For further information, see the "Social Sciences" section of this catalog.)

The degree Bachelor of Arts, Liberal Studies, is also offered with Speech as an area of concentration. (For further information, see the "Liberal Studies" section of this catalog.)

## Bachelor of Arts, Organizational Communication

Overall objectives of the program are to provide the student with opportunities to gain:

- An understanding of the theories and processes of human communication as a necessary part of one's education in the liberal arts and sciences.
- A requisite background in the diverse theories and methodologies of the discipline as a preparation for graduate study in the various fields of communication.
- A specialized knowledge of and proficiency in the communicative arts and sciences for entrance into such communication careers as public relations, newspaper reporting, radio and television broadcasting, media sales and promotions, and communication research.


## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 6 units):
a. COMM 2011 Approaches to Human Communication, 3 units, or COMM 2200 Introduction to Mass Media, 3 units,
b. COMM 2000 Public Speaking, 3 units, or

COMM 2110 Group Discussion Processes, 3 units, or COMM 2400 Oral Interpretation, 3 units
3. Complete one of the following courses in a supporting field (3 units):
a. ANTH 2060 Introduction to Cultural Anthropology, 3 units, or ECON 2500 Principles of Economics I, 3 units, or ECON 2510 Principles of Economics II, 3 units, or
$\begin{array}{ll}\text { PSYC } 2010 & \text { Introduction to Psychology, } 3 \text { units, or } \\ \text { SOCL } 1010 & \text { Introduction to Sociology, } 3 \text { units }\end{array}$
b. Strongly recommended:

MATH 1600 Statistics, 4 units
4. Complete the major of not less than 31 upper-division units, as approved by the major adviser; majors must take all courses counted toward the major for a letter grade if the letter grade option is available.
5. Students must achieve a " $\mathbf{C}-$ " grade or better in all prerequisites to the major.
6. Students must achieve a " $\mathrm{C}-$ " grade or better in all courses that count toward fulfilling the requirements for the major.
7. Completion of a minor is not required. However, any student seeking a minor may not count course units in both the major and minor (double-counting). Program approval is required by both the major and minor adviser. Upper-division General Education courses may be counted as units in a minor.

## The Major ( 31 units)

1. Complete the following required courses ( 19 units):

COMM 3100 Advanced Interpersonal Communication, 3 units
COMM 3140 Persuasive Messages, 3 units
COMM 3900 Communication Research Methods, 4 units
COMM 4000 Communication Theory, 3 units
COMM 4110 Organizational Communication, 3 units
COMM 4160 Intercultural Communication, 3 units
2. Select one course from the following ( 3 units):

COMM 3120 Management Communication, 3.units, or
COMM 4170 Professional Interviewing, 3 units, or
JOUR 3040 History of Journalism, 3 units
3. Select one course from the following ( 3 units)

COMM 4060 Family Communication, 3 units, or
COMM 4100 Group Communication, 3 units, or
COMM 4120 Advanced Persuasion and Social Influence, 3 units, or PSYC 4820 Group Dynamics and Interpersonal Behavior, 3 units
4. Select one course from the following ( $3-4$ units):

MGT 3310 Management Theory and Practice, 3 units, or
MGT 4000 Organization and Environment, 3 units, or
SOCL 4800 Formal Organizations in Modern Society, 3 units, or
PSCI 4300 Organization Theory, 4 units
5. Select one course from the following ( 3 units):

COMM 4200 Mass Communication Perspectives, 3 units, or COMM 4210 Public Relations, 3 units

## Minor in Speech Communication

## Requirements (18 units)

1. Complete the required lower-division course COMM 2011 Approaches to Human Communications, 3 units, or COMM 2200 Introduction to Mass Media, 3 units
2. Complete one of the following ( 3 units):

COMM 2000 Public Speaking, 3 units, or

COMM 2110 Group Discussion Processes, 3 units, or COMM 2400 Oral Interpretation, 3 units
3. Complete one of the following ( 3 units):

COMM 3010 Language and Speech Development, 3 units, or
COMM 3100 Advanced Interpersonal Communication, 3 units, or
COMM 4160 Intercultural Communication, 3 units
4. Complete 9 units of upper-division courses approved by the minor adviser.

## International Program

The Department of Communication Studies supports the concept of international education and encourages students to investigate opportunities for overseas study. Certain courses offered at CSU International Programs study centers abroad are equivalent to courses in the Department of Communication Studies and may be used to fulfill requirements for degree options offered by the Department and/or certain general education requirements. Students should consult the International Programs Bulletin (available at the circulation desk of the Library), a departmental adviser and/ or the campus International Programs Adviser for more information.

## Liberal Studies Concentration in Communication Studies

## Requirements (21 units)

1. Complete the following required courses (21 units):
a. COMM 2011 Approaches to Human Communication, 3 units
b. COMM 2000 . Public Speaking, 3 units, or

COMM 2110 Group Discussion Processes, 3 units, or
COMM 2400 Oral Interpretation, 3 units
c. Upper-division courses on advisement, 15 units

## Teaching Credentials

An approved single subject waiver is available to speech majors who wish to declare English as their subject matter teaching area, with applicable courses on advisement. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed in obtaining a single subject credential.

## Communication Studies Sub-Areas

Theory and Methods
COMM 2011 Approaches to Human Communication, 3 units
COMM 2200 Introduction to Mass Media, 3 units
COMM 3010 Language and Speech Development, 3 units
COMM 3140 Persuasive Messages, 3 units
COMM 3900 Communication Research Methods, 4 units
COMM 4000 Communication Theory, 3 units
COMM 4030 Communication Research Analysis, 4 units
COMM 4140 Rhetorical Theory, 3 units
COMM 4160 Intercultural Communication, 3 units
COMM 4200 Mass Communication Perspectives, 3 units

Processes and Contexts<br>COMM 3100 Advanced Interpersonal Communication, 3 units<br>COMM 3120 Management Communication, 3 units<br>COMM 4050 New Rules for Social Relationships, 3 units<br>COMM 4060 Family Communication, 3 units<br>COMM 4100 Group Communication, 3 units<br>COMM 4110 Organizational Communication, 3 units<br>COMM 4120 Advanced Persuasion and Social Influence, 3 units<br>COMM 4130 Communication and Aging, 3 units<br>COMM 4150 Nonverbal Communication, 3 units<br>COMM 4170 Professional Interviewing, 3 units<br>COMM 4180 Health Communication, 3 units<br>COMM 4210 Public Relations, 3 units<br>COMM 4950 Selected Topics in Speech, 1-4 units<br>COMM 4980 Individual Study, 1-4 units<br>Applications and Communication Competence<br>COMM 2000 Public Speaking, 3 units<br>COMM 2110 Group Discussion Processes, 3 units<br>COMM 2400 Oral Interpretation, 3 units<br>COMM 2911 Communication Projects, 2 units<br>COMM 3400 Oral Interpretation of Children's Literature, 3 units<br>COMM 3410 Advanced Oral Interpretation,<br>COMM 3911 Communication Projects, 2 units<br>COMM 3930 Community Forensics Practicum, 1-2 units<br>COMM 3960 Communication Colloquium, 1-2 units<br>COMM 4940 Organizational Communication Internship, 2-4 units

## Course Des̈criptions

## Lower Division

COMM 2000 Public Speaking (3 units). Oral communication theory and practice in terms of the process, speaker, message, and audience. Emphasis on ethics, reasoning, evidence, listening, and criticism. Classroom activities include preparation, presentation; and criticism of speeches. (CAN SPCH 4) (Fall, Spring)

COMM 2011 Approaches to Human Communication (3 units). Introduction to the field of human communication as developed in contemporary theory and research. Recurrent variables in verbal and non-verbal interaction are traced through the intrapersonal, interpersonal, and multipersonal systems. (Fall)

COMM 2110 Group Discussion Process ( 3 units). The development of basic skills in small group communication. Study of and practice in discussion methodology, types of discussion groups, information gathering, problem solving, decision making, and leadership roles. (Fall, Winter, Spring)

COMM 2200 Introduction to Mass Media (3 units). This course will provide an overview of historical, theoretical, economic, and societal perspectives on the mass media. Topics of special interest will include violence, pornography, advertising, learning, and politics as related to the media. (CAN JOUR 4) (Spring)

162 / Communication Studies
COMM 2400 Oral Interpretation (3 units). Fundamentals of theory; techniques and practices in communicating from the printed page. (Fall)

COMM 2911 Communication Projects ( 2 units). Project course for involvement of the student in a variety of speech and/or instructional related activities. Options include such projects as campus speech activities, broadcasting, and participation in community projects. May be repeated for a total of 8 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

COMM 2950 Selected Topics in Speech (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of speech communication. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

COMM 3000 Phonetics ( 3 units). Analysis of general American speech with emphasis on synthesis in connected discourse. Practice and drill with international phonetic alphabet. Application of science of phonetics to dialects and speech correction. (Fall)

COMM 3010 Language and Speech Development (3 units). Development of normal speech and language, including the stages of development, the roles of learning and experience, phonological, morphological, grammatical, semantic, pragmatic, and effective aspects; cultural and dialectical factors. Prerequisites: Junior standing or consent of instructor. (Fall, Spring)

COMM 3100 Advanced Interpersonal Communication (3 units). Structure and communication processes in two-person relationships. A review of the history, current theories and research findings in such areas as interpersonal attraction, mate selection, compatibility, power, love, sex roles, conflict, and divorce. Alternative forms of close relationships are analyzed, including friendship, cohabitation, and homosexual relations. (Same as WMST 3100) Prerequisites: Junior standing or consent of instructor. (Fall, Winter, Spring)

COMM 3120 Management Communication (3 units). The study and practice of communication principles, techniques, and forms required of managers in the organizational context. Emphasis upon message preparation and exchange in interviews, technical reports, panel-conferences, and public presentations. Prerequisite: Junior standing or consent of instructor. (Fall, Spring)

COMM 3140 Persuasive Messages (3 units). Examination of the logical and psychological principles used in oral and written persuasive messages. Students will analyze the persuasive process and develop effective rhetorical messages. Ethical responsibility of the communicators will be considered. Satisfies upper division writing proficiency requirement. Prerequisite: Organizational Communication majors only, junior standing, WPST grade report of "pass," or consent of instructor. (Fall, Spring)

COMM 3400 Oral Interpretation of Children's Literature (3 units). Application of principles of oral interpretation to children's literature. Types of children's literature with emphasis on criteria for selection of literature for oral interpretation, story telling, as well as reading. Prerequisite: COMM 2000, or COMM 2110, or COMM 2400 , or consent of instructor. (Spring)

COMM 3610 Introduction to Communication Disorders (3 units). Overview of speech pathology and audiology including basis of normal language development; types of communication disorders, historical review of the field of communication disorders, professional training requirements, program administration in clinical private practice, hospital and school settings.

COMM 3900 Communication Research Methods ( 4 units). Designed to acquaint students with forms of research in speech communication. Samples from the research literature will be studied from the points of view of the research problems posed, the designs employed, and the techniques required. Prerequisite: COMM 2011 or 2200 and junior standing or consent of instructor. (Fall, Spring)

COMM 3911 Communication Projects ( 2 units). Project course for involvement in a variety of communication and/or instructional related activities. Options include such projects as campus speech activities, broadcasting, and participation in community projects. May be repeated for a total of 8 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

COMM 3930 Community Forensics Practicum (2 units). Provides an opportunity to prepare for and participate in community forensics competition. Laboratory preparation offered for inexperienced participants prior to public presentation. Includes debate and individual speaking events. May be repeated for a total of 8 units. Prerequisites: ENGL 2000 or PHIL 2000 or consent of instructor. (Fall, Spring)

COMM 3960 Communication Colloquium (1-2 units). The colloquium will address controversial areas of communication theory and practice, with particular attention to the potential impact of communication on culture, society, and the individual. Format will vary depending on the topic; however, guest lecturers will present contending viewpoints. May be repeated for a maximum of 4 units. (Fall, Spring)

COMM 4000 Communication Theory ( 3 units). Communication models; natural and formal language systems; contributions of theories of information, semantics, psycho-linguistics, cybernetics, and general systems to the study of communication. Prerequisites: COMM 3140, COMM 3900, and junior standing, or consent of instructor. (Fall, Spring)

COMM 4030 Communication Research Analysis (4 units). Explores the formulation of research designs used in communication research techniques. Focuses on the nature of measurement, data analysis, and interpretation of findings. Includes the use of computer programs used in the calculation and reporting of results. Will involve understanding and performing basic research. Prerequisite: COMM 3900 or SOCL 3030. (Fall)

COMM 4050 New Rules for Social Relationships ( 3 units). This course analyzes in detail a variety of recently emerging relationship forms and the underlying values they express. New forms such as cohabitation, intimate friendships, homosocial and homosexual relationships, the single parent family, dual career marriage, childless
marriage, and the blended family are examined to reveal important themes in contemporary society. Among these are a belief in autonomy, self-fulfillment, equalitarianism, rolelessness, impermanence, exchange orientation, emotional distance, and the primacy of career over parenting. Prerequisites: Junior standing or consent of instructor. (Winter)

COMM 4060 Family Communication ( 3 units). Analyses of the family as a communication system, including the role of communication in family decisionmaking, expressing intimacy, using power, managing conflicts, achieving interdependence and socializing children. Prerequisites: COMM 3140 and COMM 3900 , or consent of instructor. (Spring)

COMM 4100 Group Communication (3 units). Studies in small group theory and research. Participation in informal task groups devoted to such concepts as cooperation and competition, power, roles, status, and leadership as these relate to the variables of communication and productivity. Prerequisites: COMM 3140, COMM 3900, or consent of instructor. (Fall)

COMM 4110 Organizational Communication (3 units). Theory, problems, and practices of communication in organizations: business, industry, and public agencies. Examination of the factors involved in message transmission among various levels of management and operations, including the functioning of organizations through communication networks, and communicative contacts with other organizations and the public. Prerequisites: COMM 3140, COMM 3900, Organizational Theory course option, or consent of instructor. (Fall, Spring)

COMM 4120 Advanced Persuasion and Social Influence (3 units). Principles of message construction derived from studies of motivation. Context, receiver, and media factors will be related to the development of message strategies, such as sidedness, the aspects of order, types of appeals, evocative language, and inoculation. Prerequisites: COMM 3140 and COMM 3900, or consent of instructor. (Fall, Spring)

COMM4130 Communication and Aging ( 3 units). This course provides a framework for better understanding the process of cross-generational communication and the improvement of communication competencies for interaction with older persons. Covers such topics as: Interpersonal communication dispositions of the long living, sensory barriers to effective communication, communication perspectives in social psychological theories of aging, and the influence of context. Prerequisite: Junior standing or consent of instructor. (Winter)

COMM 4140 Rhetorical Theory ( 3 units). Rhetorical theory from classical to modern times. Influence of Aristotelian principles on development of rhetorical thought. Significant movements in development of rhetoric in France, Great Britain, and United States. Prerequisite: Junior standing or consent of instructor. (Winter)

COMM 4150 Nonverbal Communication (3 units). Relationships of nonverbal communication with establishing, maintaining, and developing interpersonal interaction. Relationships between verbal and nonverbal components of communication. Recent trends that contribute to theories of nonverbal communication. Prerequisites: Junior standing or consent of instructor. (Spring)

COMM 4160 Intercultural Communication ( 3 units). This course examines intercultural communication on the interpersonal level. In particular, it looks at the ways in which cultural differences can lead to misunderstandings. As such, the cultural assumptions brought to the interpersonal communication encounter will be explored. Through such inquiry, insights will be obtained about communicating competently with persons of other cultures. Prerequisite: Junior standing or consent of instructor. (Fall, Spring)

COMM 4170 Professional Interviewing ( 3 units). Considers interviewing from a communication process perspective. Provides understanding and experience in developing skills and techniques applicable in various interview contexts: selection, appraisal, exit and research. Covers pre-interviewing planning, interview techniques, current EEO laws and standards, and post-interview processes. Useful for students in Business Administration, Education, Social Sciences, and Communication Studies. Prerequisite: Junior standing or consent of instructor. (Fall, Spring)

COMM 4180 Health Commiunication ( 3 units). This course provides a framework for better understanding the processes and theories of Health Care Communication, and the improvement of communication competencies for interaction between Health Care professionals and the public they serve. Covers interpersonal, group, and organizational contexts. Also, examines intercultural and ethical elements of Health Care Communication. Prerequisites: COMM 3140 and 3900, or consent of instructor. (Winter)

COMM 4200 Mass Communication Perspectives ( 3 units). This course will examine the development of mass communication systems, with special emphasis on the role of broadcast media in contemporary societies. Mass media will be considered from several alternative perspectives useful in analysis, criticism, and practice. Particular attention will be given to interactions between technological systems, societal structure, and human communication processes. Prerequisites: COMM 3140 and COMM 3900, or consent of instructor. (Fall)

COMM 4210 Public Relations (3 units). A perspective on public relations as integrated into overall workings of public and private organizational strategy and tactics. Key processes required in practice of public relations, and standards required for professionalism. Prerequisite: COMM 3140 and COMM 3900, or consent of instructor. (Spring)

COMM 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and department Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator.

COMM 4940 Organizational Communication Internship (2-4 units). This course is designed for students in Organizational Communication who want to apply, integrate, and explore their educational experience as an intern in a public or private organization. May be repeated for credit. Prerequisite: Completion of 20 units in the Organizational Communication concentration. (Fall, Spring)

166/Communication Studies
COMM 4950 Selected Topics in Speech Communication (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of human communication. Topics may vary each term, thus different topics may be taken for credit. Prerequisites: Upper-division standing and consent of instructor.

COMM 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

COMM 5980 Individual Study (1-4 units). Individual study for qualified postbaccalaureate students in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

COMM 5990 Thesis Research (3-6 units). Thesis research. May be repeated for a total of 6 units. Prerequisite: Consent of graduate adviser.


## Computer Science

Office: Computer Science Bldg 101, (209) 667-3185<br>Chair: Thomas J. Carter<br>Faculty: Thomas J. Carter, Robert S. Cunningham, Edward L.Lamie, John J. Sarraille, Raymond L. Zarling

The Department of Computer Science offers courses designed for quality undergraduate education to meet the needs of students majoring in computer science, as well as students in other fields with interests in differing aspects of the theory and practice of computing.

The department offers the degree Bachelor of Science. This program is accredited by the Computer Science Accreditation Commission (CSAC) of the Computing Sciences Accreditation Board (CSAB). The degree program is designed to prepare those completing it for careers in the computing profession as well as for advanced studies. The degree program presupposes seven semesters of college preparatory mathematics. In addition, courses in foreign languages and in logic would be useful.

The department also offers a minor in computer science.

## Bachelor of Science, Computer Science

## Requirements

1. Complete University requirements for a Bachelor of Arts or Bachelor of Science degree (51 units minimum).
2. Complete the prerequisites to the major. No more than 8 units of CR-graded course work may apply toward the prerequisites to the major.
3. Complete the major of not less than 37 upper-division units.
4. Complete one upper-division course in Chemistry or Physics/Physical Sciences (3-4 units).
5. Complete PHIL 4401 Professional Ethics, 3 units.

No upper-division course which applies to the major or to the electives may be taken on a CR-graded basis except for CS 4910 (Cooperative Education) and CS 4960 (Seminar in Computer Science). Prerequisites to the major are expected to be completed before upper-division computer science courses are taken. Completion of a minor is not required.

## Prerequisites to the Major

CS 1500
Computer Programming I, 3 units
CS 2500 Computer Programming II, 3 units
CS 2700 Assembly Language and Computer Architecture, 3 units
MATH 1410 Calculus I, 4 units
MATH 1420 Calculus II, 4 units
MATH 1620 Probability and Statistics, 4 units
MATH 2510 Linear Algebra and Applications, 4 units
' 168 / Computer Science
MATH 2300 Discrete Structures, 3 units
Either one of these sequences:
PHYS 2250, 2260 General Physics I, II with labs, 10 units, or CHEM T100, 1110 Principles of Chemistry I, II, 10 units
Recommended course: The course below may be recommended, depending on the student's professional goals:

CIS 2010 Cobol Programming and Information Systems, 3 units
The Major ( 37 units)

1. Complete the following required courses ( 16 units):

CS 3050 File Processing, 3 units
CS 3100 Data Structures and Algorithms, 3 units
CS 3740 Computer Organization, 3 units
CS 3750 Operating Systems I, $\mathbf{3}$ units
CS 4100 Programming Languages, 3 units
CS 4960 Seminar in Computer Science, 1 unit
2. Depth Requirement ( 9 units). Complete three of the following:

CS 4300 Compiler Theory, 3 units
CS 4410 Automata, Computability and Formal Languages, 3 units
CS 4440. Theory of Algorithms, 3 units
CS $4480 \quad$ Artificial Intelligence, 3 units
CS 4800 Software Engineering, 3 units
3. Select 12 units from the following courses. A course may not be used as an elective if it is used to satisfy the depth requirement; at least 9 units must be in computer science courses.

| CS 3000 | Communication Networks, 3 units |
| :--- | :--- |
| CS 3200 | Computer Simulation Techniques, 3 units |
| CS 3600 | Computer Graphics I, 3 units |
| CS 4250 | Database Management Systems, 3 units |
| CS 4300 | Compiler Theory, 3 units |
| CS 4410 | Automata, Computability and Formal Languages, 3 units |
| CS 4440 | Theory of Algorithms, 3 units |
| CS 4450 | Coding and Information Theory, 3 units |
| CS 4480 | Artificial Intelligence, 3 units |
| CS 4600 | Computer Graphics II, 3 units |
| CS 4750 | Operating Systems II, 3 units |
| CS 4800 | Software Engineering, 3 units |
| CS 4910 | Cooperative Education, 2-4 units |
| CIS 4770 | Systems Analysis and Design, 3 units |
| MATH 4510 | Modern Algebra with Applications I, 4 units |
| MATH 4350 | Numerical Analysis I, 4 units |
| MATH 4360 | Numerical Analysis II, 4 units |
| PHYS 4250 | Analog and Digital Electronics, 4 units |

## The Minor

Complete 24 units of computer science course work from the courses listed below to include a minimum of 9 upper-division units:

1. Complete the following lower-division classes:

CS 1500 Computer Programming I, 3 units
CS $2500 \quad$ Computer Programming II, 3 units
CS 2700 Assembly Language and Computer Architecture, 3 units

One of the following year sequence of courses ( $6-8$ units):
MATH 1410, 1420 Calculus I, II, 8 units
MATH 1910, 1920 Calculus with Applications I, II, 6 units
2. Select a minimum of 9 upper-division units as outlined below:

CS $3050 \quad$ File Processing, 3 units
CS 3100 Data Structures and Algorithms, 3 units
One upper-division CS course as approved by an adviser, 3 units

## Course Descriptions

Lower Division
CS 1000 Introduction to Computers ( 3 units). An introduction to the computer for the non-computer science major. Selected computer applications, beginning programming, review of hardware and software, social impact of computing, and the future of the computer. Use of microcomputers. (Fall, Spring)

CS 1200-1350 Programming Language Laboratory (1 unit). Intensive study of a programming language. Total credit earned in CS 1200-1350 may not exceed three units. Credit may not be earned in a particular lab if credit for that programming language has already been earned. CS 1200, Ada Lab; CS 1210, APL Lab; CS 1220, Basic Lab; CS 1230, C Lab; CS 1240, Cobol Lab; CS 1250, Forth Lab; CS 1260, Fortran Lab; CS 1270, Lisp Lab; CS 1280, Logo Lab; CS 1290, Modula 2 Lab; CS 1300, Pascal Lab; CS 1310, PL/I Lab; CS 1320, Prolog Lab; CS 1330, Snobol Lab. These courses are offered as dictated by interest and staffing. Prerequisite: Working knowledge of at least one programming language.

CS 1500 Computer Programming I (3 units). The usual entry course for computer science majors. Algorithm development and problem solving methods. Design and development of computer programs using a structured programming language such as Pascal. Prerequisite: Two years of high school algebra. (Fall, Spring)

CS 1700 Computer Programming for Scientific Applications (3 units). An introduction to the use of the computer in scientific applications, using an appropriate language such as Fortran or PL/I. The course will cover data analysis techniques, realtime techniques, use of subroutine libraries, and algorithms such as the fast Fourier transform. Prerequisites: CS 1500 and MATH 1410.

CS 2500 Computer Programming II (3 units). Continued development of discipline in program design, in style and expression, and in debugging and testing, especially for larger programs. Introduction to algorithmic analysis, string processing, recursion, internal search/sort methods, and simple data structures. Introduction to professional methodologies and ethics. Prerequisite: CS 1500. (Fall, Spring)
CS 2700 Assembly Language and Computer Architecture (3 units). Computer programming at the machine level. Machine language and basic machine architecture, addressing modes, subprogram linkage, program sectioning and overlays, I/O programming, macros, and interrupts. Prerequisite: CS 2500. (CAN CSCI 10) (Fall, Spring)

## Upper Division

CS 3000 Communication Networks ( 3 units). The emergence of telecommunications networks is creating new environments for human interactions that are rapidly altering occupational and social dynamics. This course introduces students to the diversity of network technologies and provides them with sufficient hands-on skills to work in this field. Topics include resource sharing, resource access, and communication; an overview of network history, services, topologies, and protocols; a discussion of local area networks, wide area networks, and internetworks; connec-tion-based and connection-less links, addressing, routing, and reliability. Additional topics may include study of existing networks; organizations committed to the support and fostering of networking; transmission media, hosts, bridges, routers, and gateways; performance analysis and monitoring; layered network design; security; standardization goals; TCP/IP and X.25; and practical advice on building a network. Prerequisite: COGS 2100, 2300, Math 1500 or consent of instructor.

CS 3050 File Processing (3 units). Study of the physical and logical characteristics of data stored on external storage devices. Data structures used to organize such information. Access methods and details of working with file systems. Prerequisite: CS 2500. (Fall, Spring)

CS 3100 Data Structures and Algorithms (3 units). Fundamental concepts and abstraction of data structures. The design and analysis of algorithms involving such data structures as arrays, stacks, queues, lists, trees, strings, graphs, and files. Techniques for estimating the time and memory requirements of computer programs. Several large programming assignments. Prerequisite: CS 2500. (Fall, Spring)

CS 3200 Computer Simulation Techniques (3 units). Introduction to simulation, planning computer simulation experiments, simulation models. Simulation methodology, design of experiments, analysis of data validation of models and results. Programming selected applications using simulation languages such as GPSS or simscript. Prerequisites: MATH 1600 or 1610 or 1620 ECON 3205, and CS 1500 or CIS 2010. (Spring)

CS 3600 Computer Graphics 1 ( 3 units). An introduction to computer graphics. Geometry and graphics primitives, graphics devices, 2D and 3D transformations, clipping, 3D modeling and viewing, curves and surfaces, hidden lines and surfaces, applications. Prerequisite: CS 3100; MATH 2510 is recommended. (Fall)

CS 3740 Computer Organization (3 units). Basic computer architecture including one-address machines, two-address machines, stack machines, addressing methods, memories, I/O multiprogramming, multiprocessing, and microprogramming. Prerequisite: CS 2700. (Fall, Spring)

CS 3750 Operating Systems I ( 3 units). An introduction to computer operating systems, including batch, multiprogramming, multiprocessing, and time sharing. Topics include sequential processes, concurrent process, memory management, segmentation, scheduling algorithms, security, and ethical issues relating to security and privacy. Prerequisites: CS 3100 and 3740 . (Fall)

CS 4000 Personal Computing (3 units). This course will give the student the knowledge and experience needed to use a personal computer effectively. A range of computers and software will be available; as much as possible, the student will be able to learn about systems which are directly usable in his or her area of study. Topics will inclutde discussions of computer hardware, the range of capabilities of the personal computer, how to evaluate a piece of software, and how software is written. Prerequisite: Upper-division standing. (Fall, Winter, Spring)

CS 4100 Programming Languages ( 3 units). Study of programming language concepts such as binding, data structures, string handling, control structures; as embodied in various programming languages. Satisfies upper division writing proficiency requirement. Prerequisite: CS 3100. (Spring)

CS. 4250 Database Management Systems ( 3 units). Data definition and manipulation of selected commercially available Database Management Systems. Hierarchic, network and relational data models. Implementation of a Database Management System. Prerequisites: CS 3050 and 3100. (Spring)

CS 4300 Compiler Theory ( 3 units). Lexical, syntactic, and semantic analyses and syntax directed translation of programming languages. Includes symbol table construction, error diagnostics, and code generation. Prerequisite: CS 4100.

CS 4410 Automata, Computability, and Formal Languages ( 3 units). Finite state concepts; sequential machines and state minimization; Chomsky grammar; algorithms on grammars; computability and Turing machines; non-computable functions. Prerequisite: CS 4100.

CS 4440 Theory of Algorithms (3 units). Algorithms for combinatorics; for numerical problems, including matrix operations; for systems programming applications; and for artificial intelligence; domain-independent techniques. Prerequisite: CS 3100 .

CS 4450 Coding and Information Theory (3 units). Topics to be selected from error detecting and correcting codes, encryption and decryption techniques, RSA and knapsack codes, algebraic coding theory, Hamming distance, sphere packing and its relation to optimal codes, Hamming, Huffman and Gray codes, entropy, channel capacity and Shannon's theorem, bandwidth and the sampling theorem. Prerequisite: CS 3100 or MATH 2300 or equivalent.

CS 4480 Artificial Intelligence ( 3 units). Notational systems, structures and strategies for their choice; search strategies; parallel vs. serial processing; communication and perception; applications in psychology, medicine, and robotics. Prerequisite: CS 3100.

CS 4600 Computer Graphics II (3 units). Advanced topics in three-dimensional computer graphics. Emphasis on producing high quality images on raster devices. Object modeling, lighting and color models, surfaces, antialiasing, ray tracing. Additional topics in texture mapping, object-oriented graphics, advanced graphics hardware, or animation may be covered. Prerequisites: CS 3600 and MATH 2510 or equivalent. (Spring)

CS 4750 Operating Systems II (3 units). Concurrent processes, deadlock, and synchronization; name management; resource allocation; protection; advanced architectures. (Formerly 3760) Prerequisite: CS 3750. (Spring)

CS 4800 Software Engineering ( 3 units). A formal introduction to techniques in software design, development and verification. A large part of the course is a team project on which students will work on a large software project. (Formerly 3800) Prerequisites: CS 3050 and 3100. (Fall)

CS 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co -op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of Departmental Coordinator. (Fall, Winter, Spring)

CS 4950 Selected Topics in Computer Science (Topics to be specified in Class Schedule) ( $1-5$ units). Development' of a selected branch of computer science. Topics vary each term. Different topics may be taken for a maximum of 6 units. Prerequisites: Senior standing and consent of instructor.

CS 4960 Seminar in Computer Science (1 unit). Presentation and discussion of selected topics in computer science from the current literature. Prerequisites: Senior standing and consent of instructor.

CS 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.


## Criminal Justice

Office:
Coordinator:
Faculty:

Classroom Bldg 213, (209) 667-3408
Cecil A. Rhodes
Cecil A. Rhodes, Phyllis Gerstenfeld

The Department of Sociology and Criminal Justice offers an interdisciplinary program leading to the Bachelor of Arts degree in Criminal Justice with optional course concentrations in Law Enforcement and Corrections. (See the "Sociology" section of this catalog for Sociology course descriptions.) The program offers an appreciation of the full complexity of American criminal justice and permits students the opportunity to understand fully the social changes and technological progress in criminal justice agencies. The major requires a variety of courses pertaining to the administration of criminal justice and an equal number of courses on the nature and social causes of criminal behavior.

To prepare students for careers in highly competitive criminal justice positions, the department offers students: (1) the courses rated by criminal justice faculty and professionals across the United States as being the most valuable in the broad criminal justice field; and (2) internships in law enforcement, the courts, corrections, law, and other branches of criminal justice.

## Bachelor of Arts in Criminal Justice

## General Requirements

1. Complete the University requirements for the Bachelor of Arts degree (51 units minimum).

## Major Requirements

1. Complete the following lower-division prerequisites ( 15 units):

CJ 2250 Introduction to Criminal Justice, 3 units
CJ 2260 Evidence, 3 units
CJ 2270 Criminal Investigations, 3 units
CJ 2280 Criminal Law, 3 units
SOCL 1010 Introduction to Sociology, 3 units
2. Complete the major of not less than 39 upper-division units in Criminal Justice and Sociology courses, of which no more than 9 units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.
3. Maintain a grade point average of 2.00 or better in the major. Completion of a minor is not required.

## The Major (39-40 upper-division units)

1. Complete the following courses (core courses 21 units) required for the general major and the concentrations:
a. the general major (18-19 units), or
b. the Law Enforcement Concentration (18 units), or
c. the Corrections Concentration (18 units)

CJ 3100 Legal Research and Writing, 3 units
CJ 4151 Constitutional Criminal Procedures, 4 units
CJ 4250 Psychology of Criminal Behavior, 4 units
CJ 4930 Directed Criminal Justice Research, 4 units
SOCL 3120 Criminology, 3 units
SOCL 3130 Juvenile Delinquency, 3 units
2. Complete six of the following courses for the general major (18-19 units minimum):

CJ 3130 Administration of Corrections, 3 units
CJ 3160 Administration and Management in Law Enforcement, 3 units
CJ 3230 Police Ethics and Civil Liability, 3 units
CJ 4135 Correctional Law, 3 units
CJ 4150 Probation and Parole, 3 units
CJ 4165 Criminal Judicial Process, 3 units
CJ 4230 Juvenile Justice, 4 units
CJ 4915 Sex Crimes and Gender Issues in Criminal Justice, 3 units
CJ 4925 Historical and Contemporary Criminal Justice, 3 units
CJ 4940 Criminal Justice Internship, 3 units
SOC 4170 Victimology, 3 units

## Elective Concentrations within the Criminal Justice Major

Students who elects to have a concentration in Corrections or Law Enforcement may do so by completing the lower division prerequisites to the major, the required core courses, and the requirements of the concentration. The following concentrations are offered:

## Corrections Concentration (18 units minimum)

1. Complete the following courses ( 9 units):

| CJ | 3130 | Administration of Corrections, 3 units |
| :--- | :--- | :--- |
| CJ | 4135 | Correctional Law, 3 units |
| CJ | 4150 | Probation and Parole, 3 units |

2. Complete 3 of the following 13 electives ( 9 units minimum):

| CJ | 3315 | Hate Crimes, 3 units |
| :--- | :--- | :--- |
| CJ | 4165 | Criminal Judicial Process, 3 units |
| CJ | 4175 | Capital Crimes and the Death Penalty, 3 units |
| CJ | 4230 | Juvenile Justice, 4 units |
| CJ | 4260 | Criminal Justice Seminar, 3 units |
| CJ | 4915 | Sex Crimes and Gender Issues in Criminal Justice, 3 units |
| CJ | 4925 | Historical and Contemporary Criminal Justice, 3 units |
| CJ | 4940 | Criminal Justice Internship, 3 units |
| CJ | 4950 | Selected Topics in Criminal Justice, 2-4 units |
| CJ | 4980 | Individual Study, 1-4 units |
| SOCL | 3240 | Social Deviance, 3 units |
| SOCL | 4190 | Treatment of the Offender, 3 units |
| SOCL | 4920 | Nutrition and Behavior, 4 units |

## Law Enforcement Concentration ( 18 units minimum)

1. Complete the following courses ( 9 units):

CJ 3160 Fundamentals of Law Enforcement, 3 units
CJ 3230 Police Ethics and Civil Liability, 3 units
CJ 3420 Community and Problem-Oriented Policing, 3 units
2. Complete 3 of the following 14 electives ( 9 units minimum):

CJ 3315 Hate Crimes, 3 units
CJ 4165 Criminal Judicial Process, 3 units
CJ 4175 Capital Crimes and the Death Penalty, 3 units
CJ 4230 Juvenile Justice, 4 units
CJ 4260 Criminal Justice Seminar, 3 units
CJ 4915 Sex Crimes and Gender Issues in Criminal Justice, 3 units
CJ 4925 Historical and Contemporary Criminal Justice, 3 units
CJ 4940 Criminal Justice Internship, 3 units
CJ 4950 Selected Topics in Criminal Justice, 2-4 units
CJ 4980 Individual Study, 1-4 units
SOCL 3240 Social Deviance, 3 units
SOCL 4170 Victimology, 3 units
SOCL 4180 Organized and White Collar Crime, 3 units
SOCL 4920 Nutrition and Behavior, 4 units

## Degree Minor (24 units)

## Requirements

1. Complete the following lower-division courses ( 12 units):

CJ 2250 Introduction to Criminal Justice, 3 units
CJ 2260 Evidence, 3 units
CJ 2270 Criminal Investigations, 3 units
CJ 2280 Criminal Law, 3 units
2. With approval of the adviser, select and complete the following 4 upper-division courses ( 12 units minimum):

CJ 3100 Legal Research and Writing, 3 units
CJ 4915 Sex Crimes and Gender Issues in Criminal Justice, 3 units
CJ 4925 Historical and Contemporary Criminal Justice, 3 units

## Course Descriptions

Lower Division
CJ 2250 Introduction to Criminal Justice (3 units). Provides an overview of the criminal justice system. The focus is on the role of law enforcement, the courts, corrections and their relationships. The definition, measurement, and causes of crime are also discussed. (CAN AJ 2) (Fall, Spring)

CJ 2260 Evidence ( 3 units). A case study and statutory analysis of the origins, development, and philosophy of criminal evidence. Includes the application and process of evidence collection; its preservation, maintenance, and use in criminal trials; burden of proof, relevancy, hearsay rules, and impeachment. Prerequisite: CJ 2250 or consent of instructor. (CAN AJ 6) (Fall, Spring)

CJ 2270 Criminal Investigations ( 3 units). Explores detection, interrogation, development of evidence, and apprehension. Stringent evidentiary standards based on the Constitution, statutory law, and administrative regulations for law enforcement and correctional personnel are reviewed as they apply to various aspects of investigations. In addition to reviewing the rule of law, the underlying ethical, social, and moral issues which direct the investigator's role are examined. Prerequisite: CJ 2250 or consent of instructor. (CAN AJ 8) (Fall, Spring)

CJ 2280 Criminal Law ( 3 units). Using a case study approach, criminal law traces the historical development and current principles and rules which determine the substantive criminal law. Topics include the purpose of criminal law; principles of liability; defenses involving excuses or justifications; and crimes against person, property, and public order. Prerequisite: CJ 2250 or consent of instructor. (CAN AJ 4) (Fall)

## Upper Division

CJ 3100 Legal Research and Writing ( 3 units). This course is designed to provide the criminal justice student with a thorough understanding of legal research and legal drafting. The student will learn LEXIS/NEXIS, the functional uses of a law library, to reference and cross-reference statutes, state and federal cases, words and phrases, indexes, journals, forms, and slip opinions. The student will learn and develop the ability to draft legal memoranda, motions, complaints, points and authorities, and briefs, and be required to draft various legal documents. Prerequisites: CJ 2250, 2280 or consent of instructor.

CJ 3130 Administration of Corrections ( 3 units). Provides the historical development of community-based and institutional programs. Using competing philosophical goals-retribution, deterrence, incapacitation, and rehabilitation-various current programs such as probation, parole, diversion, and institutional treatment are contrasted and future trends are projected. Prerequisite: CJ 2250 or consent of instructor. (Fall)

CJ 3160 Administration and Management in Law Enforcement (3 units). This course will examine the various types of administrative and management principles and practices applicable to law enforcement agencies. The history of law enforcement management, the levels of organization structure and development, and various management philosophies will be explored. Special attention will center on history, organization, operations, and administrative philosophies of federal law enforcement agencies. Prerequisite: CJ 2250 or consent of instructor. (Fall)

CJ 3230 Police Ethics and Civil Liability (3 units). Using a case study, social and legislative analytical approach, this course will explore ethics in law enforcement from its historical roots through contemporary ethical issues. Ethical issues will include areas such as communications, race, sex, excessive physical force, corruption, and conflicts of interest. Civil liability will focus on the tort liability for certain statutory and ethical violations. Prerequisites: CJ 2250 or consent of instructor.

CJ 3315 Hate Crimes (3 units). (Formerly CJ 3310.) A case study, lecture, and theoretical approach to analyzing issues, causes, effects, history, and solutions of hate crimes. The course includes informational discussions on individuals who commit
hate crimes, organized hate groups, and the victims of hate crimes and activities. Additional analyses and discussions will center on federal and state hate crime legislation, pertinent case law, and constitutional protections and constraints. Prerequisites: CJ 2250, 2280, or consent of instructor.

CJ 3420.Community and Problem Oriented Policing (3 units). This course will explore the broad and critical areas of crime prevention techniques using the citizenry as the basis. The course will encompass police paradoxical issues concerning the police image, the dilemma of policing, the role of police in the community, police/ community attitudes, complaints, and crime prevention through visibility and the media, politics, and the needs of ethnically diverse populations. Prerequisites: SOCL 1010, CJ 2250 , or consent of instructor.

CJ 4135 Correctional Law ( 3 units). Using a case study approach, the new and developing field of applied correctional law deals with the rights, responsibilities, and liabilities of correctional personnel working in county, state, or federal capacities. The course details differences which occur depending on the status of the offender, i.e., juvenile or adult, county or state, probation or parole, and defendant or prisoner. Prerequisite: CJ 2250, 3130, or consent of instructor. (Spring)

CJ 4150 Probation and Parole ( 3 units). The historical development, current practices, and future direction of probation and parole are discussed. The course explores the balancing of two competing objectives, i.e., the protection of society and the needs of the offender. The various primary roles of investigator, counselor, court officer, and supervisor are examined in light of competing objectives. Prerequisite: CJ 2250 or consent of instructor. (Fall)

CJ 4151 Constitutional Criminal Procedures (4 units). Case study and analysis of the constitutional requirements and constraints in the criminal justice process. Focus is on the application of substantive and procedural due process under the Fourteenth Amendment: Arrest, warrants, search and seizure, exclusionary rule, confessions, double jeopardy, privilege against self-incrimination, right to counsel, speedy trial, and cruel and unusual punishment. For the one unit activity credit, students are required to research and draft a legal memorandum supported by points and authorities, and to present their findings in the form of oral argument. Prerequisite: CJ 2250 and CJ 2280 or consent of instructor. (Fall, Spring)

CJ4165 Criminal Judicial Process (3 units). (Formerly CJ4170) A detailed analysis of judicial processing, from booking to sentencing, of individuals accused of crimes. Includes lecture and case study approach of substantive and procedural issues concerning pretrial motions and hearings, arraignments, bail, plea bargaining, trials, and sentencing. May include field trips to selected courts. Prerequisite: CJ 2250 or consent of instructor.

CJ 4175 Capital Crimes and Death Penalty (3 units). (Formerly CJ 4170) An analysis of the types of crimes for which the death penalty has been imposed and a study of the death penalty in America.

CJ 4230 Juvenile Justice (4 units). A case study and analysis of the American juvenile justice system from its historical beginnings through its current structure and operations and to an exploration of future trends. Discussion will include constitutional rights of juveniles, the judicial process, system structure and operation,
juvenile crime, violence, and gangs. As an activity, students will be required to conduct an on-site field observation of the juvenile justice system and complete a case study research project on an actual juvenile case. Prerequisites: CJ 2250 and 2280 or consent of instructor.

CJ 4250 Psychology of Criminal Behavior (4 units). (Formerly CJ 4240) A case study and exploratory analysis of the psychological factors that influence and cause criminal behavior in individuals. The class will cover the major psychological theories of criminal conduct such as social learning theories, personality theories, and development theories; criminal behavior, psychopaths, sex offenders, mentally disordered offenders, and mass murderers. The laboratory will include an analysis of covariants of psychological predictors of criminal behavior of exceptional offenders by use of video. The lab findings and research on the psychological criminal behavior of offenders will be presented both orally and within the context of a research paper. Prerequisites: CJ 2250, 2280, or consent of instructor.

CJ 4260 Criminal Justice Seminar ( 3 units). Sociological analysis of the history, politics, and economics of criminal justice. Course will focus on theory and research, ideology of crime control and criminal justice reform. Prerequisite: Consent of instructor.

CJ 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of eight units depending on departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator. (Fall, Winter, Spring)

CJ 4915 Sex Crimes and Gender Issues in Criminal Justice ( 3 units). This course focuses on crimes perpetrated against women, the criminal justice system's response to such crimes, gender disparity in sentencing, and women in the criminal justice system. Discussion and research will center on historical and contemporary issues of gender based criminality and on the crimes of stalking, forcible rape, molestation, prostitution, intimate abuse, and domestic violence. The course will consist of lecture, discussion, case study and legislative analyses, examinations, and socio-legal research and writing. Prerequisites: CJ 2250,2280, SOCL 1010 or consent of instructor.

CJ 4925 Historical and Contemporary Criminal Justice ( 3 units). Using a case, legislative, and treatise study and analysis, this course will explore the American criminal justice system from its historical roots through its current structure, and discuss critical and controversial current issues within our criminal justice system. The precise contemporary issues discussed will depend on current events and legislation. This course will provide students with an understanding of the political forces that drive the Democratic Consensus, Irresistible Impulse and Irrational Forces theories of criminal law and justice, and how such political forces impact, adversely and positively, the system. Prerequisites: CJ 2250, SOCL 1010, or consent of instructor.

CJ 4930 Directed Criminal Justice Research (4 units). Directed social science research applied to gathering data in criminal justice and criminological research. The focus will be on special problems encountered in research settings and groups where information about crime is to be gathered and analyzed. Includes review of research. Prerequisites: SOCL 1010 and CJ 2250. (Fall, Spring)

CJ 4940 Criminal Justice Internship ( 3 units). Allows the student who is considering a career in law enforcement, the courts, or corrections the opportunity to work alongside experienced professionals, assist them in their duties, and develop handson experience. Prerequisite: CJ 2250 or consent of instructor. (Fall, Spring)

CJ 4950 Selected Topics in Criminal Justice (Topics to be specified in Class Schedule) (1-5 units). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

CJ 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.


## Drama

Office: Drama Building 15, (209) 667-3451
Chair: Jere D. Wade
Faculty: Noble T. Dinse, Richard Levering, Douglas
McDermott, Jerome O'Donnell, Jere D. Wade

The Department of Drama offers the degree, Bachelor of Arts, Drama. The department trains undergraduates as general practitioners in the art of theatre. The curriculum balances theoretical and practical work while featuring a close relationship between courses and production. Students and faculty work together on all aspects of production in a 300 -seat mainstage theatre and a 100 -seat studio. Upon completion of the drama major, a student should be able to collaborate with others in the operation of a theatre or to qualify for further professional training as an artist or as a scholar. Courses in the drama curriculum also provide aesthetic and cultural enrichment for liberal arts students.

## Bachelor of Arts, Drama

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major ( 9 units):

DRAM 1010 Introduction to Theatre, 3 units
DRAM 1500 Acting for Non-Drama Majors, 3 units*
DRAM 2300 Theatre Workshop I, 3 units
3. Complete the major of not less than 40 upper-division units as approved by the major adviser.
4. Completion of a minor is not required.

## The Major ( 40 units)

1. Complete the following required courses ( 40 units):

DRAM 3200 Stagecraft I, 3 units
DRAM 3210 Makeup, 3 units
DRAM 3240 Costuming, 3 units
DRAM 3250 Stagecraft II, 3 units
DRAM 3510 Classical Theatre, 3 units
DRAM 3520 Romantic and Modern Theater, 3 units
DRAM 3530 Contemporary Theatre, 3 units
DRAM 4350 Rehearsal and Performance, 6 units
DRAM 4510 Intermediate Acting, 3 units

[^12]DRAM 4520 Advanced Acting, 3 units
DRAM 4600 Directing, 3 units
DRAM 4960 Senior Seminar, 4 units

Note: Elective Courses: The following special interest courses are available, but may not be substituted for Major requirements.
DRAM 3020 Children's Theatre, 3 units
DRAM 4020 Performance for Children, 4 units
:DRAM 4550 American Theatre, 3 units
DRAM 4560 Theatre in the Schools, 4 units

## The Minor (24 units)

1. Complete the lower-division course:

DRAM 1010 Introduction to Theatre, 3 units
DRAM 1500 Acting for Non-Drama Majors, 3 units
2. Complete the following upper-division courses ( 12 units):
a. DRAM 3200 Stagecraft I, 3 units
b. DRAM 3210 Makeup, 3 units, or

DRAM 3240 Costuming, 3 units
c. DRAM 4510 Intermediate Acting, 3 units
d. DRAM 4600 Directing, 3 units
3. Select six units from the following:

DRAM 3510 Classical Theatre, 3 units
DRAM 3520 Romantic and Modern Theatre, 3 units
DRAM 3530 Contemporary Theatre, 3 units
DRAM 4550 American Theatre, 3 units

## Liberal Studies Concentration

## Requirements (21 units)

1. Complete the following lower-division courses (6 units):

DRAM 1010 Introduction to Theatre, 3 units
DRAM 1500 Acting for Non-Drama Majors, 3 units
2. Complete the following upper-division courses ( 15 units):
a. DRAM 3200 Stagecraft I, 3 units
b. DRAM 3210 Makeup, 3 units, or

DRAM 3240 Costuming, 3 units
c. DRAM 4600 Directing, 3 units
d. Two courses selected from the following ( 6 units):

DRAM 3250 Stagecraft II, 3 units
DRAM 4020 Performance for Children, 4 units
DRAM 4510 Intermediate Acting, 3 units
DRAM 4520 Advanced Acting, 3 units

## Teaching Credentials

Students majoring in drama who are interested in obtaining an English single subject credential waiver are referred to a description of the waiver program in the "English" section of this catalog. Please also refer to the "School of Education, Teacher Education' section of this catalog for a description of other single subject credential requirements. State credential procedure provides that an individual holding a single subject teaching credential in one discipline may apply for a "supplementary authorization" to teach another subject if the individual has taken either 20 semester units total or ten upper-division semester units of college course work in the supplementary subject. The Drama Department recommends completing the degree minor in drama for this purpose.

## Course Descriptions

Lower Division
DRAM 1010 Introduction to Theatre ( 3 units). Introductory survey of theatrical art. The theatre as an art form; elements of theatre; classroom practice in the fundamentals of theatrical production. (Fall, Spring)

DRAM 1110 Playgoing (3 units). Understanding and appreciation of live theatrical performance by both amateurs and professionals. Attending at least five plays. May require field trips to Bay Area. May be repeated for credit. (Fall, Spring)

DRAM 1500 Acting for Non-Drama Majors (3 units). An introductory course for those with limited theatrical experience. Exercises designed to acquaint the student with the requirements of public performance, as well as to assist them in group presentation and dynamics. (Fall, Spring)

DRAM 2300 Theatre Workshop I (3 units). Practical experience in all phases of theatrical production except acting and stage management. Opportunity for experience in scene building and painting, costume construction, publicity and box office. May be repeated for credit each semester. (Fall, Spring)

DRAM 2950 Selected Topics in Drama (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in drama. Topics may vary each term and are frequently selected to complement current dramatic productions. Different topics may be taken for credit. (Fall, Spring)

## Upper Division

DRAM 3020 Children's Theatre ( 3 units). A study of special problems and techniques in the production of formal drama for children; and a consideration of techniques, methods, and materials for use in improvised theatre. (Fall, Spring)

DRAM 3200 Stagecraft I ( 3 units). Principles and techniques of building, painting, mounting, and rigging stage scenery; theory and practice in stage lighting. Individual project work will be included. (Fall)

DRAM 3210 Makeup ( 3 units). The practical application of makeup for the stage. Included will be work on modeling in line and color, age makeup, and the creation of masks. (Spring)

DRAM 3240 Costuming ( 3 units). The study and practical application of creating costumes for the theatre. Included will be the study of fabrics, pattern making, and construction. Lab hours are required. (Fall)
DRAM 3250 Stagecraft II (3 units). A.continuation of the principles and practice in the techniques of designing, building, painting, mounting, and rigging stage scenery and properties. Practice in stage lighting. Individual project work will be included. May be repeated once for credit with consent of instructor. Prerequisites: DRAM 3200 or consent of instructor. (Spring)

DRAM 3510 Classical Theatre (3 units). History of European theatrical production and performance, including selected plays from classical Greece through theeighteenth century. (Spring)
DRAM 3520 Romantic and Modern Theatre (3 units). History of European and American theatrical production and performance, including selected plays from the nineteenth century to World War II. (Fall)

DRAM 3530 Contemporary Theatre ( 3 units). History of European and American theatrical production and performance, including selected plays since World War II. Satisfies upper division writing proficiency requirement. (Fall)
DRAM 4020 Performance for Children (4 units). Preparation and performance of one or more works for the general public. Students will work on all aspects of theatrical production in a manner closely resembling the operation of a repertory theatre company for children. May be repeated for credit. Prerequisite: Consent of instructor obtained by means of audition or interview. (Winter)

DRAM 4350 Rehearsal and Performance (3 units). Practical experience in acting, stage management, and crew supervision for public performances. May be repeated for credit each semester. Prerequisite: Consent of instructor. (Fall, Spring)
DRAM 4510 Intermediate Acting ( $\mathbf{3}$ units). Styles in acting. Intensified scene work from the plays of Shakespeare and Molière progressing to modern realistic and nonrealistic drama and comedy. May be repeated for credit; however, only three units will count toward the major. Prerequisite: DRAM 1500 or consent of instructor. (Spring)
DRAM 4520 Advanced Acting ( 3 units). Advanced scene study with emphasis on technique and performance. Scene work taken from modern, naturalistic playwrights; Chekhov to Tennessee Williams. May be repeated for credit; however, only three units will count toward the major. Prerequisite: DRAM 4510 or consent of instructor. (Fall)

DRAM 4550 American Theatre ( 3 units). The growth of distinctively American stories, characters, ideas, and institutions as captured in the artistic and commercial development of theatre and drama in the United States from 1750 to the present. (Fall, Spring)

DRAM 4560 Theatre in the Schools (4 units). Performance and critical appreciation of performance for high school students. Class will present an abridged version of a classic play in area high schools and will discuss the work and its performance with members of the audience afterwards. May be repeated for credit. Prerequisites: Consent of instructor and auditions required.

DRAM 4600 Directing (3 units). Examination of history, principles, and procedures of the theatrical director. Practical scene work in composition, movement, and tempo. Prerequisites: An upper-division acting class or consent of instructor. (Winter)

DRAM4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 6 units. Prerequisites: Sophomore standing and consent of departmental coordinator. (Fall, Winter, Spring)

DRAM 4950 Selected Topics in Drama (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in drama. Topics may vary each term and are frequently selected to complement current dramatic productions. Different topics may be taken for credit. (Fall, Spring)

DRAM 4960 Senior Seminar (4 units). Senior Drama majors, with the approval of the Drama Faculty, will select and successfully complete an appropriate project in one of the following areas: Acting/Directing, Design/Technical Theatre, History/Criticism; or the student shall pass a comprehensive examination in theatre. (Formerly 4610). Prerequisite: Standing as a senior drama major and consent of major adviser. (Spring)

DRAM 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

## Postbaccalaureate

DRAM 5940 Advanced Production (2-6 units). Advanced production work in drama for qualified postbaccalaureate students. Prerequisite: Consent of instructor. (Fall, Spring)

DRAM 5950 Selected Topics in Drama (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in drama. Topics may vary each term and are frequently selected to complement current dramatic productions. Different topics may be taken for credit. Prerequisite: Consent of instructor. (Fall, Spring)

DRAM 5980 Individual Study (1-4 units). For postbaccalaureate students capable of independent work and in need of advanced specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)


## Economics

Office: Classroom Building 101, (209) 667-3181
Chair: H. Dieter Renning
Faculty: William D. Crist, Edward C. Erickson, Albert Yin-Po Lee, H. Dieter Renning, Everett E. White
Emeritus
Faculty: Frederick E. Kottke

The Department of Economics offers the degree Bachelor of Arts, Economics. The objectives of the major in economics are: (1) to provide a concentration in economics as the central core of a liberal education; (2) to provide courses in advanced theories and principles of production, distribution, exchange, and consumption, thus enabling the major to enter graduate study at leading universities; (3) to provide an expanded pre-professional base for the student interested in business, better enabling the graduate to obtain vocational objectives in government, business, and/or industry; and (4) to provide undergraduate and graduate service courses for the Masters of Business Administration (MBA) program and the Masters of Public Administration (MPA) program.

## Bachelor of Arts, Economics

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 6 units):

ECON 2500 Principles of Economics I, 3 units
ECON 2510 Principles of Economics II, 3 units
3. Complete the major of not less than 28 upper-division units; of these no more than 8 units of CR-graded work may apply toward the major. Completion of a minor is not required.

## The Major ( 28 units minimum)

1. Complete the following upper-division courses ( 16 units):

ECON 3205 Quantitative Analysis, 4 units
ECON 4000 Intermediate Theory (Macroeconomics), 3 units
ECON 4010 Economic Thought, 3 units
ECON 4200 Intermediate Theory (Microeconomics), 3 units
ECON 4960 Senior Seminar, 3 units
2. Select at least four additional courses chosen from two or more of the following areas of specialization. Area specialization exceptions can be made on approval of the department chair.
a. Banking, Investment and Managerial Economics

ECON 3150 National Income Analysis, 3 units
ECON 3320 Money and Banking, 3 units
ECON 3331 Financial Markets and Business Cycles, 3 units
ECON 4300 Mathematical Economics, 3 units
ECON 4331 Managerial Economics, 3 units
ECON 4500 Economics of Investment, 4 units
b. International Trade and Alternative Economic Systems
ECON 4050 Comparative Economic Systems, 3 units
ECON 4401 Third World Economics, 3 units
ECON 4415 International Economics, 3 units
ECON 4420 The Economy of Russia, 3 units
ECON 4455 The U.S. and World Trade, 3 units
ECON 4460 The European Union: Progress and Prospects, 4 units
c. Economics and the Public Sector
ECON 4335 Political Economy, 4 units
ECON 4540 Public Finance and Fiscal Policy, 3 units
ECON 4600 Urban Economics, 3 units
d. Labor Economics
ECON 4100 Labor Economics, 3 units
ECON 4120 Collective Bargaining Simulation, 3 units
e. Economic History
ECON 3100 Economic History of the United States, 3 units
The Minor
Requirements (18 units)
Complete ECON 2500 \& 2510, Principles of Economics I \& II, 6 units, and 12units of upper-division course work as approved by the minor adviser.
Liberal Studies Concentration
Requirements ( 20 units)

The liberal studies concentration in economics consists of 20 units, at least 15 of which must be upper-division units.

## Teaching Credential-Supplemental Authorization In Economics

## Requirements

For a supplemental authorization for credentialed teachers to teach economics, students must complete 20 units of lower-and/or upper-division courses or 10 units of upper-division course work only, with a grade of Cor better. The following courses are recommended:

ECON 2500 Principles of Economics I, 3 units
ECON 2510 Principles of Economics II, 3 units
ECON 3100 Economic History of the United States, 3 units
ECON 3320 Money and Banking, 3 units
ECON 4010 Economic Thought, 3 units
ECON 4100 Labor Economics, 3 units
ECON 4335 Political Economy, 4 units
ECON 4455 The U.S. and World Trade, 3 units

## Course Descriptions <br> Lower Division

ECON 2500 Principles of Economics I (3 units). Macroeconomics: scope, method, economic resources, monetary system, income determination, economic stabilityinstability, public finance. (CAN ECON 2) (Fall, Spring)

ECON 2510 Principles of Economics II (3 units). Microeconomics: price system and market structures, public policy and income distribution. Fundamentals of internátional economics; international trade, principles and problems of economic growth and development, analysis of economic systems. Special problem areas in American economy: urban economics, environmental economics, agricultural economics. (CAN ECON 4) (Fall, Spring)

ECON 2950 Selected Topics in Economics (Topics to be specified in Class Schedule) (í-5 units). Development of a selected topic in economics. Topics may vary each term. Different topics may be taken for credit. (Fall, Spring)

## Upper Division

ECON 3100 Economic History of the United States (3 units). Analysis of American business organizations and economic growth from colonial period to present with emphasis on evolution and changes in the American system. (Fall)

ECON 3150 National Income Analysis (3 units). Analysis of macroeconomic conditions and adjustments in a free enterprise system. National income accounting and employment theory. Prerequisite: Economic Principles or consent of instructor. (Spring)

ECON 3205 Quantitative Analysis (4 units). A stủdy of econometric techniques for measurement of economic relationships, analysis and forecasting of business situations, and testing of economic theories. A course in basic statistics is recommended but not required. Prerequisites: ECON 2500 and 2510 or consent of instructor. (Fall)

ECON 3320 Money and Banking (3 units). Money and the level of economic activity; supply and demand for money; competition among financial institutions; the Federal Reserve System and monetary policy. Prerequisite: Economic Principles or consent of instructor. (Spring)

ECON 3331 Financial Markets and Business Cycles (3 units). Examination of current economic and social issues covering recession, inflation, financial market conditions, rational expectations, construction, real estate markets, long-term finance, and foreign exchange markets. Prerequisite: Economic Principles. (Fall)

ECON 4000 Intermediate Theory (Macroeconomics) (3 units). Macroanalysis; income levels, expenditures, prices, and employment; application to depression and inflation. Prerequisite: Economic Principles or consent of instructor. (Fall)

ECON 4010 Economic Thought (3 units). Survey and comparison of the ideas and doctrines of major schools of economic thought from the Middle Ages to the Twentieth Century, with emphasis on classical and Neoclassical economics.Marxism, Institutionalism, and Keynesian economics. (Fall)

ECON 4050 Comparative Economic Systems ( 3 units). Comparison of alternative economic systems. Market economies versus planned economies. Institutions and patterns of economic decision making. Resource allocation and income distribution underdifferent forms of economic organization. Comparative economic performance. Prerequisite: Economic Principles or çonsent of instructor. (Spring).

ECON 4100 Labor Economics (3 units). A study of theories of wage determination, income distribution, manpower imbalance, and economic problems of minority groups. History and theory of the American labor movement and theories of collective bargaining. Prerequisite: Economic Principles or consent of instructor. (Spring)

ECON 4120 Collective Bargaining Simulation (3 units). Simulation of collective bargaining negotiations emphasizing: (1) interpersonal skills, (2) dilemmas of bargaining, (3) strategies of bargaining, (4) characteristics of the bargaining relationship, (5) physical components of bargaining, (6) social components of bargaining. (Winter)

ECON 4200 Intermediate Theory (Microeconomics) (3 units). Theory of consumer behavior and market demand; production costs, and the theory of the firm; theories of competition and monopoly; concentration and anti-trust policies; models of oligopoly and monopolistic competition; resource pricing and income distribution; elements of welfare economics. Prerequisite: Economic Principles or consent of instructor. (Spring)

ECON 4300 Mathematical Economics ( 3 units). Static analysis; comparative-static analysis; optimization problems, input-output analysis; linear programming and game theory. Prerequisite: Economic Principles or consent of instructor. (Spring)

ECON 4331 Managerial Economics (3 units). A study of application of economic theory and methodology to management and decision making in business enterprises with special reference to theory of demand, production and cost analysis, profit measurement and planning, market structure and pricing, government regulation of business and capital budgeting. Prerequisite: Economic Principles or consent of instructor. (Fall)

ECON 4335 Political Economy (4 units). (Formerly Free Enterprise Economics). This course will focus on the actions of exchange and intervention. After a complete development of the analytical framework, the topics of law and order, crime, poverty, prosperity, and political-industrial organization are discussed. (Spring).

ECON 4401 Third World Economics (3 units). Analysis of economic problems of less developed Third World countries: agriculture, industrial development, capital investment, trade, income distribution, population growth and education, economic theories, and policy tools for economic growth and development. Prerequisite: Economic Principles or consent of instructor. (Fall).

ECON 4415 International Economics (3 units). A study of theories and issues of international trade, commercial policies, tariff and other trade restrictions, foreign investment and multinational corporations, foreign exchanges and balance of payments adjustment, international financial institutions and systems, and regional trade organizations. Prerequisite: Economic Principles or consent of instructor. (Spring).

ECON 4420 The Economy of Russia (3 units). Development of institutions and operating principles of the Russian economy. Decision making hierarchy and organization of central planning during the Soviet era. Plan construction and implementation. Economic structure and performance. Russia's economic relations with the outside world. (Spring).

ECON 4455 The U.S. and World Trade (3 units). Dynamic change of comparative advantages of American business enterprises in world markets and recent U.S. trade policy developments affecting industries facing intense international competition, such as automobiles, steel, textile, footwear, semiconductors, and agricultural exports. Prerequisite: Economic Principles or consent of instructor. (Winter)

ECON 4460 The European Union: Progress and Prospects (4 units). Analysis of the economic integration of Europe, intracommunity economic and social policies, the European monetary system, and the community's relations with the rest of the world.

ECON 4500 Economics of Investment (4 units). Economic aspects of investment decisions and financial planning as faced by individuals in personal finance decisions and total investment for the economy. Prerequisite: Economic Principles recommended. (Winter).

ECON 4540 Public Finance and Fiscal Policy (3 units). Principles, problems, and policies of federal taxation, expenditures, debt, budgeting, and fiscal policy. Prerequisite: Economic Principles or consent of instructor. (Spring).

ECON4600 Urban Economics (3 units). An analysis of the economic interdependency of markets in urban areas and possibilities for alternative resource use; land utilization patterns, urban transportation, labor markets, housing and public service markets. Prerequisite: Economic Principles or consent of instructor. (Spring)

ECON4910 Cooperative Education (2-4units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 6 units. Prerequisites: Sophomore standing; consent of departmental coordinator and Cooperative Education Office. (Fall, Winter, Spring)

ECON 4950 Selected Topics in Economics (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in economics. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Junior standing or consent of instructor. (Fall, Spring)

ECON 4960 Senior Seminar (3 units). Reading and discussion in significant areas of economics; analysis of major contemporary economic problems, national and international. Prerequisite: Senior standing in economics. (Spring)

ECON 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

## Postbaccalaureate

ECON 5050 Business and the Economic Environment (3 units). Analysis of contemporary macro-and microeconomic problems and issues, related governmental policies, and their impact on the business firm. Including (but not limited to) unemployment, inflation, fiscal and monetary policy; government regulation of business; business concentration and anti-trust policy; income distribution; international economic relations. Prerequisite: MBA or MA candidacy. (Fall)

ECON 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

ECON 5990 Thesis (1-6 units). Thesis research. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and approval of graduate adviser.

ECON 6000 Seminar in Economics for High School Teachers (3 units). Designed for high school economics teachers. Review of micro- and macroeconomic concepts and principles, with emphasis on their importance for analyzing current economic and social issues and related public policies. Format: Individual presentations of economic topics and teaching approaches by seminar participants, class discussions, demonstrations of audio/visual materials. Prerequisite: Postbaccalaureate standing or consent of instructor. (Spring)


## English

Office: Library Building 195, (209) 667-3361
Chair: George E. Settera
Faculty: Harriett Blodgett, Anna L. Bolling, John E. Carroll, Renny Christopher, Lola V. Johnson, Ann Krabach, Susan Marshall, William H. Phillips, Paul P. Reuben, Arnold Schmidt, George Settera, Jr., Steven Stryker, Mark Thompson, Jack W. Williams
Emeritus Faculty: James P. Jensen
The Department of English offers the degrees Bachelor of Arts, English; Master of Arts, English; Liberal Studies degree concentrations in English and Teaching English to Speakers of Other Languages (TESOL); a degree minor in English and a certificate program in TESOL. Courses are offered in composition, literature, creative writing, film, and humanities.

Many career options are open to students of English, including teaching, journalism, publishing, advertising, and writing. Students also find that studying English provides excellent preparation for postgraduate study and for careers in the medical and legal professions, government, business, and industry.

The various programs of the department are designed to provide students with the skills essential for fluent and mature expression in their chosen subject fields. Courses in literature and film use critical and instructional approaches to familiarize students with important literary works and forms. Students are encouraged to develop informed ănd independent critical evaluations through studying both basic requirements and a wide range of elective courses.

## Bachelor of Arts, English

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the prerequisite to the major (6 units):
a. Select one course in British literature:

ENGL 2100 British Literature to 1800,3 units, or ENGL 2110 British Literature after 1800, 3 units
b. Select one course in American literature:

ENGL 2200 American Literature to 1865, 3 units, or
ENGL 2210 American Literature after 1865, 3 units
3. Complete the major of not less than 30 upper-division units.
4. Consult with the major adviser concerning requirements, changes in curriculum, waivers, etc.

## The Major ( $\mathbf{3 0}$ units)

1. Complete the following required courses in literature ( 9 units):

ENGL 3100 Critical Approaches to Literature, 3 units
ENGL 4300 Shakespeare, 3 units
ENGL 4990 Senior Seminar, 3 units
2. Select one of the following courses in British literature ( 3 units):

ENGL 3209 Medieval Literature, 3 units
ENGL 3210 English Renaissance Literature, 3 units
ENGL 3215 Seventeenth Century English Literature, 3 units
ENGL 3220 Eighteenth Century English Literature, 3 units
ENGL 3225 English Romantic Literature, 3 units
ENGL 3230 English Victorian Literature, 3 units
ENGL 3235 Modern British Literature, 3 units
ENGL 4105 English Novel 1, 3 units
ENGL 4106 English Novel II, 3 units
ENGL 4950 . Special Studies in English Literature, 3 units
3. Select one of the following courses in American literature ( 3 units):

ENGL 4107 American Novel I, 3 units
ENGL 4108 American Novel II, 3 units
ENGL 4110 American Short Story, 3 units
ENGL 4120 American Poetry, 3 units
ENGL 4140 American Drama, 3 units
ENGL 4930 Special Studies in American Literature, 3 units
4. Select 15 units of upper division English electives in consultation with the major adviser ( 15 units).

Note: Prospective postgraduate students in English are encouraged to undertake the study of some foreign language while still undergraduates. These students should also consult their English adviser concerning what courses in English will best prepare them for graduate study.

## TESOL Concentration within the English Major

## Requirements

Students wishing to have a specific concentration in teaching English to speakers of other languages (TESOL) may do so by completing all requirements for the major to include the following specific courses:

ENGL 3750 Introduction to Linguistic Theory, 4 units
ENGL 4615 TESOL Methods, 3 units
ENGL 4800 Second Language Acquisition, 3 units
ENGL 4850 English Grammar, 3 units
Note: Students planning to go on to a TESOL Certificate or an MA-TESOL concentration should consider taking at least two semesters of a foreign language and ENGL 4600 Tutorial Projects in English, (3 units).

## Degree Minor

## Requirements ( $\mathbf{1 8}$ units)

Complete 18 units to include at least 12 upper-division units. No more than six units of CR-graded course work in courses graded exclusively CR/NC may apply toward the minor.

1. Complete one course in each of the following categories ( 6 units):
a. ENGL 2100 British Literature to 1800,3 units, or ENGL 2110 British Literature after 1800
b. ENGL 2200 American Literature to 1865 , or ENGL 2210 American Literature after 1865
2. Select a minimum of 12 upper-division units in consultation with the minor adviser (12 units).
Note: ENGL 3100 Critical Approaches to Literature is a prerequisite to most upper division literature courses.

## Liberal Studies Concentration

## Requirements (18 units)

1. Select one of the following courses ( 3 units):

ENGL 2100 British Literature to 1800, 3 units, or
ENGL 2110 British Literature after 1800, 3 units
2. Select one of the following courses ( 3 units):

ENGL 2200 American Literature to 1865, 3 units, or
ENGL 2210 American Literature after 1865, 3 units
3. Complete the following upper division courses, ( 6 units):

ENGL 3009 Applied Writing, 3 units
ENGL 4620 Children's Literature, 3 units
4. Select 6 units of upper division English upon advisement.

Note: For a student preparing to take the multiple subject credential, the following courses would be particularly appropriate for the concentration:

ENGL $3010 \quad$ Creative Writing Workshop, 3 units
ENGL 3500-3520 Studies in Film, 3-4 units
ENGL 3750 Introduction to Linguistic Theory, 4 units
ENGL 3920 Masterpieces of World Literature, 3 units
ENGL 3930 World Literature in Translation, 2-5 units
ENGL $4300 \quad$ Shakespeare, 3 units
ENGL 4600 Tutorial Projects in English, 3 units
ENGL 4615 TESOL Methods, 3 units
ENGL $4620 \quad$ Children's Literature, 3 units
ENGL 4630 Adolescent Literature, 3 units
ENGL 4850 English Grammar, 3 units

# Liberal Studies Concentration in Teaching English to Speakers of Other Languages (TESOL) 

## Requirements ( 22 units)

1. Demonstrate evidence of second or non-primary language preparation, 3 units
2. Complete the following courses ( 19 units)

COMM 3010 Language and Speech Development, 3 units
ENGL 3750 Introduction to Linguistic Theory, 4 units
ENGL 4615 TESOL Methods, 3 units
ENGL 4800 Second Language Acquisition, 3 units, or
EDUC 4430 Crosscultural Techniques, 3 units
ENGL 4850 English Grammar, 3 units
EDUC 4200 Teaching the Culturally Different, 3 units

## Certificate Program in TESOL

The certificate in TESOL is intended for graduates and undergraduates with majors or minors in English who wish to have minimum preparation to teach English to adult speakers of other languages. The TESOL Certificate is particularly appropriate for those who would teach English in postsecondary language institutes overseas. The TESOLCertificate program consists of six TESOL-related courses (19 units) and requires a minimum of six units of study in a foreign language (or demonstration of equivalent proficiency). Fluency in both written and spoken English is required of non-native English speakers. The certificate is not a California state teaching credential (Individuals seeking credentials to teach in California public schools should inquire in the Department of Teacher Education.) For further information concerning the TESOL Certificate and Masters programs, consult the TESOL Program Adviser in the Department of English.

## Requirements (19-25 units)

1. Complete one year ( $6-8$ units) of a foreign language or demonstrate evidence of non-primary language preparation.
2. Complete the following courses ( 19 units)

ENGL 3750 Introduction to Linguistic Theory, 4 units
ENGL 4600 Tutorial Projects, 3 units
ENGL 4615 TESOL Methods, 3 units
ENGL 4800 Second Language Acquisition, 3 units, or
EDUC 4430 Crosscultural Techniques for Teachers: Language and Socioculutral Issues in School Settings, 3 units
ENGL 4850 English Grammar, 3 units
ENGL 4990 Senior Seminar (TESOL), 3 units

## Teaching Credentials

## Single Subject Credential Waiver Program

Those applying for admission to the single subject credential program at CSU Stanislaus and interested in obtaining the required certification of subject matter competency in English should obtain the description of requirements for certification currently available in the Department of English.

## Master of Arts Degree

Applications for admission to the Master of Arts program in English should be filed in the Office of Graduate Studies, which will then forward them to the Department of English for processing.

There are three main concentrations of study leading to the Master of Arts degree in English: (1) a concentration in the literature of Britain and the United States (MALIT); (2) a concentration in teaching of writing (MA-TW); and (3) a concentration in teaching English to speakers of other languages (MA-TESOL).

## Prerequisites for Admission

1. For the MA-LIT and MA-TW programs, a Bachelor of Arts degree with a major in English. For the MA TESOL, a Bachelor of Arts degree in English is normally required. See the Admission section of the TESOL program for exceptions.
2. An undergraduate GPA of 3.0 in courses in the major.
3. Two letters of recommendation from former college instructors who can comment on the applicant's ability to succeed in graduate studies.
4. A 5-10 page critical or analytical paper written in an undergraduate class.
5. Applicants must submit scores for the GRE General Examination; a score of 500 on the Verbal Test is required for admission to any of the three concentrations.

## General Requirements for the Master's Degree

1. Complete at least 30 graduate units.
2. Earn at least a grade of B - in each course.
3. Demonstrate at least a reading knowledge of an appropriate foreign language.
4. Submit GRE English subtest scores. Students in the MA-LIT or MA-TW programs must achieve a minimum score of 510 on the GRELiterature in English subtest.

## The Literature Program

In addition to the requirements listed above, students electing the literature program must take ENGL 5000 Graduate Studies: Critical Theory and Research and complete at least 16 units of course work in literature courses (seminars, independent studiés, and special studies courses) numbered ENGL 5000 through 5999.

Students electing to write a thesis may apply a maximum of three units of ENGL 5990 Thesis, toward the Master of Arts course work requirements. Students electing the non-thesis option must submit one revised graduate seminar paper and take ENGL 5965 Advanced Seminar Project, 2 units.

Students who plan to teach at the college or university level are strongly advised to take ENGL 5001 History and Research Methods in Composition/Rhetoric.

## The Program with a Concentration in the Teaching of Writing

The concentration in the Teaching of Writing will provide strong overviews of the history, research, methodologies, major emerging voices, and important questions in writing studies, rhetoric, and the teaching of writing. The concentration will provide a strong theory and research base for shaping a writing classroom and for further postgraduate work. This concentration consists of the following required courses:

1. ENGL 5001 Graduate Studies: History and Research Methods in Composition/Rhetoric, 3 units
2. ENGL 5010 Seminar: Composition/Rhetoric, 3 units (can be taken twice for credit)
3. ENGL 5850 Linguistics for Teachers, 3 units
4. ENGL 5870 Practicum: Writing and Teaching of Composition, 3 units
5. ENGL 5960 Advanced Projects in English, 4 units

MATW students must complete at least nine units which form a testable area for a comprehensive examination in literature. Students are encouraged to take ENGL 5000 Graduate Studies: Critical Theory and Research as one of those courses. Approved individual study courses (maximum 6 units) or approved upper-division undergraduate courses may be a part of the testable area.

## The Program with a Concentration in Teaching English to Speakers of Other Languages (TESOL)

The student who elects to pursue the concentration in TESOL will develop a specialist's knowledge of English grammar, second language acquisition theory, methodology, curriculum and materials development, and crosscultural issues related to the teaching of English as a Second Language (ESL) and English as a Foreign Language (EFL). This concentration is particularly appropriate for those who want to teach in postsecondary settings such as community colleges, universities, adult education programs, and English language institutes in the U.S. and abroad.

## The Concentration in TESOL

Applicants with an undergraduate major in English should have course work in both literature and language studies. Applicants without an undergraduate major in English may be admitted conditionally but must complete the following:

1. ENGL 2210 American Literature after 1865, or its equivalent;
2. ENGL 3920 Masterpieces of World Literature, or its equivalent; and
3. ENGL 3009 Applied Writing, or its equivalent.

Students for whom English is a second language will have to demonstrate fluency in English before the M.A. will be awarded. Written fluency will be assessed as a regular part of the course work in the program. Spoken fluency will be assessed by an Oral Proficiency test. The oral proficiency assessment must occur during the first semester of study to allow for any needed language instruction before the end of the student's program. MA-TESOL graduates are required to have completed at least two years of foreign language study at college level, or demonstrate a comparable proficiency in a foreign language.

This concentration consists of the following required and elective courses.

## Requirements

1. Complete the following prerequisites (4 units)

ENGL 3750 Introduction to Linguistic Theory, 4 units
2. Complete the following courses ( 12 units)

ENGL 5001 Research Methods: Composition/Rhetoric, 3 units
ENGL 5850 Linguistics for Teachers, 3 units
ENGL 5870 Practicum: Writing and Teaching Composition, 3 units
ENGL 5960 Advanced Projects, 3 units
3. Select elective courses from the following four categories ( 18 units)
a. ESL Theory ( 6 units)

ENGL 4800 Second Language Acquisition, 3 units
ENGL 4850 English Grammar, 3 units
ENGL 4990 Senior Seminar (TESOL), 3 units
ENGL 5983 Advanced Studies in Grammar, 3 units
EDML 5400 Theory of Multilingual Education, 3 units
EDUC 4430 Crosscultural Techniques: Language and Socioculutral Issues in School Settings, 3 units
b. Pedagogical Grammar (6 units)

ENGL 4600 Tutorial Projects in English, 3 units
ENGL 4615 TESOL Methods, 3 units
ENGL 5884 Practicum in Teaching Composition and Literature, 1 unit
ENGL 5894 Teaching Composition and Literature, 2 units
EDML 5000 Multilingual Education in the Content Areas, 3 units
EDML 5001 Multilingual Education Evaluation, 3 units
EDML 5940 Fieldwork: Multicultural Education, 3 units
c. Related courses-Psychological/Social Sciences (3 units)

Related courses (with written approval of adviser) including anthropology, geography, education, ethnic studies, history, international relations, and psychology.
d. Related courses-Humanities (3 units)

Related courses (with written approval of adviser) including communication theory, composition theory, creative writing, foreign language, and literature.

## Writing Competency

Faculty from English provide instruction in the following courses designed to meet the University's writing competency requirement:

ENGL 1001 Freshman Composition, 3 units
ENGL 2000 Critical Inquiry, 3 units

## Thé Upper Division Writing Proficiency

Students graduating from CSU Stanislaus must demonstrate writing competency through satisfactory completion of a Writing Proficiency course (WP) in any discipline. Passing the Writing Proficiency Screening Test (WPST) is one of the prerequisites for these courses.

English courses satisfying this writing requirement are as follows:
ENGL 3007 Business and Technical Communication (WP), 3 units (through Spring 1994)
ENGL 3009 Applied Writing (WP), 3 units
ENGL 3100 Critical Approaches to Literature (WP), 3 units
ENGL 4600 .Tutorial Projects in English (WP), 3 units

## English as a Second Language (ESL)

The Department of English offers courses for students who speak English as a second or foreign language. The courses are designed for students whose proficiency in English is at a high-intermediate to advanced fluency level. The courses are designed to improve the writing and study skills of resident ESL students or newlyarrived international students. Students in the courses normally are regularly enrolled students in the University.

## Course Descriptions

ESL 1000 Beginning English and Grammar for ESL Students (4 units). The focus of this course is reading-based grammar. Students study grammar in the context of a reading, starting at the phrasal level. The course also offers instruction in reading strategies to improve comprehension and speed. The composition work that students do is at the paragraph and short essay level. Individualized tutoring in grammar and writing is an integral part of this course (at least one hour per week). Prerequisite: Intermediate level of English as determined by diagnostic testing. (Fall)

ESL 1005 Intermediate English and Grammar for ESL Students (4 units). The focus of this course is the composition process: prewriting, drafting, revision, and editing. Students begin with personal writing and progress to academic essay work. The grammar work is individualized and is based on an inventory of problems from a "grammar journal." Students are also introduced to basic study skills like notetaking and test taking. Individualized tutoring in grammar and writing is an integral part of this course (at least one hour per week). Prerequisite: ESL 1000 or equivalent level of English as determined by diagnostic testing. (Spring)

ESL 2000 English Grammar and Composition for Foreign Students (3 units). The course content roughly parallels that of ENGL 1001. Students read and study short essays, do vocabulary work, and write short essays. Students are introduced to the library and some research skills such as summarizing and paraphrasing. The course culminates with a short, documented essay. Tutoring is available for students with special needs. Prerequisite: ESL 1000 or 1005 or equivalent level of English as determined by diagnostic testing. (Fall)

## Course Descriptions <br> Prebaccalaureate

ENGL 0100 ILE English I ( 3 units). Instruction and intensive practice in basic skills designed to increase fluency in reading and writing. Emphasis on improving sentence structure, vocabulary, usage, reading comprehension, essay organization and development. Instruction is based on reading, writing, and the development of ideas* through use of examples. Credit qualifies student for ENGL 0101. Prerequisites: First-term Freshman standing and an EPT total score of T141 or below. (Fall)

ENGL 0101 ILE English II (3 units). Reinforcement of skills practiced in ENGL 0100 in addition to experience in analytical, organizational, and comprehension skills needed for reading and writing exposition. Satisfactory completion qualifies student for ENGL 1001. May be challenged by qualified students. Prerequisite: ENGL 0100 (Spring)

ENGL 0111 Writer's Workshop (3 units). A course emphasizing the development of individual student's writing abilities, with intensive practice in basic skills, including grammar, usage, and other processes of composition. Satisfactory completion of this course will allow a student to enroll in ENGL 1001. Prerequisites: Freshman standing and EPT score of T142-T148. First-term Freshmen (EPT score of T142T148) other than First-term Freshmen (EPT score of T149). (Fall, Spring)

## Lower Division

ENGL 1001 Freshman Composition ( 3 units). A course in reading and writing expository essays. In addition to writing essays, students will be expected to demonstrate the ability to write informative summaries of university-level writing. Prerequisite: EPT score of T151 or above or ENGL 0111, 0101, or equivalent. (CAN ENGL 2) (Fall, Spring)

ENGL 1010 Introduction to Literature (3 units). Introduction to fiction, poetry, and drama. (Fall, Spring)

ENGL 2000 Critical Inquiry ( 3 units). The focus of this course is critical thinking, withemphasis split between receptive(reading/listening) and active (writing) exercises. Students will be expected to analyze arguments of others and to produce defensible arguments of their own, both in analytical summaries and in original argumentative essays. The course will emphasize the difference between good and bad arguments, as well as the distinction between significant and trivial positions on issues. Prerequisite: Sophomore standing and ENGL 1001 or equivalent. (Fall, Spring)

ENGL 2100 British Literature to 1800 ( 3 units). A survey of British literature to 1800 with attention to the historical development of literature from the Beowulf poet through the ages of Chaucer, the Renaissance poets and dramatists, to the neoclassical period. Prerequisite: ENGL 1001 or equivalent. (Fall)

ENGL 2110 British Literature after 1800 ( 3 units). A survey of British literature after 1800 with attention to the historical development of literature from the Romantic writers through the Victorian and modern periods to recent literature written in Britain. Prerequisite: ENGL 1001 or equivalent. (Spring)

ENGL 2200 American Literature to 1865 ( 3 units). A survey of American literature to 1865 with attention to the historical development of literature from the Puritans through the early republic and the period of the early romantics to the literature of the American Renaissance. Prerequisite: ENGL 1001 or equivalent. (Fall)

ENGL 2210 American Literature after 1865 (3 units). A survey of American literature after 1865 with attention to the historical development of literature from the post-Civil War regional and realist movements through naturalism and early 20th century writers to contemporary American literary expression in fiction, poetry, and drama. Prerequisite: ENGL 1001 or equivalent (Spring)

## Upper Division

ENGL 3007 Business and Technical Communication (3 units). An examination of the processes involved in writing for the professions, with emphasis on the business world. Attention will be paid to the writing of reports and proposals, the representation of research, and the principles of technical illustration. Satisfies upper division writing proficiency requirement. Prerequisite: Junior standing; and ENGL 1001 and 2000 or equivalents. (Fall, Spring)

ENGL 3008 Writing with a Computer (4 units). This course will provide students instruction in writing, revising, and printing a variety of practical and professional works by using a word processing program, computer, and printer. Works to be

## 200 / English

written include a summary, letter of application and résumé, essay explaining a process, and a report with graphic aids. No prior experience with a computer is required. Prerequisite: Junior standing; and ENGL 1001 and 2000 or equivalents.

ENGL 3009 Applied Writing ( 3 Units). A course designed for prospective and inservice teachers; deals with skills needed for good writing and the ways these skills are developed; emphasis on essay structure and development, conventional usage, and principles of essay evaluation. Satisfies upper division writing proficiency requirement. Prerequisite: Open only to Liberal Studies and English majors; and ENGL 1001 and 2000 or equivalents. (Fall, Spring)

ENGL 3010 Creative Writing Workshop (3 units). Methods and techniques of various types of creative writing. Typical studies include two or more of the following: short fiction writing, poetry writing, drama writing, film script writing. May be taken three times for credit. Prerequisite: ENGL 1001 or equivalent.

ENGL3100 Critical Approaches to Literature (3 units). An examination of theories, approaches, techniques, and vocabulary in the study of literature. Satisfies upper division writing proficiency requirement. Prerequisites: ENGL 1001 or equivalent; ENGL 2100 or 2110 ; ENGL 2200 or 2210 or equivalents. (Fall, Spring)

ENGL 3209 Medieval Literature (3 units). The literature of the Middle Ages exclusive of Chaucer. Typical studies include Piers Plowman, Sir Gawain and the Green Knight, The Pearl, the Arthurian romances, and/or the ballad. Prerequisite: ENGL 3100.

ENGL 3210.English Renaissance Literature (3 units). Literature of the period from about 1500 to 1603 . Typical studies include drama, lyric poetry, dramatic poetry, and such authors as Sidney, Spenser, Wyatt, Surrey, and Elizabethan dramatists other than Shakespeare. Prerequisite: ENGL 3100.

ENGL 3215 Seventeenth Century English Literature (3 units). Literature of the period from about 1603 to 1660 . Typical studies include works of Donne, Jonson, Marvell, Herbert, and/or others. Prerequisite: ENGL 3100.

ENGL 3220 Eighteenth Century English Literature (3 units). Literature of the period from 1660 to about 1780. Typical studies include examples of Restoration drama and works of Dryden, Pope, Swift, Johnson, Boswell, and/or others. Prerequisite: ENGL 3100.

ENGL 3225 English Romantic Literature (3 units). Literature of the late eighteenth and early nineteenth centuries. Typical studies include works of Blake, Wordsworth, Coleridge, Byron, Keats, Shelley, and/or others. Prerequisite: ENGL 3100.

ENGL 3230 English Victorian Literature (3 units). Literature of the period from 1832 to 1900. Typical studies include the works of Tennyson, Browning, Arnold, Carlyle, and/or others. Prerequisite: ENGL 3100.

ENGL 3235 Modern British Literature (3 units). Literature mainly on twentieth century modernism and later movements. Authors include: Mansfield, Eliot, Yeats, Joyce, Woolf, Lawrence, Auden, Larkin, Amis, Beckett, and recent women authors. Prerequisite: ENGL 3100.

ENGL 3400 Puritan and Colonial Periods ( 3 units). Literature of the period including Native American traditions, the literature of discovery and exploration, a study of New England puritanism, seventeenth century wit, the eighteenth century Great Awakening, and the American Revolution. Prerequisite: ENGL 3100.

ENGL 3410 American Literature: Romanticism and Transcendentalism (3 units). Literature of the United States between 1800 and 1865. Emphasis on romanticism and tranścendentalism and their representative writers. Prerequisite: ENGL 3100.
ENGL 3420 American Literature: Realism and Naturalism (3 units). Literature of the United States after the second half of the Nineteenth century. Emphasis is on realistic depiction of characters and events of everyday life including psychological realism and philosophical determinism. Prerequisite: ENGL 3100.

ENGL 3500-3520 Studies in Film (3-4 units). Examinations of film as a verbal and visual medium and as a reflector of history and culture. Typical courses include Introduction to Film, Contemporary Films, American Films, Foreign Films, and Film and Literature. These courses have no prerequisites and are designed for students in all majors.

ENGL 3700 Introduction to Language (3 units). An introduction to the study of language. Topics include: Language and communication, the structure of utterances, and the meaning of utterances and language in society.

ENGL 3750 Introduction to Linguistic Theory (4 units). (Replaces ENGL 3800). An intensive introduction to the study of syntax, phonology, and semantics.

ENGL 3920 Masterpieces of World Literature ( 3 units). A survey of important literary works written by major writers in world literature. The course will include works by Homer, Sophocles, Dante, Shakespeare, at least one novel of the 19th or 20th century, and at least one drama or film of the 19th or 20th century. Prerequisite: Completion of lower-division area General Education C-2 requirement.

ENGL 3930 World Literature in Translation (3-5 units). Studies in various aspects of world literature in translation. Course content may vary from term to term. (Same as FREN, GERM, SPAN 3930)

ENGL3940 Literature of American Cultures (3 units). An examination of American literature written by authors from a variety of ethnic and cultural backgrounds. Prerequisite: Completion of lower-division area General Education C-2 requirements and upper-division standing.

ENGL 3950 International Non-European Women Authors (3 units). Readings in women authors from the non-European world, i.e., from Africa, India, the NearEast, the Orient, Latin America, the Caribbean. Prerequisite: ENGL 3100 or consent of instructor.

ENGL4010Advanced Creative Writing (3 units). Primarily for experienced writers, the course includes writing practice, examination of the literary markef, and participation in a public reading.

ENGL 4011 Writing Scripts and Stories (4 units). An introduction to the two genres of short fiction and scripts; practice in writing and revising stories and/or scripts. Prerequisite: ENGL 1001 or equivalent.

ENGL 4019 Editing Literary Magazines ( 3 units). Topics will include the study of editorial policy, criteria, and processes. Included will be preparation for and the editing of a literary and art magazine. Prerequisites: ENGL 1001 or equivalent. Previous writing and literary courses desirable.

ENGL 4020 Literature of the Classical World (3 units). A study of major works of literature of classical Greece and Rome, including the poems of Homer; plays by Aeschylus, Sophocles, Euripides, and Aristophanes; selected dialogues of Plato; Greek lyric poems; The Aeneid of Vergil; and the poems of Horace, Juvenal, and Catullus. Prerequisite: ENGL 3100.

ENGL 4105 English Novel I (3 units). Authors to be studied may include Defoe, Richardson, Fielding, Sterne, Smollett, Austen. Prerequisite: ENGL 3100.

ENGL 4106 English Novel II ( 3 units). Authors to be studied may include Dickens, Thackeray, Bronte, Eliot, Hardy, Conrad. Prerequisite: ENGL 3100.

ENGL 4107 American Novel I (3 units). The American novel in the nineteenth century. Authors to be studied include Cooper, Hawthorne, Melville, Twain, Howells, James, Crane, and/or others. Prerequisite: ENGL 3100.

ENGL 4108 American Novel II (3 units). The American novel in the twentieth century. Authors to be studied include Wharton, Cather, Hemingway, Fitzgerald, Faulkner, Steinbeck, and/or others. Prerequisite: ENGL 3100.

ENGL 4109 The Contemporary Novel (3 units). The novel in English in the 1970s and 1980s including but not limited to works from Britain, Canada, and the United States. Authors to be studied include Anita Bookner, Margaret Atwood, Toni Morrison, Ann Tyler, Wallace Stegner, and/or others. Prerequisite: ENGL 3100.

ENGL 4110 American Short Story ( 3 units). An intensive study of the short-story as a literary form with emphasis on the American short-story. Prerequisite: ENGL 3100.

ENGL 4115 20th Century English Novel ( 3 units). The development of the English novel during the twentieth century with fluctuations between tradition and innovation. Typical readings include Bennett, Conrad, Joyce, Woolf, Forster, Bowen, Drabble. Non-repeatable. Prerequisite: ENGL 3010.

ENGL 4120 American Poetry (3 units). Lyric, narrative, and/or dramatic poetry in American literature. Prerequisite: ENGL 3100.

ENGL 4130 Dramatic Literature I (3 units). Analysis of drama as literary form: Classics of the Greek, Renaissance, and Restoration theaters. Prerequisite: ENGL 3100.

ENGL 4135 Dramatic Literature II (3 units). Analysis of drama as a literary form. Includes examination of plays by such writers as: Ibsen, Strindberg, Chekhov, Shaw, Beckett, Brecht, Williams, Pinter, and/or others. Prerequisite: ENGL 3100.

ENGL 4140 American Drama (3 units). The American drama in the twentieth century. Authors to be studied include Eugene O'Neill, Tennessee Williams, Arthur Miller and/or others. Prerequisite: ENGL 3100.

ENGL 4150 20th Century American Literature 1900-1950 (3 units). American literature in the first half of the twentieth century. Authors to be studied include Robinson, Eliot, Cather, Hemingway, Langston Hughes, Countee Cullen, and/or others. Prerequisite: ENGL 3100.

ENGL 4300 Shakespeare ( 3 units). Representative plays from among the comedies, tragedies, romances, and histories; may also include examples of non-dramatic poetry. Prerequisite: ENGL 3100.
ENGL 4305 Chaucer ( 3 units). The works of Chaucer with emphasis on The Canterbury Tales. Prerequisite: ENGL 3100.

ENGL 4310 Milton ( $\mathbf{3}$ units). Representative poetry and prose of Milton, with emphasis on Paradise Lost. Prerequisite: ENGL 3100.

ENGL 4510 Women Authors (3 units). Readings in prose and poetry by women authors selected to highlight the tradition of female writings. Significant themes, techniques, circumstances, and authors from the 17th century to the 20th. May focus on either British or American writers. May be repeated once in order to study both British and American writers. Prerequisite: ENGL 3100.

ENGL 4600 Tutorial Projects in English (3 units). An inquiry into the techniques of teaching the reading and writing of the English language. Instruction in the problems involved in tutoring students in English. Satisfies upper division writing proficiency requirement. May be repeated once for credit. (Fall, Spring)
ENGL 4610 Curriculum and Instruction: English (3 units). Contemporary trends and problems in English education withemphasis on language arts curriculum development, selection and organization of materials, and procedures for the secondary and junior high school. Field observations and contact with local teachers.

ENGL 4615 TESOL Methods ( $\mathbf{3}$ units). A course for prospective teachers of English to speakers of other languages (TESOL), teachers of multicultural K-adult ESL classes, and teachers in bilingual education programs. Topics will include current approaches, methods, techniques and materials for various English as a second/ foreign language settings.

ENGL 4620 Children's Literature ( 3 units). Introduction to children's literature: fiction, poetry, drama, fantasy, fairy tales, folklore, and ethnic materials. Analysis and investigation of the techniques of teaching literature to children.

ENGL 4630 Adolescent Literature (3 units). Study of representative works read by adolescents, including fiction, poetry, and drama.

ENGL 4700 Interdepartmental Study (2-5 units). Various interdepartmental topics. Course content may vary from term to term. Different topics may be taken for credit under this number. Prerequisite: Consent of instructor.

ENGL 4800 Second Language Acquisition (3 units). A course for prospective teachers of English to speakers of other languages. Topics will include: Comparison/
contrast of first and second language acquisition (SLA), cognitive strategies in SLA, personality and SLA, sociocultural factors in SLA, discourse analysis, error analysis, and inter-language. Prerequisite: ENGL 3750, 4850, COMM 3010 or 4021 , or consent of instructor.

ENGL 4850 English Grammar (3 units). An extensive review of the principles of English grammar, designed particularly for teachers and prospective teachers of English; the changing notions of grammar: differences between colloquial and formal standard American English.

ENGL4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator.

ENGL 4930 Special Studies in American Literature (1-5 units). Special studies in some area of American literature. Course content may vary from term to term. Typical courses include American Inmigrant Literature, the American dream and American literature, The Literature of American Minorities, or California writers and the California scene. Different titles may be taken for credit under this number. Prerequisite: ENGL 3100.

ENGL 4950 Special Studies in English Literature (1-5 units). Special studies in some area of English literature. Course content may vary from term to term. Typical courses include women in nineteenth and twentieth century literature, realism in English literature, minor writers, London in English literature. Different titles may be taken for credit under this number. Prerequisite: ENGL 3100.

ENGL 4970 Studies in World Literature, (3 units). Studies in world literature with variable content. Typical courses include Third World Novel and Myth in Literature: The Metamorphosis Motif. Two different titles may be taken for credit. Prerequisite: ENGL 3100.

ENGL 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced or specialized study. May be repeated for a total of six units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

ENGL 4990 Senior Seminar (3 units). Advanced study in English language and literature or TESOL. Course content may vary from term to term. Typical seminars will focus on a problem of genre, period, a single author, or on some aspect of English language study. Prerequisites: Completion of 18 units of upper-division English and senior standing. (Fall, Spring)

## Graduate

ENGL 5000 Graduate Studies: Critical Theory and Research (3 units). Theory of literary criticism, beginning with Aristotle. Modern approaches and methods in the study of the uses of language and literature. Bibliographical resources and methods for graduate work in English. Prerequisite: Graduate standing. (Fall)

ENGL 5001 Graduate Studies: History and Research Methods in Composition/ . Rhetoric ( 3 units). This seminar will focus upon many of the theories of rhetoric which underlie contemporary classroom practices in the teaching of writing. The goal of the course is to familiarize students with some of the many issues in the field of composition by examining current theories, research, and pedagogy. Required for all students electing the teaching of writing concentration. Prerequisite: Graduate standing or consent of English Graduate Coordinator. (Fall)
ENGL 5010 Seminar: Composition/Rhetoric (3 units). The emphasis will usually be on rhetorical theories and research methods in composition studies. Students will be expected to develop a proposal for a project. Topic for this seminar may vary from semester to semester. Prerequisite: Graduate standing or consent of English Graduate Coordinator.

ENGL 5100 Seminar: Medieval Literature (3 units). This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 6 units. Prerequisite: Graduate standing or consent of English Graduate Coordinator.

ENGL 5200 Seminar: The Renaissance (3 units). This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 6 units. Prerequisite: Graduate standing or consent of English Graduate Coordinator.

ENGL 5300 Seminar: The Enlightenment and 18th Century (3 units). This seminar will focus upion the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 6 units. Prerequisite: Graduate standing or consent of English Graduate Coordinator.

ENGL 5400 Seminar: The Nineteenth Century (3 units). This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 6 units. Prerequisite: Graduate standing or consent of English Graduate Coordinator.

ENGL 5500 Seminar: The Twentieth Century ( 3 units). This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 6 units. Prerequisite: Graduate standing or consent of English Graduate Coordinator.

ENGL 5600 Seminar: American Literature (3 units). This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 9 units. Prerequisite: Graduate standing or consent of English Graduate Coordinator.
ENGL 5850 Linguistics for Teachers ( $\mathbf{3}$ units). This course is designed to familiarize students with the variety of applications of linguistics to teaching composition. Topics covered will include Transformations and Style; What Do You Teach When

You Teach Grammar?; What's Awkward About AWK?; The Relationship Between Reading and Writing, etc. Prerequisite: ENGL 3750 or 4850 or consent of instructor. (Spring)
ENGL5870 Practicum: Writing and Teaching of Composition (3 units). Supervised observation and participation in existing university writing programs. Includes regular meetings with the student's assigned supervisor and master teacher. Prerequisite: Completion of or concurrent enrollment in ENGL 5850. (Spring)
ENGL 5884 Practicum in Teaching Composition and Literature (1 unit). Supervised discussion of classroom experiences of those teaching literature and composition. Prerequisite: ENGL 5894; or concurrent enrollment in ENGL 5894; or appointment as a graduate assistant in the Department of English for the term.
ENGL 5894 Teaching Composition and Literature (2 units). (Formerly ENGL 5940.) Practical application of literary and composition theory and research. For those who plan to teach at the college level. Prerequisites: Graduate standing or consent of instructor.
ENGL 5950 Selected Topics in English (Topics to be specified in Class Schedule) ( $\mathbf{1 - 5}$ units). Development of a selected topic in English. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.
ENGL 5960 Advanced Projects in English (1-4 units). Directed study in applied research. Students will refute, refine, or replicate existing research on a subject of relevance to composition or critical analysis. Findings will be presented in a colloquium. The project will usually take more than one term to complete. Prerequisite: ENGL 5001 or 5002 and consent of the Coordinator of the English Graduate Program.
ENGL 5965 Advanced Seminar Project ( 2 units). This course is designed to assist graduate students in the literature program in developing and completing advanced seminar projects in critical analysis and practical applications required for the M.A. degree. Close faculty supervision will be provided.
ENGL 5980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Spring)
ENGL 5990 Thesis (3 units). (Fall, Spring)


# Environmental and Resource Studies 

## Degree Minor

Office: ClassroomBuilding 215,(209)667-3127
Coordinator: Ida I. Bowers (Geography)
Advisers: Kenneth Entin, Lawrence L. Giventer, Steven W. Hughes (Politics and Public Administration); Michael J. Perona (Chemistry); Walter Tordoff III, Daniel F. Williams (Biological Sciences)

The minor in environmental and resource studies is an interdisciplinary degree program open to students in any major. It is intended for students who are concerned with environmental and resource issues and with the interactions of natural systems and social processes. The focus of the minor is on the complex problems of humanenvironment relationships.

Upper-division courses counted in the major may not be counted towards the minor. However, courses in the minor may be used to satisfy prerequisites to the major and general education requirements, if applicable. See "General Education Breadth Requirements" for current information.

## Requirements ( 25 units minimum)

Complete a minimum of 25 units, including at least eight upper-division units, as outlined below:

1. Complete the following required courses in natural and social sciences ( 10 units):
a. BOTY 1050 Introduction to Botany, 4 units, or

ZOOL 1050 Introduction to Zoology, 4 units
b. CHEM 1000 Chemistry in the Modern World, 3 units

Note: Satisfactory completion of CHEM 1100 may be substituted for CHEM 1000.
c. GEOG 2010 Introduction to the Natural Environment, 3 units, or

ECON 2510 Principles of Economics II, 3 units
2. Complete one of the following courses ( $3-4$ units):

GEOL 2100 Principles of Geology, 3 units
PHSC 1000 Solar Energy Today, 3 units
PHSC 1300 Environmental Pollution, 3 units
3. Complete a minimum of 12 units of elective courses in consultation with the minor adviser from the list below. At least six units must come from the natural sciences and six units from the social sciences or humanities.
Note: Students are also advised to complete an introductory course in statistics.
a. Natural Sciences (6 units minimum)

BIOL 2400 Biology and the Sea, 2 units
BIOL 2650 Environmental Biology, 3 units
BIOL 3630 Ecology, 4 units

208 / Environmental and Resource Studies

> CHEM 3070 The Chemicals in Your Life, 3 units
> CHEM 3080 The Chemistry of Nuclear Energy, 3 units

GEOL 3000 Physical and Environmental Geology, 4 units
PHSC 3000 Energy, Ecology, and Environment, 3 units
PHSC 3500 Solar and Other Alternative Energies, 3 units
PHYS 3800 Fundamentals of Nuclear Energy, 3 units
b. Social Sciences and Humanities ( 6 units minimum)

ANTH 3000 Anthropology and Modern Social Issues, 3 units
GEOG 3020 Human Ecology, 3 units
GEOG 4070 Agricultural Geography, 4 units
GEOG 4301 Geography and Environmental Planning, '3 units
GEOG 4350 Urban Geography,'4 units
MDIS 4400 Politics of the Environment, 3 units
PSCI 3300 Introduction to Public Administration, 3 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4325 Land Use Planning, 3 units
PSCI 4340 Political Demography, 3 units
PSCI 4600 Statistical Analysis for Politics, 4 units
SOCL 3430 Population, Resources, and the American Future, 3 units
Note: Appropriate Winter Term courses may be substituted in the elective category by prior advisement and approval of the minor adviser only. Courses not given prior approval may not be counted towards the minor. Also, upon approval of the minor adviser, one to three units of individual study or internship may be applied towards elective categories under 3.


# Environmental Sciences 

# Concentration in Natural and Physical Sciences 

Office: $\quad$ Science Building 103, (209) 667-3476<br>Coordinator: Walter Tordoff III

The concentration in environmental sciences acquaints students with environmental problems and research in the areas of biological sciences, chemistry, and physical sciences. Students will complete courses in each of these areas, participate in interdepartmental seminars, and become involved in the study of an environmentally related problem. Courses are required in each of the departments to help the student better understand the nature and diversity of the environment, as well as the broad scope of research and study necessary to deal effectively with environmental problems.

Each student must satisfy the graduation requirements of the University including the completion of a major in biological sciences, chemistry, geology, physical science, or physics. In addition, students must complete requirements for the environmental sciences concentration as outlined. Students majoring in physical science may combine the environmental science concentration requirements with major requirements to complete the physical science degree as outlined in the catalog.

## Requirements ( 55 units minimum)*

1. Complete the following prerequisites to the Environmental Sciences Concentration or their equivalent when available ( 35 units):
a. BOTY 1050 Introduction to Botany, 4 units
b. ZOOL 1050 Introduction to Zoology, 4 units
c. CHEM 1100, 1110 Principles of Chemistry I, II, 10 units
d. MATH 1600 Statistics, 4 units, or

MATH 4651 Modern Probability Theory, 4 units
e. CS 1000 Introduction to Computers, 3 units
f. PHYS 2100, 2110 Basic Physics I, II, 10 units, or

PHYS 2250, 2260 General Physiçs I, II, 8 unit, and
PHYS 2252, 2262 General Physics Lab I, II, 2 units
2. Complete the following course work for the Environmental Sciences Concentration (20-21 units):

| a. | BIOL 4680 | Ecology, 4 units |
| :--- | :--- | :--- |
| b. | CHEM 2010 | Quantitative Analysis \& Basic Instrumental Techniques, |
|  |  | 4 units |
| c. | MATH 1410 | Calculus I, 4 units, or |
|  | MATH 1910 | Calculus with Applications I, 3 units |

[^13]
## 210/Environmental Sciences

d. NSCI 4960 Seminar in Environmental Science, 1 unit (two semesters required), 2 units
e. PHSC 3000 Energy, Ecology, \& Environment, 3 units, or

GEOL 3000 Physical and Environmental Geology, 4 units
f. BIOL 4980 Individual Study, 4 units, or

CHEM 4980 Individual Study, 4 units, or
GEOL 4980 Individual Study, 4 units, or
PHYS 4980 Individual Study, 4 units
Note: This study must be on an environmentally related problem which has been selected in consultation with the adviser. Each student should include additional environmental courses in consultation with the adviser.


## Ethnic Studies

Degree Minor and Concentration within the Liberal Studies Major

Office: Classroom Building 240B, (209) 667-3341<br>Chair: Richard L. Luevano<br>Faculty: Maria Linda Apodaca, Richard L. Luevano, Sari Miller-Antonio, Delo E. Washington

Ethnic Studies is a multidisciplinary program coordinating courses, activities, and projects to enhance the student's understanding of the roles, functions, and lifestyles of American ethnic minorities.

Students may take interdisciplinary courses offered through the ethnic studies program or courses offered by faculty from other academic disciplines. See the "Schedule of Classes" for course availability each semester. Students interested in ethnic studies as a field should consult the faculty members above regarding the "Special Major" option.

## Ethnic Studies Categories

The following is a list of the courses offered in Asian American Studies, African American Studies, and Chicano Studies designated according to the following categories:

## Category I

An introduction to the study of the role, function, and lifestyles of American ethnic groups.

ETHS 2000 Contemporary African American Studies, 3 units
ETHS 2100 Contemporary Chicano Studies, 3 units
ETHS 2200 Contemporary Asian American Studies, 3 units

## Category II

A detailed study of the cultural development of ethnic groups in America.
ANTH 3070 Peoples and Cultures of Africa, 3 units
ANTH 3101 Cultures of Asia and the Pacific, 3 units
ANTH 3301 The American Indian, 3 units
ANTH 3320 Native Peoples of Latin America; 3 units
ANTH 4130 Urban Subcultures: Chinatown, 1 unit

## Category III

A detailed study of the historical background of minority groups in America.
HIST 3510 Latin America in Colonial Times, 3 units
HIST 3520 Latin American States Since Independence, 3 units
HIST 3800 East Asia in Traditional Times, 3 units
HIST 3810 East Asia in the Modern World, 3 units

## 212 / Ethnic Studies

HIST 4500 History of Mexico, 3 units
HIST 3860 Africa Before 1885, 3 units
HIST 3880 Contemporary Africa, 1945 to the Present, 3 units
HIST 4800 Modern China, 3 units
HIST 4850 China and the. United States, 3 units

## Category IV

A study of the psychological, sociological, economic, educational, and political adjustments necessary for members of each of the groups to function in American society.

EDUC 4200 Cultural Diversity and the Classroom, 3 units
ETHS 3000 Mexican American Politics Since 1850, 3 units
ETHS 4000 Mexican American Family, 3 units
ETHS 4010 The African American Family, 3 units
ETHS 4020 The African American Woman: Soul Sister, 4 units
ETHS 4030 Asian American Families, 3 units

## Category V

A synthesis of knowledge gained in the preceding courses with some introduction of research methodology for the study of each ethnic group.

ETHS 4200 The Minority Experience, 3 units
ETHS 4350 Multiculturalism: From Bias to Reality, 3 units
ETHS 4940 Field Work in Ethnic Studies, 4 units
ETHS 4950 Selected Topics in Ethnic Studies, 1-5 units
ETHS 4960 Seminar in Ethnic Studies, 3 units, or
SSCI 4960 Social Science Interdisciplinary Seminar, 3 units
ETHS 4980 Individual Study, 1-4 units

## Minor in Ethnic Studies

## Requirements ( 18 units)

Complete 18 units in the ethnic studies program as approved by the minor adviser, including at least 12 upper division units, distributed as follows:

1. Category $I$, to include two areas, 6 units
2. Category II-V, 6 units
3. Category V, 6 units

## Minor in Chicano Studies

## Requirements (18 units)

Complete 18 units in the ethnic studies program in Chicano Studies as approved by the minor adviser, including at least 12 upper division units, distributed as follows:

1. Category I, 3-6 units
2. Category II or III, 3 units
3. Category V, 6 units
4. Category II-V, 3-6 units

## Minor in African American Studies

## Requirements (18 units)

Complete 18 units in the ethnic studies program in African American Studies as approved by the minor adviser, including at least 12 upper division units, distributed as follows:

1. Category I, 3-6 units
2. Category II or III, 3 units
3. Category V, 6 units
4. Category II-V, 3-6 units

## Liberal Studies Concentration in Ethnic Studies

Requirements ( 20 units)
Lower Division, 3 units (one course) selected from Category I
Upper Division, 17 units as approved by the major adviser to include:
6-11. units of course work from Categories II-IV.
6-11 units of course work from Category V

## Course Descriptions

Lower Division
ETHS 2000 Contemporary African American Studies (3 units). A survey of the African American experience, a look at the distinctive African American culture and customs, and an analysis of the various problems of economic, religious, political, psychological, and educational adjustment. Particular emphasis will be placed on problems encountered in the ghetto and white resistance to change in the urban and suburban communities. (Fall, Spring)

ETHS 2100 Contemporary Chicano Studies (3 units). A survey of the Chicano experience, a look at the distinctive Chicano culture and customs, and an analysis of the various problems of economic, religious, political, psychological, and educational adjustment. Particular emphasis will be placed on problems encountered in the barrio, the farm labor situation, and the educational complications of bilingualism. (Fall, Spring)

ETHS 2200 Contemporary Asian American Studies (3 units). A survey of the Asian American cultures and customs, and an analysis of the various problems of economic, religious, political, psychological, and educational adjustment. Particular emphasis will be placed on inter-ethnic identity, identity crisis, and contacts among Asian Americans.

ETHS 2950 Selected Topics in Ethnic Studies (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of ethnic studies. Topics vary each term, thus different topics may be taken for credit.

## Upper Division

ETHS 3000 Mexican American Politics Since 1850 (3 units). A critical analysis of the Chicano's political participation in the United States since 1850. Special emphasis will be placed on the cultural factors as well as economic and social conditions that allowed or prevented their full political participation. Prerequisite: ETHS 2100.

ETHS 4000 Mexican American Family (3 units). Basic sociological structure and functions of the family as a social institution. Application of role theory to the Chicano family as a unit of interacting personalities. Courtship, marriage, and child rearing practices, etc. The relationship of the Chicano family with other institutional factors of the society. Stress is placed on the changing sex roles for the Chicano family members. (Same as WMST 4000) Prerequisite: ETHS 2100 or 4200 . (Fall)

ETHS 4010 The African American Family (3 units). A social psychological approach to studying the African American family as a basic social unit. A variety of perspectives are used to describe and explain how family members function in terms of courtship, marriage, child rearing practices, etc. The family's relationship with other institutions in the wider society also is considered. (Same as WMST 4010) (Fall, Spring)

ETHS 4020 The African American Woman: Soul Sister (4 units). A review of popular notions about the identity of the African American woman in the U.S. Stereotypes will be contrasted with examples of her position, role, and status in past and present society. Explanations or systematic accounts regarding the African American woman's behavior will be offered from a social psychological perspective. (Same as WMST 4020) (Winter)

ETHS 4030 Asian-American Families (3 units). An exploration of the rich diversity in Asian-American families as they reflect the cultural histories and adaptations of East and Southeast Asian peoples in America. The nature of family organization, the socioeconomics of family resources, changing gender and status roles within the family, and the socialization process of family members into the ethnic and majority cultures will be examined. Prerequisite: ETHS 2200 or ETHS 4200.

ETHS 4200 The Minority Experience (3 units). A study of the history, culture, and current problems of racial and ethnic minorities with emphasis on cultural clashes, curriculum development, and the psychology of each major group, i.e., African American, Chicano, Asian American, and Native American. (Fall, Spring)

ETHS 4300 Chicano Student Organization (2 units). Study of the sociological and political development of Chicano student organizations in Californiahigher educational systems with emphasis on the problems of social alienation, student politics, academic achievement, etc. Prerequisite: ETHS 2100.

ETHS 4350 Multiculturalism: From Bias to Reality (3 units). An examination of progressive change from the conventional majoritarian bias to self-awareness, selfidentity and self-esteem, i.e. the changing consciousness of systematically disadvantaged groups in the United States. Utilizing the theoretical framework of Anthony Wallace, the self-articulation of African-Americans, Chicanos, LatinAmericans, Asian-Americans and women are reviewed. Integrating concepts are used to identify the operative dynamic of exclusion and to articulate an ideal of multiculturalism and diversity. Prerequisite: Upper-division standing. (Same as WMST 4350)

ETHS 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. Up to 3 units may be counted as elective units toward the minors available in Ethnic Studies. Prerequisites: Normally, ETHS 2000 or 2100 , and completion of ETHS 4000,4010 , or 4020 will serve as the minimum requirements for enrollment in ETHS 4910.

ETHS 4940 Field Work in Ethnic Studies (4 units). Work in ethnic relations is arranged to be performed in a community, an institution, or an agency setting. Efforts will be made to bridge a gap between the intellectual pursuit of knowledge and its practical application in intergroup contacts. May be repeated for a total of 8 units. (Fall, Spring)

ETHS 4950 Selected Topics in Ethnic Studies (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of ethnic studies. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor. (Spring)

ETHS 4960 Seminar in Ethnic Studies (3 units). A synthesis of existing knowledge from ethnic studies material; relating pertinent background information to special independent projects. Prerequisites: Course work in ethnic studies and consent of instructor.

ETHS 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.


## Geography

Office: (209) 667-3127

Coordinator:
E-mail:
Faculty:

Leon S. Pitman rkistler@toto.csustan.edu
Ida I. Bowers, Eric T. Karlstrom, Leon
S. Pitman, Michael J. Schmandt

The Department of Anthropology/Geography offers thie degree Bachelor of Arts, Geography, as well as courses for a concentration in the Liberal Studies major. In addition, it is one of three fields of interest in the Social Sciences major. A minor in Geography is also available. Courses are open to all students interested in obtaining a better understanding of the world in which they live.

Geography is concerned with the interrelationships between the environmental characteristics of the earth and human perception and use of them. A major goal of the department is to provide students with meaningful knowledge of the world's peoples in their different physical settings.

The Department of Anthropology/Geography supports the concept of international education and encourages students to investigate opportunities for overseas study. Certain courses offered at CSU International Programs study centers abroad are equivalent to courses in the department of Anthropology/Geography and may be used to fulfill requirements for degree options offered by the Department and/or certain general education requirements. Students should consult the International Programs Bulletin available at the circulation desk of the Library, a departmental adviser, and/or the campus International Programs Adviser for more information.

## Bachelor of Arts, Geography

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major ( 6 units):
a. GEOG 2010 Introduction to the Natural Environment, 3 units
b. Complete one of the following:

GEOG 2020 Introduction to Cultural Geography, 3 units
GEOG 2400 World Regional Geography, 3 units
GEOG 2420 Third World Regions, 3 units
Note: Completion of MDIS 2000, Library Resources, 2 units, is recommended but not required.
3. Complete the major of not less than 36 upper-division units as approved by the major adviser. Four units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.
4. Completion of a minor is recommended but not required.

Note: Students are expected to take additional courses in supporting fields that relate to their career interests. See adviser for further information.

## The Major (36 units minimum)

1. Complete 36 units of course work as follows:
a. Topical Human Geography ( 10 units minimum)
i. GEOG 3010 Cultural Geography or its equivalent, 3 units

Note: If Cultural Geography is taken at the lower-division level, GEOG 3020 (Human Ecology) should be taken to fulfill I.a.i.
ii. Complete two of the following courses:

GEOG 3020 Human Ecology, 3 units
GEOG 4070 Agricultural Geography, 4 units
GEOG 4350 Urban Geography, 4 units
be. Topical Physical Geography (6 units)
Complete the following two courses:
GEOG 3100 Climatology, 3 units
GEOG 4120 Geomorphology, 3 ủnits
c. Regional Geography (6 units minimúm)

Complete two of the following courses:
GEOG 3510 Geography of North America, 3 units
GEOG 3550 Geography of Europe, 3 units
GEOG 3570 Geography of Russia and East Europe, 3 units
GEOG 3580 Cultural Ecology of Southeast Asian Peoples, 4 units
Note: With prior approval, certain other regional geography coürses may be substituted for the courses listed above!' See your adviser.
${ }^{2} d$. Methodology (6 units minimum)
Complete two of the following courses:
GEOG 3700 Cartography, 3 units
GEOG 4700 Geographical Processes in Arid Landscapes: Death Valley, 4 units
GEOG 4710 Field Methods, 3 units
GEOG 4750 Geographic Information Systems, 3 units
Note: In the event that GEOG 4700 or 4710 is not available, see your adviser regarding a senior thesis option.
e. Upper-division Electives

Select electives to complete a total of at least 36 units, including those upperdivision units listed above.

## Applied Geography Concentration (18 units)

This concentration is designed to provide a core of geography courses which have a practical application in careers in computer mapping, city planning, public administration, or resource management.

1. Complete the prerequisites to the major.
2. Complete the following required methodology courses:

GEOG 3700 Cartography, 3 units
GEOG 3751 Introduction to Computer Applications in Geography, 3 units
GEOG 4301 Geography and Environmental Planning, 3 units
GEOG 4710 Field Methods, 3 units
3. Complete a minimum of 6 units from the following applied courses:

GEOG 4700 Geographical Processes in Arid Landscapes: Death Valley, 4 units

GEOG 4730 Computer Applications in Geography, 1-3 units
GEOG 4750 Geographic Information Systems, 3 units
GEOG 4930 Planning Issues, 1-2 units
4. Complete the following as per advisement:
a. Six units of Physical Geography
b. Three units of Regional Geography
c. Six units of Human Geography
d. Upper Division Geography Electives

## The Minor

## Requirements (18 units)

Complete 18 semester units approved by the minor adviser, including at least 15 units in upper-division courses. These upper-division units must include a minimum of one course from each of the following three categories:

1. Human Geography
2. Physical Geography .
3. Regional Geography

Note: See the department for further information.

## Liberal Studies Concentration

Liberal Studies majors who wish to take their concentration in geography are to complete a minimum of 20 units, including at least 15 units of upper-division courses.

## Requirements ( 20 units)

1. Complete two of the following courses ( 6 units):

GEOG 2010 Introduction to the Natural Environment, 3 units
GEOG 2400 World Regional Geography, 3 units
GEOG 2420 Third World Regions, 3 units
2. Complete the following courses ( 6 units):

GEOG 3010 Cultural Geography, 3 units
GEOG 3020 Human Ecology, 3 units
3. Complete the following regional course ( 3 units):

GEOG 3510 Geography of North America, 3 units
4. Complete additional units in geography ( 5 units), based on interest and career goals.

## Teaching Credentials

Majors in geography interested in a single subject teaching credential should review the social sciences waiver described in the "Social Sciences" section of this catalog. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed for the single subject credential.

## Course Descriptions

## Lower Division

GEOG 2010 Introduction to the Natural Environment (3 units). Analysis of the distribution and character of major aspects of the natural environment, including
weather, climate, landforms, soils, vegetation, and their significance and meaning to humans; humankind's impact on and use of these elements. (CAN, GEOG 2) (Fall, Spring)

GEOG 2020 Introduction to Cultural Geography (3 units). A broad based geográphical survey of major components of human culture, including forms of livelihood, religion, and language. An introduction to themes in the study of folk culture, popular culture, and settlement patterns. (CAN GEOG 4)

GEOG 2400 World Regional Geography (3 units). A survey of the major regions of the Old World, including Asia, Europe, and Africa, with emphasis on environment and contemporary economic and cultural conditions. Key topics to be considered include location, population, political status, the natural environment, type of economy, potentialities, and current problems. (CAN GEOG 4)

GEOG 2420 Third World Regions (3 units). A regional analysis of Africa and the Middle East, Asia, and Latin America, examining the spatial patterns of natural and human phenomena. Includes consideration of demographic and cultural characteristics, land use patterns, resulting economies, and current problems. (CAN GEOG 4)

## Upper Division

GEOG 3010 Cultural Geography ( 3 units). Study of the spatial variety and patterns in human cultures and an analysis of the processes of cultural change. Topics include agriculture, landuse, religion, migrations, ethnic minorities, and language. Prerequisite: Junior standing. (Fall)

GEOG 3020 Human Ecology (3 units). Study of environmental problems arising from human use of the earth's resources. Topics include population dynamics, natural resource management, land use, coastal preservation, energy resources, and humankind's relationship to nature. (Fall, Spring)

GEOG 3100 Climatology ( 3 units). The elements and controls of weather and climate; analysis of climatic regions of the world. Prerequisite: GEOG 2010 or consent of instructor.

GEOG 3300 Geography of Economic Activities (3 units). Study of world economic activity from a geographic point of view; systematic analysis of agricultural, mining, and manufacturing patterns in the various regions of the world in relation to their natural and cultural settings. Considers locational determinants of human economic activities. Prerequisite: Junior standing or consent of instructor. (Normally offered alternate years)

GEOG 3340 California Cultures and Environments ( 3 units). Course considers California's diverse natural regions and patterns in which these environments were occupied successively by native Americans, Hispanics, and later Americans. Studies modern California life, including the role and contributions of ethnic minorities, as well as demographic and environmental issues. (Fall)

GEOG3510 Geography of North America (3 units). A survey of natural and cultural factors responsible for present patterns in settlement and land use in the United States and Canada; topics discussed include agriculture, industry, transportation, and urbanization. Prerequisite: Junior standing or consent of instructor. (Spring)

GEOG 3550 Geography of Europe (3 units). The regional geography of Europe, with emphasis on present-day patterns. Prerequisite: Junior standing or consent of instructor. (Fall)

GEOG 3570 Geography of Russia and East Europe ( 3 units). A survey of the physical geography, resources, agriculture, industry, people, potential and problems of Russia and the East European countries. Prerequisite: Junior standing or consent of instructor.

GEOG 3580 Cultural Ecology of Southeast Asian Peoples (4 units). (Replaces GEOG 3590). This courses examines the cultures of southeast Asia and their life styles emphasizing complex interrelations between cultures and their environments. Includes migration and acculturation issues related to Indochinese refugees.
GEOG3650 Selected Topicsin Regional Geography (1-3 units). Regional emphasis or topic varies each semester. Course may be repeated. Prerequisite: Junior standing or consent of instructor.

GEOG 3700 Cartography ( 3 units). Introduction to thematic cartography; fundamentals of map reading and cartographic portrayal including map design, compilation, drafting, and reproduction. (Lecture, 2 hours; laboratory, 2 hours) Prerequisite: Three units of geography or consent of instructor.

GEOG 3751 Introduction to Computer Applications in Geography (3 units). Course introduces computer systems and programs used in geographic research. Students will utilize systems and programs through the context of a class-wide geographic research problem.
GEOG 3930 Historical Geography of the Central Mother Lode (1 unit). An individually-paced, two-day field trip which involves following a trip guide to sites in and around the communities of Jamestown, Sonora, Columbia, Angels Camp, Murphys, Jackson, Volcano, Sutter Creek, Amador City, and Fiddletown. At each site, students are directed to play recorded lectures on topics ranging from early gold mines, mining methods, mining towns, local history, geography, and geology. (Fall, Spring, Summer)

GEOG 3950 Historical Geography of the Northern Mother Lode (1 unit). An individually-paced, two-day field trip which involves following a trip guide to sites in and around the communities of Folsom, Coloma, Grass Valley, Nevada City, and North Bloomfield. At each site, students are directed to play recorded lectures on topics ranging from early gold mines, mining methods, mining towns, local history, geography, and geology. (Fall, Spring, Summer)
GEOG 4000 Current Trends in Geography (1-2 units). A symposium on geography featuring speakers on their special areas of research, including current theories and research approaches in geography. Topics differ each term. May be repeated for no more than 4 units of credit towards the major. Prerequisite: One lower division geography class or consent of instructor.

GEOG 4070 Agricultural Geography (4 units). Course examines a variety of agricultural systems in the world from an agro-ecological approach. The natural resources and cultural factors which interact to shape and change agricultural systems are studied in detail. (Formerly 3070) Prerequisite: One course in physical geography.

GEOG 4120 Geomorphology (3 units). Study and interpretation of the Earth's natural landforms; their distribution and the processes acting on them; includes consideration of landform evolution under varied climatic regimes. (Formerly 3120) Prerequisite: GEOG 2010 or equivalent course in physical geography or consent of instructor.

GEOG 4210 Geographic Problems in the Developing World (3 units). Analysis of natural and cultural conditions pertinent to development. Consideration of the role of geography in solution of development problems. Prerequisite: An introductory course in geography.

GEOG 4301 Geography and Environmental Planning (3 units). A survey of the linkages between geography and planning; topics may include emphasis on planning needs of non-urban regions; provisions of human services; maps as planning tools; despoliation and preservation of rural areas. Prerequisite: Junior standing or consent of instructor.

GEOG 4350 Urban Geography (4 units). Study of the spatial aspects of the city. Emphasis on the relationship of cities to each other and to the countryside, as well as on the internal structure and spatial dynamics of urban centers. Special consideration given to problems of the urban environment including urban sprawl, water and recreational needs, and controls of land use. Field trips may be required. Prerequisite: Junior standing or consent of instructor. (Fall)

GEOG 4610 Historical Geography of the United States (3 units). A study of the evolution of cultural landscapes in the United States. Emphasis on initial and sequential settlement patterns, routes of diffusion and migration, and use of resources in light of cultural traditions. Comparative analysis of regional differences in material folk culture. Prerequisites: Junior standing or consent of instructor.

GEOG 4650 Seminar in Geography (1-3 units). Topic or emphasis varies each semester; coủrse may be repeated. Prerequisite: Six units of geography or consent of instructor.

GEOG 4700 Geographical Processes in Arid Landscapes: Death Valley (4 units). Using field techniques in geography, the course analyzes geomorphic processes, climate characteristics, vegetation patterns and adaptations, and human impacts in an arid environment. Course is taught in Death Valley, and is offered only Winter Term. Prerequisite: A course in physical geography and consent of instructor.

GEOG 4710 Field Methods ( 3 units). Methods of field observation; techniques of data collection and analysis; field work and report writing required. Satisfies upper division writing proficiency requirement. Prerequisite: Six units in geography or consent of instructor. (Fall)

GEOG 4720 Local Field Excursions (1 unit). Provides students with directed field experiences, involving travel to and study of areas of special geographic significance such as Yosemite, Point Reyes, Mono Lake, and others. Course may be repeated to various destinations. Prerequisite: Consent of instructor.

GEOG 4730 Computer Applications in Geography (1-3 units). A tutorial course for self-motivated students familiar with the Macintosh computer. Students will learn mapping techniques and geographic information systems from available software. Prerequisites: Consent of instructor and knowledge of cartography.

GEOG 4750 Geographic Information Systems (3 units). The use of computers for input, storage, representation, and retrieval of spatial data for cartographic purposes; GIS as a tool in information management and decision making. Prerequisite: Consent of instructor and computer experience.

GEOG 4800 Survey of Geographic Thought and Literature (3 units). Survey of the history and philosophy of geography, its place among the sciences and social sciences, and the major contributors to the development of modern scientific geography. Prerequisite: Consent of instructor.

GEOG 4900 Directed Field Research (1-5 units). Field research conducted in any subdiscipline of geography under the direction of a specific faculty member. May be repeated for a total of 6 units. Prerequisites: Junior standing and consent of instructor.

GEOG 4910 Cooperative Education (2-4 units). Provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students serve in private or public sector positions under the supervision of the employer and Department Co-op Coordinator. May be repeated for a total of 6 units. Prerequisites: Sophomore standing and consent of departmental coordinator. (Fall, Winter, Spring).

GEOG 493 Q Planning Issues (1-2 units). On an individual basis, students will attend a selection of urban and/or county planning meetings during one term and develop reports related to issues discussed. Must provide own transportation. Prerequisite: Consent of instructor.

GEOG 4940 Internship in Geography (1-6 units). This course is designed for students who are serving as interns in public or private agencies. Students serve internship as arranged between the agency and the department. Prerequisites: Nine upper-division units in geography and consent of instructor.
GEOG 4950 Selected Topics in Geography (Topics to be specified in Class Schedule) ( $1-5$ units). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

GEOG 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

GEOG 4990 Senior Thesis (3 units). Senior thesis (a research topic to be agreed upon by the student and major professor). Geographic research and writing incorporating primary sources of data and geographic methods. Prerequisites: Senior standing, advanced course work in geography, and consent of instructor.

## Postbaccalaureate

GEOG 5800 Seminar in the Development of Geographic Thought (3 units). Seminar in the history and philosophy of geography, its place among the sciences and humanities, and the major contributors to the development of modern scientific geography. Prerequisites: Graduate standing and consent of instructor.

GEOG 5850 Seminar in Graduate Research ( 2 units). The course considers the techniques used, problems encountered, and results of the current research of graduate students. May be repeated once for credit. Prerequisite: Graduate standing and consent of instructor.

GEOG 5900 Directed Field Research (1-5 units). Field research conducted in a subdiscipline of geography under the direction of a specific faculty member. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. Available only for postbaćcalaureate credit.

GEOG 5940 Internship in Geography (1-6 units). This course is designed for postbaccalaureate or graduate students who are serving as interns in public or private agencies. Students serve internship as arranged between the agency and the department. Prerequisite: Graduate standing and consent of instructor.

GEOG 5950 Selected Topics in Geography (1-5 units). Innovative course of study in seminar format. Topics vary. Different topics may be taken for credit. Prerequisite: Consent of instructor. Available only for postbaccalaureate credit.

GEOG 5980 Individual Study (1-4 units). Individual study for qualified postbaccalaureate students in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

GEOG 5990 Thesis (3-6 units). Thesis research. May be repeated for a total of 6 units. Prerequisite: Consent of graduate adviser.


## Geology

Office:
Coordinator:
E-mail:
Faculty:
Science Building 256, (209) 667-3090
Abbas Kimyai
geol@chem.csustan.edu
Mario J. Giaramita, Abbas Kimyai

The Department of Physics, Physical Sciences, and Geology offers undergraduate curricula leading to the Bachelor of Science degree in geology. The program consists of required courses plus electives to meet the needs of students who are preparing for employment in geology and for admission to graduate study in geology.

The Bachelor of Science degree in geology serves as professional preparation for employment in fields such as geologic planning specialist, environmentalist, and park naturalist. The program is designed to provide the kind of comprehensive background required for students who wish to seek additional training in graduate and/or professional schools.

Students interested in a single subject credential in the sciences with a concentration in Earth Science should see the Teaching Credential section of Geology for more information.

## Bachelor of Science, Geology

## Requirements

1. Complete University requirements for a Bachelor of Science degree ( 51 units minimum).
2. Complete the following prerequisites to the major (32-34 units):
a. CHEM 1100,1110 Principles of Chemistry I, II, 10 units
b. MATH 1600 Statistics, 4 units, and

Introductory Computer Programming in Basic, Fortran, or Pascal, 2-4 units, or
MATH 1910, 1920 Calculus with Applications I, II, 6 units
c. PHYS 2100, 2110 Basic Physics I, II, 10 units, or PHYS 2250, 2260 General Physics I, II, 8 units, and PHYS 2252, 2262 General Physics Laboratory I, II, 2 units
d. GEOL 2100 Principles of Geology, 3 units, and GEOL 2102 Principles of Geology Lab, 1 unit
e. Lower-division geology electives, 6 units
3. Select a 12 -unit option in Geology or Petroleum Geology/Geophysical Exploration. The Bachelor of Science degree in Geology requires 26 units of upperdivision units and completion of a 12 -unit option.
4. Complete the major of not less than 38 upper-division units as specified for the Bachelor of Science degree.
5. Completion of a minor is not required.

## The Major (38 units)

1. Complete the following required cơurses ( 26 units):

GEOL 3300 Paleontology, 4 units
GEOL 3400 Plate Tectonics, 4 units
GEOL 4300 Minerals and Crystals, 3 units
GEOL 4360 Structural Geology, 4 units
GEOL 4380 Sedimentary Rocks, 4 units
GEOL 4390 Stratigraphy, 3 units
GEOL 4500 , Field Geology, 4 units
2. Select 12 units from either option a or $b$. Substitution of science or mathematics courses is permitted by approval of adviser.
a. Geology Option

GEOL 3000 Physical and Environmental Geology, 4 units
GEOL 3100 Earth Science I, 3 units
GEOL 3110 Earth Science II, 3 units
GEOL 3500 Earthquakes \& Volcanoes, 3 units
GEOL 3700 Igneous and Metamorphic Petrology, 4 units
GEOL 3800 Optical Mineralogy, 3 units
GEOL 3810 Hydrogeology, 3 units
GEOL 3900 Soil Geology, 3 units
GEOL 4350 Geophysical Explorations, 3 units
GEOL 4351 Advanced Seismic Interpretation, 3 units
GEOL 4600 Geology of Petroleum, 3 units
GEOL 4800 Advanced Theory of Hydrogeology, 4 units
GEOL 4810 Water Resources Development and Management, 4 units
GEOG 4120 Geomorphology, 3 units
b. Petroleum Geology/Geophysical Explorations Option

GEOL 4350 Geophysical Explorations, 3 units
GEOL 4351 Advanced Seismic Interpretation, 3 units
GEOL 4600 Geology of Petroleum, 3 units
Geology elective, 3 units
Petroleum Geology/Exploration Geophysics Concentration

## Requirements (24 units)

1. Complete the following courses ( 13 units):

GEOL 3100 Earth Science I, 3 units
GEOL 3400 Plate Tectonics, 4 units
GEOL 4350 Geophysical Explorations, 3 units
GEOL 4600 Geology of Petroleum, 3 units
2. Complete 11 elective units from the following courses or other electives in consultation with your adviser:*

GEOL 3000 Physical and Environmental Geology, 4 units
GEOL 3110 Earth Science II, 3 units
GEOG 3700 Cartography, 3 units
GEOG 4120 Geomorphology, 3 units
GEOL 4300 Minerals and Crystals, 3 units

## The Minor

## Requirements ( 18 units)

1. Select three to ten units selected from the following lower-division courses:

GEOL 2001 Regional Geology of California, 3 units
GEOL 2100 Principles of Geology, 3 units
GEOL 2102 Principles of Geology Lab, 1 unit
GEOL 2200 Historical Geology, 4 units
Note: Equivalent substitution permitted with approval of minor adviser.
2. Complete upper-division courses as approved by minor adviser, 8-15 units.

## Teaching Credentials

The waiver program for satisfying the subject matter competency requirements for the single subject teaching credential in the sciences was being revised at the time the catalog went to press. Students interested in a single subject credential in the sciences must consult with their adviser about the content of the new program.

## Course Descriptions

Lower Division
GEOL 2001 Regional Geology of Cálifornia (3 units). Survey of rocks, minerals, ages of geological formations and plate tectonics-continental drift, followed by field studies of the geology of the great valley, or coastal ranges, or the Sierra Nevada mountains. (Lecture, 2 hours; field trips) This course may be repeated for a total of 6 units, but only 3 units are applicable to General Education: Great Valley, 3 units; Coastal Ranges, 3 units; Sierra Nevada Mountains, 3 units. (Fall, Spring)

GEOL 2100 Principles of Geology ( 3 units). An introductory course in physical geology dealing with materials and the internal and external processes. Includes global plate tectonics which are responsible for producing and sculpturing geological features of the Earth's crust. (Lecture, 3 hours) Satisfies lecture requirement for General Education section B1. (CAN GEOL 2) (Fall, Spring)

GEOL 2102 Principles of Geology Lab (1 unit). Laboratory to accompany GEOL 2100 Principles of Geology. Classification of minerals and rocks; reading and interpreting topographic and geologic maps; studies of selected problems in plate tectonics, structural geology, ground water, mass movement, etc. (Laboratory, 3 hours, including some field trips). Prerequisite: GEOL 2100 or concurrent enrollment in GEOL 2100. Optional for non-majors; fulfills lab requirements for General Education section B1. (Fall, Spring)

GEOL 2200 Historical Geology (4 units). Introduction to the application of scientific method to the study of the history of the earth from its origin to the present; consideration of the principles and methods by which earth history is deciphered; nature and paleography of Paleozoic, Mesozoic, and Cenozoic eras. (Lecture, 3 hours; laboratory, 3 hours) (CAN GEOL 4) (Winter)

## Upper Division

GEOL 3000 Physical and Environmental Geology (4 units). Interaction of man with the geological environment. Geological'weathering and soil formation; soil geology and soil erosion; world mineral resources; waste disposal; air and water pollution; energy resources. (Lecture, 3 hours; laboratory or field work, 3 hours) (Fall, Spring)
GEOL 3100 Earth Science I (3 units). Study of physical properties of rocks, earth's internal structure, seismic techniques of earthquakes, gravity, and magnetic properties of the earth. (Lecture, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102 or consent of instructor. (Winter)

GEOL 3110 Earth Science II (3 units). Continuation of GEOL 3100. Prerequisite: GEOL 3100.

GEOL 3300 Paleontology (4 units). Morphology, systematics, evolution, and paleoecology of fossil organisms with emphasis on the phyla of major invertebrate fossils. (Lecture, 3 hours; laboratory, 3 hours̀) Prerequisite: GEOL 2100 and GEOL 2102 or equivalent.
GEOL 3400 Flate Tectonics ( 4 units). Study of the theory of plate tectonic and present magnetic gravity, heat flow, earthquake, and other evidence in the support of the theory. (Lecture, 4 hours) Prerequisite: GEOL 2100.

GEOL 3500 Earthquakes and Volcanoes ( 3 units). Application of the scientific method and geologic principles to study the nature, causes, and prediction of earthquakes and volcanoes; analysis of earthquakes and volcanoes in regional settings such as the San Andreas Fault, Coalinga, Morgan Hill, and Mammoth Lake earthquakes. (Lecture, 3 hours) Prerequisite: Completion of lower division General Education in natural sciences and mathematics, or consent of instructor. (Fall, Spring)
GEOL 3700 Igneous and Metamorphic Petrology (4 units). Origin, occurrence, identification, and classification of igneous and metamorphic rocks; mineralogical and textural features of igneous and metamorphic terrains will be examined; laboratory work will include examination of samples in hard specimen and thin sections. (Lecture 3 hours; laboratory, 3 hours, including some field trips) Prerequisite: GEOL 2100 and GEOL 2102.

GEOL3800 OpticalMineralogy (3 units). Optical properties of minerals; identification of selected minerals by optical methods; theory and use of polarizing microscope for determining optical properties of minerals. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102.

GEOL 3810 Hydrogeology ( 3 units). Theory of ground water; factors related to occurrence and development of ground water resource; occurrence of water in plutonic, sedimentary, metamorphic, and alluvial terrains. (Lecture, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102

GEOL 3900 Soil Geology: Application to Agriculture and Hydrogeology (3 units). A study of the linkages between geology, hydrogeology, and soil sciences; emphasis on soil genesis, including weathering and alteration of organic compounds, soil texture, soil structure, soil profile, soil classification, soil testing, and soil conservation. (Lecture, 3 hours). Prerequisite: GEOL 2100 and GEOL 2102 orconsent of instructor. (Spring)

GEOL 4000 California Field Excursions ( 2 units). Provides students with directed field experiences, involving long weekend or vacation travel to, and study of, geologically significant areas such as Mono Lake, Lassen/Shasta volcanoes, Death Valley, San Andreas fault, and others. Course may be repeated to different destinations. Prerequisites: GEOL 2100 and upper division standing or consent of instructor.

GEOL 4300 Minerals and Crystals (3 units). Study and classification of crystals, physical properties of crystals with their chemical composition, property of light, and optical properties of minerals under polarized light. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102 or consent of instructor.

GEOL 4350 Geophysical Explorations ( 3 units). Geophysical exploration techniques: seismic wave propagation; seismic recording instruments; seismic reflection and refraction methods; gravity surveys; magnetic surveys; and geological interpretation of geophysical data. (Lecture, 3 hours) Prerequisites: GEOL 2100, GEOL 2102 and PHYS 2110, or consent of instructor.

GEOL 4351 Advanced Seismic Interpretation ( 3 units). The course will contain (a) the study of wave propagation in layered media; correction for weathered layers; (b) determination of wave velocity in different layers; (c) utilization of experimental data to determine the possible structure of the petroleum reservoirs. (Lecture, 3 hours) Prerequisite: GEOL 4350.

GEOL 4360 Structural Geology (4 units). Structural geology deals with the ways that rocks respond to deforming forces. The ultimate aim of structural geology is to establish the history of displacements, strains, stresses, strain rates, temperatures, and pressures that the crust and upper mantle have experienced. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102.

GEOL 4380 Sedimentary Rocks (4 units). The origin, dispersal, deposition, and burial of natural sediment grains. Sedimentology is approached from two viewpoints: a descriptive approach through traditional petrography and facies analysis, and a quantitative approach through physical and chemical sciences. (Lecture, 3 hours; discussion, 1 hour) Prerequisite: GEOL 2100 and GEOl 2102. (Spring)

GEOL 4390 Stratigraphy ( 3 units). A review of rock formations and types of rocks. Sedimentary rocks will be discussed in detail. These formations will be classified and correlated. Interpretation of depositional environment will be discussed in detail. (Lecture, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102. (Fall)
GEOL 4500 Field Geology (4 units). Field methods; use of geological maps in field study; locate and study specific geologic structures; preparation of local maps and formal geologic report. (Lecture, 2 hours; laboratory, 6 hours) Satisfies upper division writing proficiency requirement. Prerequisite: WPST test; GEOL 2100 and GEOL 2102 or consent of instructor.

GEOL 4600 Geology of Petroleum (3 units). The origin of petroleum; hydrocarbon, its formation and migration into reservoir rocks will be discussed with emphasis on the types of oil fields. (Lecture, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102.

GEOL 4800 Advanced Theory of Hydrogeology (4 units). This course deals in detail with hydrodynamics of fluid flow through porous media. Detailed analysis of fluid flow as a function of space and time in the cylindrical coordinates. This course is an
integral part of hydrology dealing with water supplies in aquifers and water pollution. (Lecture, 3 hours; discussion, 1 hour) Prërequisites: 1 year physics: PHYS 2100 \& 2110 or PHYS 2250 \& 2260 and 1 year mathematics: MATH 1410 \& 1420 or MATH 1910 \& 1920 or consent of instructor.

GEOL 4810 Water Resources Development and Management (4 units). Appraisal of water-resource developments from the standpoints of hydrogeology and desirable public policy; need for a national water policy to prevent waste, reduce pollution, control floods, recharge aquifers, and promote activities. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: GEOL 2100 and GEOL 2102.

GEOL 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in priyate or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisite: Sophomore standing; consent of departmental coordinator. (Fall, Spring)

GEOL 4940 Geology Internship (1-3 units). This course is intended for students who are serving as interns or conducting field work with private or governmental agencies. May be repeated for a total of 6 units. Prerequisites: Upper-division standing and consent of adviser. (Fall, Spring)

GEOL 4950 Selected Topics in Geology (1-5 units). Special studies in selected areas of geology. Course content may vary each term; different titles may be taken for credit. Prerequisite: Upper-division standing or consent of instructor. (Fall, Spring)

GEOL 4980 Individual Study (1-4 units). For the student capable of independent study in geology; may be field-oriented or the study of some specialized topic. Prerequisite: Consent of instructor. (Fall, Spring)

## Postbaccalaureate

GEOL 5900 Directed Field Research (1-6 units). Field research to be conducted in an area of geology under the general supervision of a faculty member. May be repeated for a total of 6 units. Prerequisite: Bachelor's degree and consent of instructor. (Fall, Spring)

GEOL 5960 Graduate Project (1-6 units). Alternative to a thesis. Directed study in applied research resulting in a written document. Prerequisites: Admission to classified graduate standing and consent of graduate adviser.

GEOL 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Spring)

GEOL 5990 Thesis (1-6 units). Preparation of a thesis for partial fulfillment of special master's program. Prerequisite: Admission to classified graduate standing. (Fall, Spring)


# Gerontology <br> Degree Minor 

Office: $\quad$ Classroom Building 213, (209) 667-3408
Coordinator: Walter E. Doraz

Gerontology is the study of aging with particular focus on the latter part of the life cycle. It is an interdisciplinary minor open to students in any major. The minor's primary objective is to examine biological-physiological, sociological-psychological, economic-political, and related health and cultural processes as they contribute to understanding human aging. This option is designed to serve individuals majoring in social sciences and health professions, people currently working for organizations serving the aging, and all persons interested in gaining greater insight into the problems and opportunities associated with aging.

## Requirements (18 units)

1. Complete the following required courses ( 12 units):

COMM 4130 Communication and Aging, 3 units
MDIS 3000 Introduction to Gerontology, 3 units
PSYC 3340 Human Development III: Adulthood and Aging, 3 units
SOCL 4710 Sociology of Aging, 3 units
2. Select one elective course each from areas $\boldsymbol{a}$ and $\boldsymbol{b}$ below ( 6 units):
a. ETHS 4000 The Mexican-American Family, 3 units

ETHS 4010 The Black American Family, 3 units
SOCL 3150 The Family, 3 units
b. COMM 4060 Family Communication, 3 units

COMM 4180 Health Communication, 3 units
SOCL 4700 Medical Sociology, 3 units
SOCL 4720 Sociology of Death, 3 units
SOCL 4730 Alcohol and Alcoholism, 3 units
Note: It is strongly recommended that students complete an internship or immersion program in their major which complements their interest in gerontology.

## Course Description

MDIS 3000 Introduction to Gerontology ( 3 units). A broad overview of the current concepts, issues, and processes associated with human aging and the latter part of the life cycle. The problems and challenges facing the older person will be explored from the perspectives of various disciplines as they contribute to our understanding of related systems. Prerequisite: Consent of instructor.


## History

Office: Classroom Building 118, (209) 667-3238
Chair: Austin Metumara Ahanotu
Faculty: Austin Metumara Ahanotu, Britten Dean, Curtis R. Grant, David K. Keymer (Adjunct Professor), Samuel A. Oppenheim, Samuel O. Regalado, Nancy J. Taniguchi, Ronald J. VanderMolen, Richard C. Weikart
Emeritus Faculty: John E. Caswell, J. W. Smurr, David Bentheim Stenzel

The Department of History offers the degrees Bachelor of Arts, History; Master of Arts, History; Master of Arts in History, with a concentration in International Relations; and Master of Arts in History, with a concentration for secondary school teachers. The University also offers the degree Bachelor of Arts, Liberal Studies, with a concentration in History for those seeking a multiple subjects credential.

History provides a general background for studying the humanities or social sciences and, understanding the contemporary world. Preparation in history is especially useful for careers which require careful judgment on the basis of limited evidence, such as the United States Foreign Service, journalism, and law, as well as teaching and a variety of civil service functions.

The Department of History supports the concept of international education and encourages students to investigate opportunities for overseas study described elsewhere in the catalog.

## Bachelor of Arts, History

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major (8 units).
a. A one-year sequence in American, European, or non-Western history, 6 units
b. HIST 2900 Library Resources and Bibliographical Control for Historical Research, 2 units
Note: MDIS 2000 and SSCI 3000 also satisfy this requirement.
3. Complete the major of 30 upper-division units. No courses graded CR may be counted towards the major, except for eight units taken in courses graded exclusively CR/NC.
Note: Reading knowledge of a foreign language is desirable for the Bachelor's degree and is required for some of the graduate history programs here and in most other schools.

## The Major ( $\mathbf{3 0}$ units minimum)

1. Select one course in upper-division European history from the following list (3 units):

HIST 3120 Ancient Mediterranean World, 3 units*
HIST 3140 Medieval Europe, 3 units*
HIST 3210 Renaissance \& Reformation, 3 units*
HIST 3220 Absolutism and Revolution, 3 units
HIST 3230 Nineteenth Century Europe, 3 units
HIST 3240 Twentieth Century Europe, 3 units
2. Select one course in upper-division American history from the following list (3 units):

HIST 3610 Colonial America, 3 units
HIST 3620 Early National America, 3 units
HIST 3630 America after the Civil War, 3 units
HIST 3640 Contemporary America, 3 units
3. Complete two upper-division courses in non-Western history from the following list (6 units):

HIST 3510 Latin America in Colonial Times, 3 units*
HIST 3520 Latin America States Since Independence, 3 units
HIST 3800 East Asia in Traditional Times, 3 units*
HIST 3810 East Asia in the Modern World, 3 units
HIST 3860 Africa Before 1885, 3 units*
HIST 3880 Contemporary Africa, 3 units
HIST 3900 Arab/Islamic Civilization: Origins to the Present, 3 units*
HIST 4041 Colonialism and the Modern State in Africa and Asia, 3 units
Note: At least two courses from 1, 2, \& 3 above must be in a pre-modern era. Courses fulfilling this requirement are starred (*). Also fulfilling this requirement is:
HIST 4350 English Culture to 1603, 3 units.
4. Select one of the following courses (4 units):

HIST 4960 Directed Reading Seminar, 4 units
HIST 4990 Senior Thesis, 4 units
5. Complete sufficient electives to equal at least 30 upper-division units in history.

## Minor in History

## Requirements (18 units)

Complete 18 units in history, of which 12 units must be upper-division history courses. All but Winter Term courses are to be taken for a letter grade.

Select courses for the degree minor in history in consultation with and approval of the minor adviser.

## Liberal Studies Concentration in History

## Requirements ( $\mathbf{2 0}$ units)

Upon advisement, complete 20 units from both Western (American and European) and non-Western courses, in approximately equal amounts. At least 15 units must be upper division.

## Teaching Credentials

Students interested in teaching history at the secondary level should consider the single subject program in History and the Social Sciences, as described elsewhere in this catalog. History majors may add sufficient social science courses to complete this waiver program.

## Master of Arts Degree Programs in History

There are three degree programs within the Master of Arts, History:

1. Master of Arts

This degree program is appropriate for persons interested in pursuing the study of history for college teaching or for other purposes. Students may specialize in American or modern European history.

## 2. Master of Arts: Secondary School Teachers Concentration

This program is designed for persons with junior or senior high school teaching credentials and is considered a terminal degree.

## 3. Master of Arts: International Relations Concentration

This program is of particular interest to those in professional military careers, those wishing to supplement their professional training in certain civil service careers, and those desiring an interdisciplinary background for teaching.

## Prerequisites for Admission

## All Programs

1. A grade point average of 3.0 in the undergraduate major and in all subsequent course work. Since applicants' experience is considered toward admission to the Secondary School Teachers and the International Relations Concentrations, students applying to those programs who lack the 3.0 GPA may petition for admission with conditionally classified status.
2. Satisfactory performance on the Graduate Record Examination, General Test\#1.

## Master of Arts

Complete prerequisites for admission to all programs listed above, as well as the following:

1. Twenty-four units of upper-division history, including a senior thesis or equivalent.
2. Satisfactory performance in the history section of the Graduate Record Examination.
3. Reading knowledge of an appropriate foreign language or 9 units of approved 4000- and 5000-level course work in other departments.

## Secondary School Teachers Concentration

Complete prerequisites for admission to all programs listed above, and have the following:

1. A valid California single subject teaching credential or a teaching minor in Social Sciences, History, or Government.
2. Adequate academic background as evaluated by the Graduate Committee.

## International Relations Concentration

Complete prerequisites for admission to all programs listed above, and demonstrate adequate academic background, informal preparation, and/or job-related experience, as evaluated by the History/International Relations Graduate Committee.

## Requirements for the Degree

Each student will be assigned an adviser immediately upon acceptance. The student and adviser will develop a program adapted to the student's specific goals. After the student completes a minimum of 10 units and is promoted to "candidate for the degree," an examining committee will be appointed for the candidate.

## All Programs

1. Thirty units are required, of which 24 units are to be taken in courses offered by CSU Stanislaus.
2. Fifteen of the 24 units are to be taken after admission to classified graduate standing. .
3. No course work below "B" may be applied to any M.A. requirement, nor are CRgraded courses applicable.
4. When enrolled in a 4000-level (senior) course, the graduate student must do an appropriate paper or equivalent exercise beyond that required of undergraduates.
5. Each student's record will be reviewed after completing 10 units, and periodically thereafter, by the appropriate graduate committee. The student must maintain satisfactory progress.
6. A student not doing a thesis must submit at least two substantial papers through the adviser to be read by the examining committee.
7. A comprehensive written examination is required of all candidates and will cover all work taken in the program. In addition, an oral examination may be required at the discretion of the examining committee.
8. In the papers and examination, the student is expected to demonstrate knowledge of subject matter, including working knowledge of the seminal works in the field, and competence in the following three skills: ability to perform research operations, analytical skills, and literary skills.

## Master of Arts

Complete all of the requirements for all programs listed above, as well as the following:

1. At least 15 graduate units from the following:

HIST 5910 Graduate Studies-American and/or HIST 5920 Graduate Studies-European (two four-unit sections required, 8 units)
HIST 5930 History of Historical Writing (required), 4 units
HIST 5950 Selected Topics offered during Winter Term, 2-4 units
HIST 5980 Individual Study, 1-4 units
HIST 5990 Thesis, 3-6 units
2. Additional units to complete a minimum of 30 units selected from the 4000 - and 5000-level courses listed in the catalog, except for HIST 4970, 4980, and 4990, for which parallel graduate numbers exist.

## Secondary School Teachers Concentration

Complete all of the requirements for all programs listed above, as well as the following:

1. At least 15 graduate units from the following:

HIST 5910 Graduate Studies-American or HIST 5920 Graduate Studies-European (one section required; 4 units)
HIST 5930 History of Historical Writing (required), 4 units
HIST 5980 Individual Study, 1-4 units
HIST 5990 Thesis, 3-6 units
2. Additional units to complete a minimum of 30 units selected from the 4000 -and 5000-level courses listed in the catalog, except for HIST 4970 and 4980. Up to nine units of appropriate course work in a field other than History may be selected from senior and graduate courses in other departments, provided the student has completed the specified prerequisites.

## International Relations Concentration

Complete all of the requirements for all programs listed above, as well as the following:

1. At least 15 graduate units from the following:

HIST/PSCI 5000 International Relations Seminar (required), 4 units HIST 5910 Graduate Studies-American (may be repeated), 4 units
HIST 5920 Graduate Studies-European (may be repeated), 4 units
HIST 5930 History of Historical Writing (required), 4 units
HIST 5950 Selected Topics in History (may be repeated), 4 units
HIST 5980 Individual Study, 1-4 units
HIST 5990 Thesis (optional), 3-6 units
2. Additional units to complete a minimum of 30 units selected as follows:
a. Up to six units of appropriate postgraduate work from other institutions of higher learning may apply toward this requirement.
b. A 5000 -level course listed above, or appropriate winter term courses numbered HIST 5970, PSCI 5970, or ECON 5970.
c. Any of the following courses, or others as offered:

ECON 4050 Comparative Economic Systems, 3 units
ECON 4415 International Economics, 3 units
ECON 4420 The Economy of Russia, 3 units
GEOG 3550 Geography of Europe, 3 units
GEOG 3570 Geography of the U.S.S.R. and Eastern Europe, 3 units
GEOG 4210 Geographic Problems in the Developing World, 3 units
HIST 4041 Colonialism and the Modern State in Africa and Asia, 3 units
HIST 4340 Modern Germany, 3 units
HIST 4360 British Culture, 1603 to the Present, 3 units
HIST 4430 Twentieth-Century Russia, 3 units
HIST 4600 American Diplomatic History, 3 units
HIST 4800 Modern China, 3 units
HIST 4840 Modern Japan, 3 units
HIST 4950 Selected Topics (when an international relations topic is taught), $1-5$ units
HIST 4960 Directed Reading Seminar in History, 4 units
PSCI 4630 International Politics of Industrial Societies, 3 units

## Course Descriptions

## Lower Division

HIST 1010 World Civilizations I (3 units). Intellectual, political, and social history of world civilizations from their origins through approximately 1600. Examination of peoples' efforts to organize their society, to understand the nature of their universe, and to interpret the riddle of human destiny. (Fall)

HIST 1020 World Civilizations II (3 units). Continuation of HIST 1010. The world since approximately 1600. (Fall, Spring)

HIST 2000 Readings in History (1-2 units). Reading in a selected historical era. Concurrent enrollment in a related history course is required. Papers on works read will be required. Prerequisite: Consent of instructor. (Fall, Spring)

236 / History
HIST 2600 Problems in U.S. History ( 3 units). Focus on selected issues and themes in American history, including examination of America in relation to the world; the American Revolution; rise of democratic politics; slavery, abolitionism, and sectional conflict; race and ethnic relations; philosophies of government; reform movements; foreign policy. Open only to freshmen and sophomores. (Fall, Spring)
HIST 2950 Selected Topics in History (Topics to be specified in Class Schedule) (15 units). Development of a selected branch of history. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor. (Fall, Spring)

## Upper Division

HIST 3000 Introductory Seminar in History ( 3 units). Introduction to the study of history as a discipline, with focus on a major historical work. The circumstances under which the work was produced will be examined through reading, class discussion, and individual work with the instructor. Satisfies upper division writing proficiency requirement.

HIST 3090 Contemporary World History (3 units). Integrated global history of mankind since 1945. The aftermath of World War II; the Cold War; the collapse of colonial empires; the impact of the death of Stalin; the youth revolution; Sino-Soviet rivalry; and U.S.-Soviet detente. Prerequisite: Sophomore standing. (Spring)

HIST 3120 Ancient Mediterranean World ( 3 units). The Hellenistic Age, Roman Republic and Empire, and the triumph of Christianity. Prerequisite: Sophomore standing. (Fall)

HIST 3140 Medieval Europe ( 3 units). Western Europe from ca. 500-ca. 1300: a study of social, political, and intellectual developments. Prerequisite: Sophomore standing. HIST 1010 recommended.

HIST 3210 Renaissance and Reformation (3 units). European social, political, economic, and intellectual changes from the late Middle Ages to 1598:The Renaissance state; Renaissance humanism; the Reformation; social impact of the Reformation. Prerequisite: Sophomore standing.

HIST 3220 Absolutism and Revolution, 1598-1799 (3 units). European social, political, economic, and intellectual changes: Royal absolutism; the scientific revolution; seventeenth-century revolutions; the Enlightenment; the French Revolution. Prerequisite: Sophomore standing. (Fall)

HIST 3230 Nineteenth Century Europe ( 3 units). Democratization in the age of nationalism; Napoleon to Sarajevo. Prerequisite: Sophomore standing. (Fall)

HIST 3240 Twentieth Century Europe (3 units). Origins of World War I: The War, the uneasy peace, the democracies and the dictators between the wars, World War II and the Cold War. Prerequisite: Sophomore standing. (Fall)
HIST 3300 History of Western Christianity (3 units). A survey of the development of Christianity from the age of Constantine to the present. Emphasis will be placed on Christian thought, Christian institutions, and the relationship between Christianity and society in Western history. Prerequisite: Sophomore standing. (Spring)

HIST 3310 Judaism and Jewish History: An Introductory Survey (3 units). A survey of the history of Judaism and the Jews from their origin to the rise of the state of Israel. Emphasis will be on Jewish thought, Jewish institutions, and the relationship between the Jewish and the non-Jewish world. Prerequisite: Sophomore standing. (Fall)

HIST 3400 The Great Teachings (3 units). History and analysis of major world religions and ideologies: Greco-Roman, Buddhist, Hindu, Judaic, Christian, Islamic, Marxist. Prerequisite: Sophomore standing. (Fall)

HIST 3510 Latin America in Colonial Times (3 units). A survey of Latin American history: native Indian cultures, European conquests and resulting cultural conflict, Spanish and Portuguese rule, and trends in colonial society. Prerequisite: Sophomore standing. (Fall)

HIST 3520 Latin American States Since Independence (3 units). From the struggle for independence to the mid-twentieth century. Prerequisite: Sophomore standing. (Spring)

HIST 3610 Colonial America (3 units). The Anglo-American colonies of the North American mainland, from their foundation through their maturation and struggle for independence to their emergence as the United States of America. Prerequisite: Sophomore standing. (Fall)

HIST 3620 Early National America (3 units). United States, 1789-1865. Origins of the young republic through the Civil War. European perils and American responses; nationalism; political philosophies and emergence of democratic politics; slavery, abolitionism, and sectional conflict. Prerequisite: Sophomore standing. (Fall,Spring)

HIST 3630 America After the Civil War (3 units). United States, 1865-1914. Reconstruction through Progressivism: development of a complex urban-industrial society; coming of world power. Prerequisite: Sophomore standing. (Fall)

HIST 3640 Contemporary America (3 units). United States since 1914. World War I to the present: America's role as a great power; problems of welfare capitalism. Prerequisite: Sophomore standing. (Fall, Spring)

HIST 3680 Women in American History ( 3 units). American history with reference to female experiences, value systems, and ethnic diversity from the Colonial period to the present. Includes discussion of various theoretical approaches. (Same as WMST 3680). Prerequisite: Sophomore standing or consent of instructor.

HIST 3710 Mexican American History ( 3 units). The role of the Mexican-American in the nineteenth and twentieth centuries with emphasis on the modern period. Prerequisite: Sophomore standing.

HIST 3730 Afro American History ( 3 units). The development of the Black community in the United States; African origins, American slavery, reconstruction, and the foundations of the Black community in modern America. Prerequisite: Sophomore standing.

HIST 3800 East Asia in Traditional Times ( 3 units). Origins and development of the principal institution and cultural patterns of China, Japan, and Korea from earliest times to the nineteenth century. Prerequisite: Sophomore standing. (Fall)
HIST 3810 East Asiain the Modern World (3 units). Disintegration of the traditional civilizations of China, Japan, and Korea under the impact of the West, and the subsequent quest for reintegration and adjustment to the West since the nineteenth century. Prerequisite: Sophomore standing. (Spring)
HIST 3860 Africa Before 1885 ( 3 units). Historical development of social, political, and economic institutions of traditional African societies and relations with classical antiquity, Asia, Europe, and America. Prerequisite: Sophomore standing. (Fall)
HIST 3880 Contemporary Africa, 1945 to the Present ( 3 units). The interplay of historical forces leading to the decolonization of Africa, the reorganization of African state systems, and Africa's participation in world affairs. Prerequisite: Sophomore standing. (Spring)

HIST 3891 The Oriental Mind ( 3 units). Historical survey of the major works of Chinese thought illustrating the main tenets and evolution of Confucianism, Taoism, Buddhism, and Maoism. (Formerly 3890) Prerequisite: Sophomore standing.

HIST 3900Arab-Islamic Civilization: Originstothe Present(3 units). Anintroduction to the subject of Islam as a religion and civilization dealing with the succession problem after Muhammad's death and with the various dynasties that ruled in the Middle East from the seventh to the twentieth centuries. The various facets of the Arab/Islamic civilization will be studied. The relationship between the Middle East and the West will be closely examined. Prerequisite: Sophomore standing.

HIST 4000 Readings in History (1-2 units). Reading in a selected historical era. Concurrent enrollment in a related history course is required. Papers on works read will be required. Prerequisite: Consent of instructor. (Fall, Spring)

HIST 4041 Colonialism and the Modern State in Africa and Asia (3 units). A study of the age of European colonialism, the era of the struggle for independence and the creation of modern states. Prerequisite: One year of college-level history or consent of instructor. (Fall, Spring)
HIST 4210 European Intellectual History: Renaissance to the Present (3 units). A study of the major ideologies in modern Europe and the means by which these ideologies were institutionalized. Prerequisite: One year of college-level history or consent of instructor.

HIST 4330 Modern France (3 units). Development of the French nation with emphasis on the period since 1870. Prerequisites: One year of college-level history or consent of instructor.

HIST 4340 Modern Germany ( 3 units). The problem of German disunity since the Reformation. The rise of Prussia, romanticism and German nationalism, World War I, Hitler, and World War II, the partition of Germany since 1945. Prerequisite: One year of college-level history or consent of instructor. (Fall)

HIST 4350 English Culture to 1603 (3 units). Political, cultural, and constitutional history from the Anglo-Saxon invasion to the creation of a modern nation state. Prerequisite: One year of college-level history or consent of instructor. (Fall)

HIST 4360 British Culture 1603 to the Present (3 units). An integrated study of British cultural developments from the Stuart era to the present. Prerequisite: One year of college-level history or consent of instructor. (Spring)

HIST 4420 Russia to 1917 ( 3 units). Russia from earliest times to the revolutions of 1917. Prerequisite: One year of college-level history or consent of instructor.

HIST 4430 Twentieth-Century Russia (3 units). Russia, its empire, and world impact on the twentieth century, concentrating on the Soviet period, 1917-1991. Prerequisite: One year of college-level history or consent of instructor. (Fall, Spring)

HIST 4500 History of Mexico ( 3 units). From independence to the mid-twentieth century. Prerequisite: One year of college-level history or consent of instructor.

HIST 4600 American Diplomatic History ( 3 units). U.S. foreign relations from the colonial period to the present. Prerequisite: One year of college-level history or consent of instructor.

HIST 4630 American Legal History (3 units). A study of the chronological development of American law and legal culture from colonial times to the present through a synthesis of historical context with specific cases, doctrines and questions.

HIST 4650 History of the American West (3 units). The development and impact of the American West on the life of the nation and the interactions of ethnic groups that inhabit the West. Emphasis on the period 1803 to the present. Prerequisite: One year of college-level history or consent of the instructor.

HIST 4660 American Religious History (3 units). American religious institutions and thought from colonial origins to present; importance of European backgrounds and American environment in producing a unique American religious tradition; impact upon social and cultural development. Prerequisites: Junior standing and two courses in American history. (Fall)

HIST 4670 California History ( 3 units). Indian culture; Spanish exploration and settlement; environment; political, economic, and social factors which give California its unique character. Prerequisite: One year of college-level history or consent of instructor: (Spring)

HIST 4680 The American Mind ( 3 units). Impact of European experience and American environment; impact on the cultural milieu of industrialism, urbanism, and U.S. world involvement. Prerequisite: One year of college-level history or consent of instructor. (Fall)

HIST 4690 Sport in America Since the Civil War (3 units). An analysis of the development of sport and its impact in American society from the late nineteenth century to the present. The lectures will follow a chronological order and class members will examine such topics as industrialization, nationalism, social mobility, gender, ethnicity, and behaviorism with respect to America's sport heritage. Prerequisites: One year of college-level history or consent of instructor.

HIST 4800 Modern China (3 units). Analysis of the main trends of nineteenth and twentieth century imperialism in China and the consequent rise of Chinese antiimperialism; main features of China's socio-economic system and the gradual development of reform movements culminating under the People's Republic. Prerequisites: Junior standing and one year of college-level history. (Fall)

HIST 4840 Modern Japan ( 3 units). Development of Japan from a feudal society of the early nineteenth century to a major world power in the present day. Emphasis will be on the conflicting themes of authoritarianism and liberalism. Prerequisites: Junior standing and one year of college-level history.

HIST 4850 China and the United States ( 3 units). A comprehensive survey of the economic, political, and cultural relations between China and the United States from the eighteenth century to the present. Prerequisite: One year of college-level history or consent of instructor.

HIST 4860 Novels on African Societies (4 units). A historical explanation through African novels of social change in Africa. Although class lecture and discussion will focus on the novels of Chinua Achebe, students will be allowed to select novels of their choice.

HIST 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental co-op coordinator. May be repeated for a total of 6 units, although no more than 3 may count as elective units in the 30 -unit upper division History BA degree program. Prerequisites: A one-year sequence in history, consent of the coordinator, and junior or senior standing.

HIST 4950 Selected Topics in History (Topics to be specified in Class Schedule) (15 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

HIST 4960 Directed Reading Seminar in History (4 units). Reading on a theme or period of the student's choice. Satisfies upper division writing proficiency requirement. Prerequisite: Senior standing or consent of instructor. (Fall, Spring)

HIST 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of inștructor. (Fall, Winter, Spring)

HIST 4990 Senior Thesis (4 units). Methodology of history. Research techniques applied to investigation of original source material. May be repeated for a maximum of 8 units. Satisfies upper division writing proficiency requirement. Prerequisites: Senior standing or consent of instruçtor. (Fall, Spring)

## Graduate

HIST 5000 International Relations Seminar (4 units). Research on an international relations topic, using history or political science methodology. This course is primarily for the International Relations/History M.A. concentration, but is open to all qualified students and may be repeated with different instructors. (Spring)
HIST 5910 Graduate Studies-American (4 units); Reading of major secondary works or intensive original research in American history. Prerequisites: Advanced course work in American history as appropriate, and consent of instructor. (Fall, Spring)

HIST 5920 Graduate Studies-European (4 units). Reading of major secondary works or intensive original research in European history. Prerequisites: Advanced course work in European history as appropriate, and consent of instructor. (Fall; Spring)
HIST' 5930 The History of Historical Writing (4 units). The problem of reproducing and analyzing the past as seen through the eyes of major historians and philosophers of history from earliest times to the present. Prerequisite: Advanced course work in history. (Fall)

HIST 5950 Selected Topics in History(Topics to be specified in Class Schedule) (15 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

HIST 5980 Individual Study (1-4 units). For qualified graduate students in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

HIST 5990 Thesis (3-6 units). Thesis research. Prerequisite: Consent of instructor.


# University Honors Program 

Office: Classroom Building 105, (209) 667-3095
Directors: Susan Middleton-Keirn and Terrie L. Short
E-mail: susan@koko.csustan.edu tshort@koko.csustan.edu
Staff: rkistler@koko.csustan.edu
Office: Classroom Building 215, (209) 667-3127

For students of unusual curiosity, energy, and intelligence, the University provides an Honors Program. Its heart is an alternative General Education curriculum made up of a series of interdisciplinary seminars and sections of regular courses. The classes combine information and insight from various fields of study, and students take an active role in the shape and conduct of each one. The program also sponsors attendance at concerts, plays, exhibits, and other extracurricular activities. Students are encouraged to seek cultural and intellectual adventure.

Admission to the program is competitive and is based on an assessment of a variety of factors such as grades, test scores, essays, and interviews. The program believes in taking risks and nurturing students who show exceptional promise. For further information call, write, or e-mail the Directors.

## Honors Curriculum

Note: Prerequisite for all Honors courses is admission to membership in the Honors Program.
Freshman Year:
HONS 1960 Honors Seminar I: Issues and Advocacy (Fall) HONS 1965 Honors Seminar II: Advocacy and Society (Spring)
Sophomore \& Junior Years:
HONS 2960 Honors Seminar III: Humanities (Fall)
HONS 3960 Honors Seminar IV: Great Thinkers (Spring)
HONS 3965 Honors Seminar V: Science, Technology and Human Values (Fall)
HONS 4965 Honors Seminar VI: Self \& Community (Spring)
Senior Year:
HONS 4966 Honors Lecture Series (Spring)
HONS 4980 Individual Study (Fall, Spring)
HONS 4995 Honors Research (Fall)
HONS 1960 Honors Seminar 1: Issues and Advocacy (3 units). A single significant human problem that affects social policy, such as freedom, poverty, or war, will be studied in both its philosophical and historical contexts as well as in its contemporary manifestations. Intensive critical reading, writing, and speaking. Required of all first year Honors students. Meets G.E. Area A2: Freshman Composition (Liberal Studies Area D2a: Freshman Composition). (Fall)

HONS 1965 Honors Seminar II:Advocacy and Society (3 units). A continuation of HONS 1960. Divergent philosophies on law and government will be considered. Contemporary policy implications will be examined using the case study method. Required of all first year Honors students. Meets G.E. Area A3: Critical Thinking (Liberal Studies Area D2b: Inquiry). (Spring)

HONS 1970 Political Polemics (3 units). The analysis of persuasion and the development of effective, ethically responsible arguments of value and policy by means of debate.

HONS 2960 Honors Seminar III: Humanities (3 units). The exploration of ways in which the arts reflect human experience and values. Meets G.E. Area C2: Humanities (Liberal Studies Area C5: Humanities and Philosophy). (Fall)

HONS 3960 Honors Seminar IV: Great Thinkers ( 3 units). The examination of one or more thinkers with consideration of the age(s), representative works, philosophy/ method, biography, and contemporary meanings. Meets G.E. Area F2: UpperDivision Humanities (Liberal Studies Area D4: Area C and D Integrative). (Spring)

HONS 3965 Honors Seminar V: Science, Technology, and Human Values (WP) ( 3 units). An investigation of the scientific bases of technological innovation, the effects of technology on individual and shared values, the ethical implications of advances in fields such as medicine and information science. Satisfies upper division writing proficiency requirement. Meets G.E. Area F1: Upper-Division Science (Liberal Studies Area B7: Area B Integrative). (Fall)

HONS 4965 Honors Seminar VI: Selfand Community (WP) (3 units). Multicultural study of the relationships between ideas of, and consciousness about, the self on the one hand and the theories and realities of social community on the other. Satisfies upper division writing proficiency requirement. Meets G.E. AreaF3: Upper-Division Social Science (Liberal Studies Area A5: Human Organization). (Spring)

HONS 4966 Honors Lecture Series ( 3 units). A series of lectures treating issues of contemporary concern and the relationships between disciplinary approaches to these topics. May be repeated for a total of 12 units. Required of all Honors Program members as a capstone course following Honors Research. Meets G.E. Area D2a: Human Institutions (Liberal Studies Area A6: Global Perspectives). (Spring)

HONS 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced or specialized study. May be repeated for a total of six units. Prerequisite: Consent of instructor and Honors Program Director.

HONS 4995 Honors Research (3 units). Directed research resulting in a project which describes methodology and results. Required as a capstone course of all Honors Program members. (Fall)


# Humanities 

Office: Library Bldg 195, (209) 667-3361<br>Coordinator: Lola V. Johnson, Professor of English and Humanities

Administered by the Department of English, "Humanities" courses are taught by faculty from several different departments on campus. These courses are broader in scope than those offered from within specific disciplines and are generally interdisciplinary in nature. The courses typically involve material from two or more of the following disciplines: Art, drama, literature, music, and philosophy.

## Course Descriptions

HUM 2000 Introduction to the Humanities (3units). Introduction to the Humanities is a course which explores the ways in which people of different cultures and times express human experience in their artistic, literary, musical, and philosophical works. One example is a course which chronologically surveys the development of Western humanities from the Renaissance to the present.
HUM 3000 Exploration in Humanities (3 units). Explorations in Humanities is intended to give students an opportunity to explore in some depth one or two of the humanistic disciplines. Emphasized will be the nature and interrelationship of these disciplines, and independence in research in humanities.
HUM 4980 Individual Study ( $1-4$ units). For students capable of independent work and in need of advanced or specialized study. May be repeated for a total of six units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)


# Interpersonal Studies Interdisciplinary Minor 

Office: Coordinator:

Classroom Bldg 108, (209) 667-3371
Fred P. Hilpert (Communication Studies)

The Interpersonal Studies minor providès a course of study focused around human behavior in social systems such as the family, work group, or social relationship. The core program provides an understanding of the cultural, social, and psychological bases of the dyad and small group and introduces the student to the theoretical and empirical approaches to the field. Electives are designed to provide depth and specialization in areas related to each student's major discipline.

A minor in interpersonal studies will be especially valuable to students interested in understanding how social factors influence individual or organizational behavior. Among the professional areas which draw most heavily on interpersonal expertise are counseling, human resource development, human services, management, organizational communication, and educational psychology.

## Requirements ( 18 units)

1. Complete the following required courses as listed below ( 12 units):
a. Foundations of Interpersonal Behavior ( 6 units)

COMM 3100 Advanced Interpersonal Communication, 3 units, or PSYC 3310 Introduction to Social Psychology, 3 units,
b. The Dyad (3 units)

COMM 4050 New Rules for Social Relationships, 3 units, or
PSYC 4810 Social Psychology of Personal Relationships, 3 units
c. The Small Group (3 units)

COMM 4100 Group Communication, 3 units, or
SOCL 4020 Sociology of Small Group Dynamics, 3 units, or
PSYC 4820 Group Dynamics and Interpersonal Behavior, 3 units
2. Select two elective courses from the list below or from Winter Term courses on advisement of an Interpersonal Studies program coordinator ( 6 units):

ANTH 4165 The Family in Cross Cultural Perspective, 3 units
COMM 4060 Family Communication, 3 units
COMM 4120 Advanced Persuasion and Social Influence, 3 units
COMM 4150 Nonverbal Communication, 3 units
COMM 4160 Intercultural Communication, 3 units
PSYC 3320 Introduction to Personality, 3 units
PSYC 3790 Introduction to Counseling Theory, 3 units
SOCL 3150 The Family, 3 units
SOCL 4520 Personality and Society, 3 units


Journalism
Degree Minor

Office: Classroom Building 108゙, (209) 667-3371
Director: Thomas J. Young

Journalism is a degree minor in the Department of Communication Studies open to students in any major. It is designed to provide an academic background in aspects of mass communication applicable to work in the public media including newspapers, broadcasting, public relations, and public information functions of businesses and public service organizations. Opportunities for practical media experience and internship training are a feature of the curriculum in the minor.

## Requirements (18 units)

1. Complete JOUR 2150, Newswriting, 3 units
2. Complete the following upper-division classes ( 12 units):

JOUR 3030 Freedom of Speech and Press: Contemporary Issues, 3 units
JOUR 3040 History of Journalism, 3 units
JOUR 3012 Journalism Laboratory, 3 units, or
JOUR 3112 Radio Production Laboratory, 3 units, or
JOUR 4940 Journalism Internship, 2-4 units
COMM 4200, Mass Communication Perspectives, 3 units
3. Select three units of elective courses.

Note: Up to 6 units of the 18 unit total may be taken CRNC.

## Course Descriptions

Lower Division
JOUR 2150 Newswriting ( 3 units). A basic newswriting course for beginning journalists: reporting techniques, interviewing, introduction to communication theory, interpretive and investigative writing. (CAN JOUR 2) (Fall, Spring)

## Upper Division

JOUR 3012 Journalism Laboratory ( 3 units). A practical course in newspaper writing with the emphasis on timely coverage of campus and area events and personalities: feature writing, interviews, human interest, student government reporting, photo judgment, and some newspaper layout and headline writing. Will culminate in the public distribution of a newspaper. May be repeated three times. Prerequisites: JOUR 2150 or equivalent, and typing. (Fall, Spring)

JOUR 3020 News Editing and Copy Preparation (2 units). This class will address various issues involved in news editing and copy preparation. Specific emphasis on decisions involving copy-editing, layout, paste-up,and proofreading. Prerequisite: JOUR 2150. (Fall, Spring)

JOUR 3025 Photojournalism (2 units). Theory and practice of photojournalism. Value of the photograph in mass media and its communication of news in newspapers and magazines; photographic news assignments and development of news photo essays. Prerequisite: Consent of instructor. (Spring)

JQUR 3030 Freedom of Speech and Press: Contemporary Issues (3 units). An examination of the nature and variety of responses to value questions concerning communication, including a survey of the evolution of and current controversies in freedom of speech and press. Constitutional foundations, legal precedents, and pending cases as they bear on the people's right-to-know, the right to privacy, the right to speech and assembly, and the right of a free press will be considered. Attention also to regulation of broadcasting. (Fall)

JOUR 3040 History of Journalism ( 3 units). A historical survey of the evolution of American journalism from the colonial period to the present. (Fall, Spring)

JOUR 3112 Radio Production Laboratory (1-3 units). This is a laboratory course in the fundamentals of audio production. Training in audio console operation, use of tape recorders and microphones, tape editing, program formats, and announcing. Students will apply their skill at radio station KCSS. Students must work at least 3 hours per week at the radio station for each unit hour. Maximum of 6 units allowable. (Fall, Spring)

JOUR 4940 Journalism Internship (2-4 units). This course is designed for students in journalism who want to apply their educational experience as an intern in a public or private organization. May be repeated for credit. Prerequisite:'JOUR 2150, 3012, or 3112, or consent of instructor. (Fall, Spring)


# Latin American Studies 

## Degree Minor

Office: Classroom Building 237B, (209) 667-3037 Director: Julia G. Cruz

The minor in Latin American Studies is a multidisciplinary program seeking to provide students an in-depth knowledge of Latin American society. The program is designed to foster an understanding of Latin America today through its languages, cultures, literatures, and social, economic, and political development. Its faculty accomplish this not only through the courses offered but also through their scholarly research as well as their collaborative participation in the annual colloquium series open to students, faculty, and the community at large. The minor is useful to students planning careers in education, business, U.S. foreign policies affecting both the public and the private sectors; the foreign service; and other international organizations as well as for those who simply desire a better understanding of Latin America.

## Requirements (20 units)

1. Complete the following lower-division courses (8 units)*

SPAN 1010 Elementary Spanish I, 4 units, and SPAN 1020 Elementary Spanish II, 4 units, or equivalent course work in Portuguese
2. Complete a minimum of one course each from areas $a$ and $b$ below ( $6-7$ units): a. HIST 3510 Latin America in Colonial Times, 3 units SPAN 3300 Literature and Civilization of Spanish America I, 3 units
b. HIST 3520 Latin American States Since Independence, 3 units

PSCI 3410 Comparative Politics: Latin America, 4 units
SPAN 3310 Literature and Civilization of Spanish America II, 3 units
3. Select elective courses with the minor adviser's approval to complete the 20 required units. Courses should be selected with attention to gaining breadth of experience so the student will have taken courses from at least three disciplines in the minor. The elective courses may be additional ones taken from areas $a$ and b above or other appropriate courses, such as:

ANTH 3320 Native Peoples of Latin America, 3 units
ETHS 2100 Contemporary Chicano Studies, 3 units
HIST 4500 History of Mexico, 3 units
PSCI 4680 U.S.-Latin American Relations, 4 units
SPAN 3970 Contemporary Latin American Prose in Translation, 3 units
SPAN 4600 Literatura Mexicana, 3 units
Note: Twelve of the required 20 units must be upper-division; three of the required 12 upper-division units may be taken in courses numbered 4980, Individual Study. Where appropriate, and as approved by the minor adviser, courses offered during Winter term are also applicable.

[^14]

## Liberal Studies

Office: Classroom BldgC116,(209)667-3304
Coordinator: Peter Finley

Liberal Studies Advisers: Liberal Studies is the only major on campus with its own GE package. Only a few faculty advisers have been trained in it. They are listed here:

|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Geography Ida Bowers
Mathematics ......................................................................... Louis Feldman, Viji Sundar
Philosophy Valerie Broin
Physical Education .............................................................................William M. Morris
Physical Sciences and Geology .............................................................. Marvin Johnson
Psychology ......... Victoria Cortez, Susan Goodwyn, Lin Myers, Gary Novak, Gina Pallotta Social Sciences:
Economics, History, and Political Science ............................................... Laura Collard
Sociology ....................................................................................................... Paul O'Brien
Spanish ...................................................................................................Robert Anderson
Stockton Program .....................................................................................William Ozuna
TESOL ................................................................................................... Stephen Stryker
Undeclared ............................................................................ Laura Collard, Peter Finley
Women's Studies ........................................................................................J.J. Hendricks

The Bachelor of Arts degree program in Liberal Studies is a multidisciplinary curriculum enabling students to pursue general education in the following academic areas: arts-humanities, English-speech, mathematics-science, and social sciences. The program will provide: 1) a multidisciplinary background in liberal arts for students intending to pursue graduate study or professional careers in nontechnical fields; 2) an approved waiver of the general subjects examinations of the multiple subjects teaching credential; and 3) an opportunity to explore, while still progressing toward a degree, a greater variety of subject areas than is possible in conventional academic majors.

## Bachelor of Arts, Liberal Studies

## Requirements

1. Complete the liberal studies major including all requirements in each of the four subject matter areas (A, B, C, D below). Waiver students must complete Area F also.
2. Select an area of concentration. Units from courses completed in the concentration may be cross-counted, that is, counted both in the area of concentration and the appropriate subject matter area. CR grades are not allowed in the concentration except where no other grading option is available.
Note: Completion of the Liberal Studies program fulfills all General Education requirements. The program must conform to all other graduation requirements, however, including 124 total units, 40 upper-division units, and courses offered during Winter Term.

## Coordinating with the Multiple Subjects Teaching Credential Program

Liberal Studies is the only major with an approved waiver program leading to the multiple subjects credential program (MSCP). Liberal Studies majors on the 199192 catalog or later must complete the following curriculum if they wish to obtain a waiver of the Multiple Subjects Assessment Test. Successful completion of that examination is a requirement for entry into the Multiple Subjects Credential Program. To obtain an MSAT waiver, Liberal Studies majors on any pre-1991 catalog must complete their waiver program by June 30, 1996 or become subject to the following curriculum. See the "School of Education" section of this catalog and the MSCP application packet for other academic and professional admission requirements including CLAD and BCLAD. Also see the Liberal Studies or Multiple Subjects Credential Coordinator for details.

Students may be admitted into the credential program in Education before obtaining a bachelor's degree. With careful planning, students may be able to complete both the preliminary multiple subjects credential and the Bachelor of Arts degree in Liberal Studies by the end of their senior year. The units required in education for the credential program may count as upper-division credit toward the 124 units required for the bachelor's degree.

Courses listed under Area F must be completed to obtain a waiver. They are not required of students who do not wish to obtain a waiver. See your Liberal Studies adviser for more information.

The deadlines for submitting complete applications for admission to the credential program are in October-to commence course work the following Spring Semester; and in March-to commence course work the following Fall Semester. Note that submission of completed applications must be well in advance of the term of entry into the program. Applications may be submitted before all necessary course work is completed.

The Liberal Studies Coordinator must approve MSCP students for subject matter competency. Subject matter competency requires that all courses in Liberal Studies subject matter areas must be met with grades of at least $\mathbf{C}$ - or CR, or all part-scores of the MSAT must be met with scores high enough to waive those areas. See the Liberal Studies Coordinator for details well before entrance into the MSCP to avoid delaying progress toward the credential.

## Liberal Studies Subject Matter Areas

CSU Stanislaus courses listed below apply to the fulfillment of the subject matter areas. All areas and sub areas must be fulfilled. Cross-counting is allowed. Consult the Schedule of Classes for courses offered during Winter Term that may also fulfill these subject matter requirements. Other substitutions for these courses must be approved by petition to the Liberal Studies Coordinator before enrollment in the class; this safeguards the student from making substitutions that may not be acceptable for the Multiple Subjects Credential waiver program.

## A. Social Sciences ( $\mathbf{1 8}$ units minimum)

Six units of History and three units of Geography must be completed for Area A.

1. American Government (3 units)

PSCI 1201 American Government, 3 units
2. U.S. History Survey (3 units)

HIST 2600 Problems in U.S. History, 3 units
HIST 3610 Colonial America, 3 units
HIST 3620 Early National America, 3 units
HIST 3630 America After the Civil War, 3 units
HIST 3640 Contemporary America, 3 units
3. The Individual and the Family (3 units)

ANTH 4165 The Family in Crosscultural Perspective, 3 units
ETHS 4000 The Mexican-American Family, 3 units
ETHS 4010 The African-American Family, 3 units
MDIS 3000 Introduction to Gerontology, 3 units
PSYC 2010 Introduction to Psychology, 3 units
PSYC 3140 Human Development I, 3 units (not applicable for A. 3 if used for Area F)
PSYC 3240 Human Development II: Adolescence, 3 units
PSYC 3320 Introduction to Personality, 3 units
PSYC 3340 Human Development III: Adulthood and Aging, 3 units
SOCL 2000 Intergenerational Experiences and Life Course Development, 3 units
SOCL 3150 The Family, 3 units
4. Human and Cultural Relationships to the Earth (3 units)

ANTH 2060 Introduction to Cultural Anthropology, 3 units
ANTH 3101 Cultures of Asia and the Pacific, 3 units

ANTH 3301 The American Indian, 3 units
ANTH 3320 Native Peoples of Latin America, 3 units
GEOG 2420 Third World Regions, 3 units (Fulfills Geography requirement above)
GEOG 3010 Cultural Geography, 3 units (Fulfills Geography requirement above)
GEOG 3020 Human Ecology, 3 units (Fulfills Geography requirement above)
GEOG 3510 Geography of North America, 3 units (Fulfills Geography requirement above)
GEOG 3550 Geography of Europe, 3 units (Fulfills Geography requirement above)
GEOG 3580 Cultural Ecology of Southeast Asian Peoples, 4 units (Fulfills Geography requirement above)
GEOG 4070 Agricultural Geography, 3 units (Fulfills Geography requirement above)
SOCL 3430 Population, Resources and the American Future; 3 units
5. Humans' Relationship to Humans: Human Organization (3 units)

Any course with an asterisk will fulfill the multicultural requirement as well as A.5. (See Area E: Multicultural Requirement.)

ANTH 3000 Anthropology and Modern Social Issues, 3 units
ETHS 4200 The Minority Experience*, 3 units (Cross counts with A.7)
ETHS/WMST 4350 Multiculturalism: Bias to Reality*, 3 units (Cross counts with A.7)
GEOG 3300 Geography of Economic Activities, 3 units •
GEOG 4350 Urban Geography, 3 units
PSCI 4330 Urban Politics, 3 units
SOCL 3250 Social Issues in Crosscultural Perspectives*, 3 units (Cross counts with A.7)
SOCL 4010 Race and Ethnic Relations*, 3 units
SOCL 4520 Personality and Society, 3 units
SOCL 4800 Formal Organizations in Industrial Society, 3 units
WMST 3550 Society and Gender, 3 units
6. Global Perspectives (3 units)

ANTH 3010 The Great Discoveries, 3 units
ANTH 3750 Human Evolution, 3 units
ANTH 4211 The World in Change, 3 units
HIST 1010 World Civilization I, 3 units (Fulfills History, other than U.S. History, requirement above)

HIST 1020 World Civilization II, 3 units (Fulfills History, other than U.S. History, requirement above)

HIST 3090 Contemporary World History, 3 units (Fulfills History, other than U.S. History, requirement above)
PSCI 3600 International Relations, 3 units
SOCL 3200 Social Change, 3 units
7. Area A Integrative Requirement

One of the following upper division integrative courses must be completed for Area A. Note that some of these courses are listed in other subsections of Area A. Those courses may cross-count for both subsections. For example, SOCL 3250 may fulfill the Area A. 7 integrative requirement and the A. 5 requirement
as well. Also, any course with an asterisk will-also fulfill the multicultural requirement, too. (See Area E: Multicultural Requirement.)

ANTH 3000 Anthropology and Modern Social Issues, 3 units
ECON 4010 Economic Thought, 3 units
ETHS 4200 The Minority Experience*, 3 units (Cross counts with A.5)
ETHS/WMST 4350 Multiculturalism: From Bias to Reality*, 3 units (Cross counts with A.5)
GEOG 3020 Human Ecology, 3 units (Cross counts with A.5)
HIST 3400 The Great Teachings, 3 units
PSCI 4630 International Politics of Industrial Societies, 3 units
PSYC 4800 Origins of Human Consciousness, 3 units
SOCL 3250 Social Issues in Crosscultural Perspective*, 3 units (Cross counts with A.5)
B. Mathematics and Science (19-20 units minimum)

1. Mathematics ( 6 units)

MATH 1030 Elementary Foundations of Math I, 3 units
MATH 1040 Elementary Foundations of Math II, 3 units
2. Biological Sciences ( $3-4$ units) (Must include lab)

BIOL 1010 Principles of Biology, 3 units, and
BIOL 1020 Special Laboratory Studies, 1 unit
BOTY 1050 Introduction to Botany, 4 units (includes lab)
ZOOL 1050 Introduction to Zoology, 4 units (includes lab)
3. Chemistry ( 3 units)

CHEM 1000 Chemistry in the Modern World, 3 units
CHEM 2500 The Chemistry of Photography, 3 units (includes B. 6 lab)
CHEM 3070 The Chemicals in YourLife, 3 units (Cross counts with B.7)
CHEM 3080 The Chemistry of Nuclear Energy, 3 units
4. Physics (3 units)

PHYS 1500 Energy and Matter, 3 units
PHYS 3800 Fundamentals of Nuclear Energy, 3 units
5. Earth and Space Science (3 units)

ASTR 2100 Descriptive Astronomy, 3 units
ASTR 3000 Contemporary Astronomy, 3 units
GEOL 2001 Regional Geology of California, 3 units
GEOL 2100 Principles of Geology, 3 units
GEOL 3000 Physical and Environmental Geology, 4 units (includes B. 6 lab) (Cross counts with B.7)
GEOL 3500 Earthquakes and Volcanoes, 3 units
PHSC 2000 Introduction to Earth Science, 3 units
PHSC 2100 Atmosphere, Weather, and Climate, 3 units
6. Physical Sciences Lab (1 unit)

ASTR 2112 Descriptive Astronomy Lab, 1 unit
CHEM 1002 Chemistry in the Modern World Lab, 1 unit
CHEM 2002 Experiments for the Elementary School Classroom, 2 units
GEOL 2102 Principles of Geology Lab, 1 unit
PHYS 1502 Energy and Matter Lab, 1 unit
7. Area B Integrative Requirement (3 units)

One of the following upper-division integrative courses must be completed for

Area B. Note that some integrative courses are listed in other subsections of Area B. Those courses may cross-count. For example, CHEM 3070 fulfills the Area
B. 7 integrative requirement and the B. 3 requirement as well.

BIOL 3000 Frontiers in Biology, 3 units
CHEM 3070 The Chemicals in YourLife, 3 units (Cross counts with B.3)
GEOL 3000 Physical and Environmental Geology, 4 units (Cross counts with B.5)

## C. Arts-Humanities ( 19 units minimum)

At least 3 units of course work in C.1, C.2, or C. 3 must be completed in activity, performance, or studio courses. Those courses are marked by a double asterisk (**).

1. Art (3 units)

ART 1000 Introduction to Drawing**, 3 units
ART 1010 Drawing I**, 3 units
ART 1100 Two-Dimensional Design**, 3 units
ART 1200 Three-Dimensional Design**, 3 units
ART 1340 Introduction to Ceramics**, 3 units
ART 2515 Art History Survey-Ancient, 3 units
ART 2520 Art History Survey-Modern, 3 units
ART 2525 Art History Survey-Non-Western, 3 units
ART 2530 Art Appreciation, 3 units
ART 4515-4565 Art History (by period), 3 units
2. Drama (3 units)

DRAM 1010 Introduction to Theatre, 3 units
DRAM 1110 Playgoing, 3 units
DRAM 1500 Acting for Non-Drama Majors**, 3 units
DRAM 3020 Children's Theatre**, 3 units
DRAM 3510 Classical Theatre, 3 units
DRAM 3520 Romantic and Modern Theatre, 3 units
DRAM 3530 Contemporary Theatre, 3 units
DRAM 4020 Performance for Children**, 3 units
DRAM 4550 American Theatre, 3 units
3. Music (3 units minimum)

MUS 1000 Introduction to Music, 3 units
MUS 1190 Music Fundamentals, 3 units
MUS 1600 Basic Class Piano**, 1 unit
MUS 1620 Basic Class Guitar**, 1 unit
MUS 1630 Basic Class Voice**, 1 unit
MUS 2000 Music of World Cultures, 3 units
MUS 2400 Orchestra**, 1 unit
MUS 2420 Choral Society**, 1 unit
MUS 3341 Music for Classroom Teachers**, 3 units
MUS 3400 American Music, 3 units
MUS 3410 History of Jazz, 3 units
MUS 4400-4440 Orchestra/Chorale**, 1 unit
4. Literature (3 units)

Any literature course in any language. The following are examples from various departments:

ENGL 1010 Introduction to Literature, 3 units

ENGL 3920 Masterpieces of World Literature, 3 units (Cross counts with C.7/D.4)
ENGL 4620 Children's Literature, 3 units
FREN 3330 Aspects of the French Novel, 3 units
GERM 3930 German Literature in Translation, 3 units
SPAN 4600 Literatura Mexicana, 3 units
5. Humanities and Philosophy ( 3 units)

HUM 2000 Introduction to the Humanities, 3 units
HUM 3000 Explorations in Humanities, 3 units (Cross counts with C.7/ D.4)

PHIL 1010 Introduction to Philosophy, 3 units
PHIL 2100 Logic, 3 units
PHIL 2200 Ancient Philosophy, 3 units
PHIL 2230 Modern Philosophy, 3 units
PHIL 2400 Contemporary Moral Issues, 3 units
PHIL 3010 Classics of Western Philosophy, 3 units
PHIL 4401 Professional Ethics, 3 units
6. Foreign Language (4 units)

Any course that is the equivalent to or at a higher level than the courses
listed below:
FLAN 1010 through 1099
FREN 1010 Elementary French I, 4 units
GERM 1010 Elementary German I, 4 units
PORT 1010 Elementary Portuguese I, 4 units
SPAN 1010 Elementary Spanish I, 4 units
Sign Languages
7. Area C Integrative Requirement (3-6 units)

See Area C-D Integrative Requirement below.
D. Communication Skills ( 18 units minimum)

1. Speech (6 units)
a. Oral Communication Practice
COMM 2000 Public Speaking, 3 units
COMM 2110 Group Discussion Processes, 3 units
COMM 2400 Oral Interpretation, 3 units
COMM 3400 Oral Interpretation of Children's Literature, 3 units
b. Oral Communication Theory

COMM 2011 Approaches to Human Communication, 3 units
COMM 3010 Language and Speech Development, 3 units
COMM 4160 Intercultural Communication*, 3 units (Cross counts with C.7/D.4)
2. English Composition (9 units)
a. Freshman Composition
ENGL $1001 \quad$ Freshman Composition, 3 units
b. Inquiry ENGL 2000 Critical Inquiry, 3 units, PHIL $2000 \quad$ Philosophical Inquiry, 3 units
c. Upper Division Writing Competency

ENGL 3007 Business and Technical Communication, 3 units

ENGL 3009 Applied Writing, 3 units
Any approved Writing Proficiency (WP) course.
3. Computer Science ( 3 units)

CS 1000 Introduction to Computers, 3 units
CS 4000 . Personal Computing, 3 units
4. Area $C$ and $D$ Integrative

One of the following upper division integrative courses must be completed for the combined Areas C and D. Note that some of the integrative courses may cross-count. For example, ENGL 3920 fulfills the Area C-D integrative requirement and the C. 4 requirement as well. Also remember that any course with an asterisk will fulfill the Multicultural requirement, too. (See AreaE: Multicultural Requirement.)

COMM 4160 Intercultural Communication*, 3 units (Cross counts with
ENGL 3920 Masterpieces of World Literature, 3 units (Cross counts with C.4)
HUM 3000 Exploration in Humanities, 3 units (Cross counts with C.5)

## E. Multicultural Requirement

One of the following courses from Areas A through D must be taken. They have been given an asterisk where listed for your convenience.

COMM 4160 Intercultural Communication, 3 units ETHS 4200 The Minority Experience, 3 units'
ETHS/WMST 4350 Multiculturalism: From Bias to Reality, 3 units
SOCL 3250 Social Issues in Crosscultural Perspective, 3 units
SOCL 4010 Race and Ethnic Relations, 3 units

## F. Multiple Subjects Credential

MSAT, CLAD/BCLAD Credential Programs
Additional waiver program requirements for entry into MSAT, CLAD/BCLAD:
EDUC 3500 Early Field Experience, 2 units
LIBS 1000 Introduction to Liberal Studies, 3 units, or
LIBS 3000 Community and Diversity (WP), 3 units (Satisfies D.2.c)
LIBS 4960 Senior Seminar, 2 units
PHED 3400 Elementary Physical Education, 3 units
PSYC 3140 Human Development I: Childhood, 3 units
CLAD - for entry into CLAD, add the following to the MSAT requirements listed above:
I. EDUC 4200 Cultural Diversity and the Classroom, 3 units
2. ENGL 4800 Second Language Acquisition, 3 units, or EDUC 4430 Crosscultural Techniques for Teachers, 3 units
3. One upper-division crosscultural course (can be satisfied by Area E).
4. A total of six units of a foreign language (including units completed in Area C.6)

BCLAD - for entry into BCLAD, add the following to the CLAD requirements listed above:

1. Satisfactory completion of the Language Proficiency and Cultural Awareness examination.

## G. Concentrations

All concentrations, except English and Music, must total 20 units minimum of which at least 15 units must be upper-division. In addition to the 20 units, the Bilingual Crosscultural concentration requires completion of specified language course work or language examination. Cross-counting is allowed. Select one from the following:

Note: These concentrations are detailed in this catalog according to department. (See the Index.)

Anthropology
Applied Studies
Art
Bilingual/Crosscultural: Spanish
Bilingua//Crosscultural: S.E. Asia
Biological Sciences
Chemistry
Child Development
Communication Studies Drama
Economics
English
Ethnic Studies
Exceptional Children and Youth
French
Geography
German

History
Mathematics
Modern Languages
Music
Philosophy
Physical Education
Physical Sciences
Physics
Political Science
Psychology
Russian-Soviet Studies
Sociology
Spanish
TESOL
Women's Studies

## Course Descriptions

## Lower Division

LIBS 1000 Introduction to Liberal Studies ( 3 units). An introduction to the Liberal Studies major with an attempt to maximize the university experience. Emphasis is on self-assessment. Topics include characteristics of a well-educated person, understanding multicultural diversity, and contemporary issues. Oral and written presentations are required. Prerequisite: LIBS 1000 and MDIS 1000 cannot both be taken for credit.

## Upper Division

LIBS 3000 Community and Diversity ( 3 units). An introduction to the Liberal Studies major and the University. Focus is on multiculturalism and diversity, including perspectives on cultura//linguistics differences, gender roles and the handicapped. Satisfies upper division writing proficiency requirement. Not open to students who have completed LIBS 1000. Prerequisite: Satisfactory completion of Writing Proficiency Screening Test.

LIBS 4960 Senior Seminar (2 units). An integrative course in which students will reflect on the nature and extent of their liberal arts education. Students will be required to demonstrate both their ability to integrate studies across disciplines as well as their competencies within those disciplines. Prerequisite: LIBS 1000 or 3000.

## Applied Studies Track

$\begin{array}{ll}\text { Office: } & \text { Science Building 249, (209) 667-3461 } \\ \text { Coordinator: } & \text { Louis Feldman }\end{array}$
The Applied Studies program is preparation for entry or advancement in careers that do not correspond to other academic programs. It is a program designed for persons returning to college part-time evenings and/or weekends. Its purpose is to complement their life experiences with academic work which will make them more valuable in a variety of careers. It does not act as an approved waiver program into the Multiple Subjects Credential Program.

The rapid and significant change that has become a preeminent feature of our civilization creates a need for a new type of professional, one well qualified to deal with both the opportunities and the problems constantly arising from the state of change. The Applied Studies program educates this new type of professional by complementing life experience with academic study focusing on the following: Contemporary and Future Trends: The Major Trends in American Civilization, Economic Trends, Trends in Science and Technology; Computer Studies; and the Modern Organization.

Most upper-division courses for the Applied Studies track in the Liberal Studies major will be offered evenings on a three-year cycle. Persons with 56 or more transferable units of credit should be able to complete all requirements for a baccalaureate degree in any three consecutive years.

Course prerequisites assist students in selecting their course work. Those whodo not have the formal prerequisites for a course but feel they may be qualified for other reasons must contact the course instructor.
Note: Persons whose primary interest is business administration, computer information systems, computer science, public administration, or a teaching credential also should consult an adviser in that area.

## Requirements

1. Liberal Studies major with the Applied Studies track including a minimum of 18 units in each of the four subject areas $1,2,3$, and 4 with a maximum of 40 units in any one area;
2. A physical education activity course (for students entering before their twentyfifth birthday);
3. The Applied Studies concentration;
4. Electives to bring the student's total number of units to at least 124 and the total number of upper-division units to at least 40 , and to include at least 9 upper-division units which satisfy the University's upper-division General Education requirements (see note below);
5. A program of study approved by the student's Applied Studies adviser.

Note: Courses applicable to the University's upper-division General Education requirements are denoted throughout by the dagger symbol ( $t$ ).

## Subject Matter Areas

## Area 1. Social Sciences (18 units)

a. Complete one of the following courses in United States History: HIST 2600 Problems in U.S. History, 3 units

HIST 3610 Colonial America; 3 units
HIST 3620 Early National America, 3 units
HIST 3630 America After the Civil War, 3 units
HIST 3640 Contemporary America, 3 units
HIST 4620 America: The Rise of a Technological Society, 3 units
b. Complete one course in the United States Constitution and California state and local government.
c. Complete one of the following introductory economics courses ( 3 units):

ECON 2500 Principles of Economics I, 3 units
ECON 2510 Principles of Economics II, 3 units
d. Complete two of the following courses concerned with differing world trends. Each must be selected from a different discipline:
ANTH 3900 Women: A Crosscultural Perspective, 3 units
ANTH 4211 The World in Change, 3 units
ETHS 4200 The Minority Experience, 3 units $\dagger$
GEOG 3020 Human Ecology, 3 units $\dagger$
GEOG 3300 Geography of Economic Activities, 3 units
GEOG 4070 Agricultural Geography, 4 units
PSCI 3600 International Relations, 4 units
PSCI 4350 Government, Business and the Economy, 3 units
PSCI 4630 International Politics of Industrial Societies, 3 units
PSYC 3660 Psychology of Women, 3 units
SOCL 3200 Social Change, 3 units
e. Elective courses in anthropology, economics, ethnic studies, geography, history, political science, psychology, or sociology (normally one course)

## Area 2. Mathematics/Science (18 units)

a. Complete one course in mathematics.
b. Complete one course in biology, botany, entomology, microbiology, or zoology.
c. Complete one course in astronomy, chemistry, geology, physical science, or physics.
d. Complete one science laboratory section or course.
e. Complete one of the following courses concerned with the environment:

BIOL 2650 Environmental Biology, 3 units
GEOL 3000 Physical and Environmental Geology, 4 units $\dagger$
PHSC 1300 Environmental Pollution, 3 units
PHSC 3000 Energy, Ecology, and Environment, 3 units
PHSC 3500 Solar and Other Alternative Energies, 3 units $\dagger$
f. Elective courses in astronomy, biology, botany, chemistry, computer science, entomology, geology, mathematics, microbiology, natural science, physical sciences, physics, or zoology (normally two courses).
Area 3. Arts/Humanities ( $\mathbf{1 8}$ units)
a. Complete one course in literature, including foreign literature and philosophy.
b. Complete one course in art, drama, or music.
c. Complete two of the following courses, selected from different disciplines, which give insight into today's technological society from the viewpoint of the arts and humanities.

ART 4550 Art Since 1945, 3 units
ART 4555 American Art, 3 units $\dagger$
DRAM 3530 Modern Theatre, 3 units
DRAM 4550 American Theatre, 3 units $\dagger$
MUS 3400 American Music, 3 units $\dagger$
PHIL 4260 Twentieth Century Philosophy, 3 units
PHIL 4401 Professional Ethics, 3 units $\dagger$
d. Elective courses in art, drama, French, German, music, philosophy, or Spanish (normally three courses).
Area 4. Communication ( 18 units)
a. Complete the following course:

ENGL 1000 Critical Reading and Writing, 3 units
b. Complete one of the following courses:

ENGL 2000 Critical Inquiry, 3 units, or
PHIL 2000 Philosophical Inquiry, 3 units.
c. Complete one upper-division writing proficiency course ENGL 3007 Business and Technical Communication, 3 units
d. Complete one of the following courses concerned with modern media:

COMM 2200 Introduction to Mass Media, 3 units
COMM 4200 Mass Communication Perspectives, 3 units
ENGL 3500-3520 Studies in Film, 3-4 units
JOUR 3030 Freedom of Speech and Press: Contemporary Issues, 3 units
e. Complete an introductory course in public speaking or interpersonal communication, or
COMM 2011 Approaches to Human Communication, 3 units
f. Complete one of the following:

COMM 3100 Advanced Interpersonal Communication, 3 units $\dagger$
COMM 3120 Management Communication, 3 units
COMM 4100 Group Communication, 3 units
COMM 4120 Advanced Persuasion and Social Influence, 3 units
g. Elective courses in English, journalism, or speech.

Area 5. Physical Education
Students entering CSU Stanislaus before their twenty-fifth birthday must complete a physical education activity course.
Area 6. Concentration: Applied Studies (24 units)
a. Contemporary and Future Trends
i. Major Trends in American Civilization-one of the following courses:

ANTH 3000 Anthropology and Modern Social Issues, 3 units $\dagger$
ANTH 4140 Urban Anthropology, 3 units
ANTH 4211 The World in Change, 3 units
GEOG 4350 Urban Geography, 4 units
HIST 3090 Contemporary World History, 3 units $\dagger$
HIST 3640 Contemporary America, 3 units
PSCI 4330 Urban Politics, 4 units
SOCL 3430 Population, Resources and the American Future, 3 units
WMST 3000 Women's Studies Colloquium, 3 units
ii. Economic Trends-one of the following courses:

ACC 3005 Personal Financial Planning, 3 units $\dagger$

ECON 3150 National Income Analysis, 3 units'
ECON 3320 Money and Banking, 3 units
ECON 4050 Comparative Economic Systems, 3 units
ECON 4100 Labor Economics, 3 units
ECON 4415 International Economics, 3 units
ECON 4500 Economics of Investment, 4 units $\dagger$
ECON 4540 Public Finance and Fiscal Policy, 3 units
ECON 4600 Urban Economics, 3 units
FIN 3210 Investment Management, 3 units $\dagger$
iii. Trends in Science and Technology-one of the following courses:

BIOL 3000 Frontiers in Biology, 3 units $\dagger$
CHEM 3070 The Chemicals in Your Life, 3 units $\dagger$
CHEM 3080 The Chemistry of Nuclear Energy, 3 units
CHEM 3100 Environmental Chemistry, 3 units $\dagger$
MATH 3350 Applied Mathematical Models, 3 units $\dagger$
PHYS 3800 Fundamentals of Nuclear Energy, 3 units $\dagger$
PHYS 4930 Lasers and Holography, 4 units
b. Computer Studies

Complete 6 units from the following courses:
CIS 2000 Introduction to Business Computer Systems, 3 units
CIS 2010 COBOL Programming and Business Information Systems, 3 units
CIS 3730 Structured Programming, 3 units
CIS 4720 Data Base Management Systems, 3 units
CIS 4770 Systems Analysis and Design, 3 units
CS 1000 Introduction to Computers, 3 units
CS 1200-1350 Programming Language Laboratory, 1-3 units
CS 1500 Computer Programming I, 3 units
CS 2500 Computer Programming II, 3 units
CS 2700 Assembly Language and Computer Architecture, 3 units
CS 3050 File Processing, 3 units
CS 3100 Data Structures and Algorithms, 3 units
CS 3200 Computer Simulation Techniques, 3 units
CS 3600 Computer Graphics I, 3 units
CS 4000 Personal Computing, 3 units $\dagger$
c. The Modern Organization

Complete three courses from the following with at least 3 units in each of two or more disciplines.

COMM 4110 Organizational Communication, 3 units
MGT 3310 Management Theory and Practice, 3 units
MGT 4000 Organization and Environment, 3 units
MGT 4360 Organizational Behavior, 3 units
PSCI 3300 Introduction to Public Administration, 3 units
PSCI 4300 Organization Theory, 4 units
PSCI 4315 Public Policy Making, 3 units
PSYC 4821 Group Dynamics Workshop, 1 unit
SOCL 4800 Formal Organizations in Modern Society, 3 units

Some of the courses listed as satisfying requirements for the concentration are also listed as satisfying requirements in Areas 1,2,3, and 4; however, no more than 9 units may be used to satisfy concentration requirements and requirements in Areas $1,2,3$, and 4 simultaneously.

## Area 7. Electives

Electives to bring the student's total number of units to at least 124 and total number of upper-division units to 40 . These electives should be selected to complement the courses selected to fulfill the requirements for the concentration. Students should give serious.consideration to any electives recommended for this program. These include all courses listed above as well as other recommended electives.

Note: The lists of courses for the various requirements are not exhaustive. Courses not on these lists-including courses offered during Winter Term, approved selected topics courses, etc.-may be used to fulfill these requirements with the consent of the student's Applied Studies adviser.

## Bilingual/Crosscultural Concentration

Office: Classroom Building 125, (209) 667-3277
Coordinator: Leodoro Hernandez
The Bilingual/Crosscultural track provides the academic prerequisite for students who are planning to pursue bilingual/crosscultural credentials to teach in elementary schools. It is also designed to give graduates the language teaching skills and cultural background to teach limited- and non-English speaking students.

Requirements (20 units minimum)

1. Complete the Liberal Studies Subject Matter Area Requirements A, B, C, and D, listed above. Waiver students must also complete Area F.
2. Complete one of the two following emphases: Spanish or Southeast Asian.

Bilingual/Crosscultural-Spanish
I. Satisfactory completion of at least SPAN 3020 or the Spanish Language Assessment Test. (Students should take the test early to determine the extent of preparatory language course work needed.)
2. Cultural Component

Complete the following:
ETHS 2100 Contemporary Chicano Studies, 3 units
ENGL 4800 Second Language Acquisition, 3 units, or
EDUC 4430 Crosscultural Techniques for Teachers, 3 units
3. Crosscultural Component

Complete the following:
EDUC 4200 Cultural Diversity and the Classroom, 3 units
ETHS 4200 The Minority Experience, 3 units
4. Electives

Complete 8 units from the following:
ETHS 3000 Mexican American Politics Since 1850, 3 units
ETHS 4000 The Mexican American Family, 3 units
ETHS 4940 Field Work in Ethnic Studies (Hispanic), 1 unit
HIST 3710 Mexican American History, 3 units
HIST 4500 History of Mexico, 3 units

SPAN 3300
Literature and Civilization of Spanish America, 3 units
SPAN 4000 Literature Mexicana, 3 units
Bilingual/Crosscultural - Southeast Asian (Cambodian, Hmong, Lao)

1. Satisfactory completion of the Language Assessment Test in Cambodian, Hmong, or Lao. (Students should take the test early because CSU Stanislaus does not offer course work at a high enough level to develop competency in these languages. Only students with strong language backgrounds should attempt the Southeast Asian emphasis. Students are allowed to take the language test early and, if unsuccessful, switch to the Ethnic Studies core where the same course work in the culture is available.)
2. Cultural Component

Complete the following:
ETHS 2200 Contemporary Asian American Studies, 3 units
ENGL 4800 Second Language Acquisition, 3 units, or
EDUC 4430 Crosscultural Techniques for Teachers, 3 units
3. Crosscultural Component

EDUC 4200 Cultural Diversity and the Classroom, 3 units
ETHS 4200 The Minority Experience, 3 units
4. Electives

Complete 8 units from the following:
ANTH 3101 Cultures of Asia and the Pacific, 3 units
EDUC 4300 Teaching the Cultural Heritage of the Hmong and Lao People,
ETHS 4030 The Asian-American Family, 3 units
ETHS 4940 Field Work in Ethnic Studies (Southeast Asian), 1 unit
GEOG 3580 Cultural Ecology of Southeast Asian Peoples, 4 units

## Exceptional Children and Youth Concentration

Office: $\quad$ Classroom Building 100A, 677-3364
Coordinators: Jane S. Howard/Karen M. Sniezek
The Liberal Studies concentration in Exceptional Children and Youth was developed primarily for students interested in teaching the learning and severely handicapped at the elementary and secondary levels. Because all undergraduates may find the program valuable in better understanding exceptionality, students may choose it as a minor.

In order to apply to the Special Education Specialist Credential Program, students must possess a multiple subjects credential or single subject credential. (See the "School of Education, Teacher Education" section of this catalog for descriptions of these programs.) However, careful selection of concentration or minor electives permits students to complete more of the generic course work for the special education specialist credential. (See the "School of Education" section of this catalog for descriptions of Learning and Severely Handicapped specialization program requirements.)

## Requirements (21 units minimum)

1. Complete a minimum of 21 units including the 15 upper-division units listed below. Required courses taken to satisfy the Area A through D of the Liberal Studies major may be double counted for the concentration.

Note: Students should maintain contact with the program coordinators to be apprised of any course work changes in the credential program.
Note: The 15 required upper-division units common to both minor and concentration satisfy some of the generic requirementsfor state teacher certification in exceptionality.
2. Complete the prerequisite course:

PSYC 2010 Introduction to Psychology, 3 units
3. Complete the following required classes ( 15 units):

EDSE 4310 Introduction to Special Education Programs, 3 units
EDSE 4330 Assessment and Instruction of Language for Exceptional Pupils, 3 units
PSYC 3140 Human Development I: Childhood, 3 units
PSYC 4150 Learning Disabilities, 3 units
PSYC 4560 Theory of Direct Instruction, 3 units, or
PSYC 4550 Practicum in Direct Instruction, 3 units
4. Select one of the following elective classes to complete the concentration (3 units)

COMM 3010 Language and Speech Development, 3 units
PSYC 4130 Psychological Disorders of Children, 3 units
PSYC 4750 Applied Behavior Analysis for Severely and Learning Handicapped, 3 units
PSYC 4790 Behavioral Engineering, 3 units
Russian and East European Studies Concentration
Office: $\quad$ Classroom Building 101, (209) 667-3181
Coordinator: H. Dieter Renning

## Requirements ( 20 units minimum)

1. Complete the requirements for the Liberal Studies major.
2. Complete the concentration of not less than 20 units.

## The Concentration

1. Select 12 to 16 units from the following list, to include at least one course from each of three different disciplines:

ECON 4420 The Economy of Russia, 3 units
GEOG 3570 Geography of Russia and East Europe, 3 units
HIST 4420 Russia to 1917, 3 units
HIST 4430 Twentieth-Century Russia, 3 units
PSCI 3055 Marx on the Human Condition, 3 units
PSCI $3450 \quad$ Comparative Politics: Eastern Europe, 3 units
Note: At its discretion, the Russian-East European Studies Committee may designate additional courses-courses offered during Winter Term or regular terms-that might apply toward this list. These could be courses from the abovedisciplines orfrom otherdisciplines.
2. Complete the concentration as follows:
a. Select four units in the form of two 2-unit courses in Individual Study (ECON 4980, ENGL 4980, GEOG 4980, HIST 4980, PSCI 4980, or other appropriate disciplines) which delve more deeply into one or more aspects of previous course work taken in the concentration; and/or
b. Select four units of MDIS 4980, Russian-East European Studies Research Paper, in which the student will write an interdisciplinary research paper. The student will write the paper under the supervision of appropriate instructors from at least two academic disciplines.


# Marine Sciences 

Office: Coordinator:

Science Building 103, (209) 667-3476
Pamela Roe

The California State University operates the Moss Landing Marine Laboratories at Moss Landing, California. This marine facility functions as a seaside extension of the campuses of six cooperating State Universities (Stanislaus, Fresno, Hayward, Sacramento, San Francisco, and San Jose) and offers course work in marine biology, geology, oceanography, and other marine sciences. The curriculum is designed to fulfill major requirements for qualified upper-division and graduate students. Such students can plan their academic schedules to provide for one or more terms at the Moss Landing Marine Laboratories and will be considered as in-residence at California State University, Stanislaus.

Interested students should make early application because enrollment is limited. Consult advisers in the Department of Biological Sciences or Department of Physical Sciences for further details or write to the Director, Moss Landing Marine Laboratories, P.O. Box 450, Moss Landing, California 95039. Consult the office of the Department of Biological Sciences for information on the Master of Science in Marine Science (Marine Biology) degree.

## Master of Science in Marine Sciences

This degree program, to be offered as an interdepartmental degree on each campus in appropriate science departments (biology, geology, chemistry) in cooperation with Moss Landing Marine Laboratories (MLML), provides the opportunity for students to acquire a practical and theoretical education in the marine sciences to prepare them for careers as marine specialists, scientists and teachers. The program at MossLanding provides extensive field and laboratory work for advanced study in the marine sciences which cannot be duplicated on any one individual Cal State campus.

## Admission to the Program

The Master of Science in Marine Sciences program is administered through MLML and an academic department from a consortium campus (biological science, geology, natural science, or other department) depending on the choice of the student. The prospective student must meet the entrance requirements for the department and will be accepted into unclassified or conditionally classified graduate status by normal procedures at that campus. The student will become classified upon completion of MLML's requirements.

Admission to the MS Marine Sciences program through CSU, Stanislaus requires application both to the University and to the Department of Biological Sciences. Completed applications must be received by January for the following fall
semester or August for the following spring semester. Application materials for the Department of Biological Sciences must include a copy of transcripts of all undergraduate courses with summary of overall GPA and GPA in upper-division biological sciences courses; a statement of student's area(s) of research interests, a summary of all research experiences, scores on the GRE exam (both aptitude and Biology), and three letters of recommendation. The GRE testing program will change significantly in 1997. Once the new GRE is introduced, each student should take the package of General Test measures containing the Quantitative Reasoning Test, and the appropriate science area Subject Test related to his/her undergraduate degree (i.e., Biology, Chemistry, Geology, Physics).

All application materials should be sent to the Office of Graduate Studies. Requirements for Admission to the MS Marine Science program via CSU, Stanislaus are: A bachelor's degree in one of the biological sciences with a program comparable to the biology program at CSUS from an accredited college or university, an overall GPA of 3.0 , statement of research interests consistent with interests and facilities of Moss Landing Marine Laboratories faculty, and approval for admission" with conditional classified status by the 'Department of Biological Sciences, CSUS, and by Moss Landing Marine Laboratories. For more detailed information, contact the Office of Graduate Studies.

## MLML Classification in the Program

A conditionally classified student may become fully classified in the marine science program as set forth in the following steps:

1. Obtain an adviser at MLML and in the department of his/her choice at the home campus. Each new student in the Master's program at MLML will be assigned an adviser who may or may not be the final thesis adviser.
2. Make up any course work deficiencies in either the home campus department (see department regulations) and/or MLML. MSCI 3040 Quantitative Marine Science, and three of the following five courses are prerequisites for classified graduate standing: MSCI 3030 Marine Ecology, MSCI 3410 Geological Oceanography, MSCI 3420 Physical Oceanography, MSCI 3430 Chemical Oceanography, and MSCI 3440 Biological Oceanography. These courses may be waived by the graduate committee upon certification that equivalent courses have been completed satisfactorily. MSCI 3040, Quantitative Marine Science, cannot be counted towards the 30 -unit degree requirement.
3. Students who do not receive a grade of " $B$ " or better in the courses described in (2) above taken at MLML, or who wish to substitute equivalent courses taken elsewhere regardless of the grade(s) received, must pass a written qualifying examination given by the faculty at MLML. The examination will substitute for any equivalent examination given by home campus departments. There is no official time limit, but the exam should be taken as soon as possible; only a limited number of units taken while in unclassified status can be counted towards the degree. The exam may be repeated once, and must be passed before the student can be classified. The examination will consist of a choice of five out of six questions designed to test knowledge of the concepts and principles of oceanography, marine ecology, and statistics as covered in the courses listed under (2) above. It will be used to evaluate the student's background in these subject areas and the ability to write well and formulate answers logically. Each
answer will be graded "pass" or "fail" by two faculty members (a third faculty member will resolve disagreements) on accuracy, content, and ability to clearly communicate. For a reading list covering the required material and further details concerning the exam, see MLML's Assistant to the Director.

## Advancement to Candidacy

- In order to be advanced to candidacy, the student must have

1. attained classified standing,
2. selected a thesis problem and selected a graduate committee, and
3. completed 1 unit of MSCI 5980, Research in Marine Science, in which a thesis proposal has been written and approved by the thesis committee both for its content and the graduate English competency requirement.

The thesis committee will be composed of at least three members, including one faculty member from MLML (who is ordinarily the thesis adviser) and, at the discretion of the home campus, a representative from that campus. The other member or members of the thesis committee may also be from the home campus, or elsewhere, with the approval of the thesis adviser.

## Requirements ( $\mathbf{3 0}$ units)

A student becomes eligible for the Master's degree in Marine Science after the following requirements have been satisfied:

1. Been advanced to candidacy
2. Satisfied MLML requirements for the degree
3. Completed the following curricular requirements for a minimum total of 30 units:
a. A minimum total of 15 units of 5000 -level courses (including two units of MSCI 5850, MSCI 5860 or MSCI 5870, and 4 units of MSCI 5990).
b. Fifteen units or more of elective courses in marine sciences (courses numbered 3000 or above). The following list of elective courses can be used to satisfy major requirements:

MSCI 3050 Marine Science Diving, 3 units
MSCI 3110 Introduction to Marine Animal Behavior, 4 units
MSCI 3120 Marine Birds and Mammals, 4 units
MSCI 3130 Marine Ichthyology, 4 units
MSCI 3240 Marine Invertebrate Zoology I, 4 units
MSCI 3250 Marine Invertebrate Zoology II, 3 units
MSCI 3310 Marine Botany, 4 units
MSCI 3610 Marine Fisheries, 4 units
MSCI 3730 Topics in Marine Biology, 1-4 units
MSCI 3740 Topics in Oceanography, 1-4 units
MSCI 3750 Topics in Marine Science, 4 units
MSCI 3770 Microscopic Techniques, 3 units
MSCI 5020 Marine Instrumental Analysis, 4 units
MSCI 5040 Sampling and Experimental Design, 4 units
MSCI 5110 Ecology of Marine Birds and Mammals, 4 units
MSCI 5120 Advanced Topics in Marine Vertebrates, 1-4 units
MSCI 5210 Advanced Topics in Marine Invertebrates, 1-4 units
MSCI 5220 Biology of the Mollusca, 4 units
MSCI 5310 Biology of Seaweeds, 4 units
MSCI 5330 Advanced Topics in Marine Ecology, $1-4$ units
MSCI 5340 Advanced Biological Oceanography, 4 units
MSC 5420 Plate Tectonics, 3 units
MSCI 5440 Paleoceanography, 4 units
MSCI 5450 Deep Sea Sedimentation, 4 units
MSCI 5510 Marine Geochemistry, 4 units
MSCI 5610 Ocean Circulation and Mixing, 4 units
MSCI 5620 Satellite Oceanography, 4 units
MSCI 5630 Applications of Computers in Oceanography, 4 units
MSCI 5710 Population Biology, 3 units
MSC 5720 Subtidal Ecology, 4 units
MSCI 5740 Advanced Topics in Oceanography, $1-4$ units
MSCI 5804 Scientific Writing, 2 units
MSCI 5850 Graduate Seminar in Marine Biology, 2 units
MSC 5860 Graduate Seminar in Marine Geology, 2 units
MSCI 5870 Graduate Seminar in Oceanography, 2 units
MSCI 5980 Research in Marine Sciences, 1-4 units
herelectives, including coursesfrom the home campus departments, may
included in consultation with the graduate committee. The combination
required units (seminar and thesis and elective) must total at least 30
4. Submitted a thesis approved by the graduate committee. The thesis must conform to the rules set forth by the consortium campus' graduate office.
5. Given an oral thesis defense to include an open seminar presentation of the thesis material and a defense before the graduate committee.

## Schedule of Core Courses

(Quantitative Marine Science, Physical Oceanography, Chemical Oceanography, Geological Oceanography, Biological Oceanography, and Marine Ecology)

## Fall

MSCI 3030 Marine Ecology
MSCI 3040 Quantitative Marine Science
MSCI 3410 Geological Oceanography
MSCI 3420 Physical Oceanography

Spring
MSCI 3430 Chemical Oceanography
MSCI 3440 Biological Oceanography

## Course Descriptions

Upper Division
MSCI 3030 Marine Ecology (4 units). A field-oriented introduction to the interrelationships between marine and estuarine organisms and their environment with emphasis on quantitative data collection and analysis. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: Ecology, statistics (or concurrent registration in MSCI 3040), or consent of instructor. (MLML 103) (Fall and Spring)

MSCI 3040 Quantitative Marine Science ( 4 units). The mathematical methods for the analysis of biological, chemical, and physical data from the marine environment; experimental design, parametric, and non-parametric statistics. (Lecture, 3 hours; lab or field, 3 hours) Prerequisite: College mathematics. (MLML 104) (Fall)

MSCI 3050 Marine Science Diving (3 units). Skin and scuba diving course; pool training culminates in five ocean dives. Thorough background in diving physics and physiology. Successful completion gives NAUI, YMCA, L.A. County or MLML certification. (No credit toward science major) (Lecture, 1 hour; lab or field, 6 hours) Prerequisites: Upper division science major status, thorough physical examination, ability to pass swimming test. (MLML 105) (Fall, Spring)

MSC1 3110 Introduction to Marine Animal Behavior (4 units). Basic theoretical concepts of animal behavior, stressing the causation, development, and evolution of behavior. Emphasis is on the marine environment. (Lecture, 3 , hours; lab or field, 3 hours) Prerequisites: MSCI 3030 or consent of instructor. (MLML 110) (Fall)

MSCI 3120 Marine Birds and Mammals (4 units). Systematics, morphology, ecology, and biology of marine birds and mammals. (Lecture, 1 hour; lab or field, 6 hours) Prerequisites: Upper-division college vertebrate zoology. MSCI 3030 recommended. (MLML 112) (Spring)

MSCI 3130 Marine Ichthyology (4 units). A description of the taxonomy, and ecology of marine fishes. Both field and laboratory work concentrate on the structure, function, and habits of marine fishes and the ecological interaction of these fishes with their biotic, and abiotic surrounding. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: College zoology or equivalent. MSCI 3030 recommended. (MLML 113) (Spring)

MSCI 3240 Marine Invertebrate Zoology I (4 units). A field-oriented introduction to the structure, systematics, evolution, and life histories of the major marine invertebrate phyla. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: College zoology or consent of instructor; MSCI 3030 recommended. (MLML 124) (Fall)

MSCI 3250 Marine Invertebrate Zoology II (3 units). Field-oriented introduction to the structure, systematics, evolution, and life histories of the minor marine invertebrate phyla. (Lecture, 1 hour; lab or field, 6 hours) Prerequisites: College zoology or consent of instructor; MSCI 3030 and 3240 recommended. (MLML 125) (Spring)

MSCI 3310 Marine Botany (4 units). Introduction to the plants of the sea, marshes, and dunes, with emphasis on the morphology, taxonomy, and natural history of seaweeds and vascular plants. (Lecture 2 hours; 1 ab or field, 6 hours) Prerequisites: MSCI 3030 recommended. (MLML 131) (Fall)

MSCI 3410 Geological Oceanography (4 units). A study of the structures, physiography, and sediments of the sea bottom and shoreline. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MSCI 3420 or 3430 (concurrent registration satisfactory). (MLML 141) (Fall)

MSCI 3420 Physical Oceanography (4 units). An introduction to the nature and causes of various oceanic motions including currents, waves, tides, and mixing. Also includes the physical properties of seawater, including transmission of sound and light. Does not require calculus. (Lecture 3 hours; laboratory 3 hours) Prerequisites: college algebra; college physics recommended. (MLML 142) (Fall)

MSCI 3430 Chemical Oceanography (4 units). An introduction to the theoretical and practical aspects of the chemistry of the oceans, including major salts, dissolved gases, nutrient ions, carbonate system, transient tracers, and shipboard sampling techniques. (Lecture 2 hours; laboratory 6 hours) Prerequisites: One year of college chemistry. (MLML 143) (Spring)

MSCI 3440 Biological Oceanography (4 units). The ocean as an ecological system. Emphasis will be on the complexity of organismal-environmental interaction of the plankton, the transfer of organic matter between trophic levels and nutrient cycles. Laboratory sessions will include methods in sampling, shipboard techniques, identification of the plankton, and current analytical techniques. (Lecture, 2 hours; lab, 6 hours) Prerequisites: general biology, general chemistry. (MLML 144) (Spring)

MSCI 3550 Physiological Ecology of Marine Algae (4 units). A lecture//ab course which develops a physiological basis for understanding the adaptation of marine algae (seaweeds and microalgae) to their environment. Students will learn modern methods in physiological research, covering areas such a photosynthesis, respiration, enzyme activity, and biochemical composition. (Lecture, 2 hours; lab, 6 hours) Prerequisites: MSCI 3030, 3310, 3440, or consent of instructor. (MLML 135)

MSCI 3610 Marine Fisheries (4 units). An introduction to fishery biology, including the concepts stock, recruitment, and yield, emphasizing the parameters abundance, age, growth, and mortality. Discussion of hydrography and fishery ecology, management problems, world fisheries and mariculture, and collection and analysis of fishery data. (Lecture, 2 hours; lab, 6 hours) Prerequisites: College mathematics, MSCI 3040, or consent of instructor. MSCI 3030 recommended. (MLML 161) (Fall)

MSCI 3730 Topics in Marine Biology (1-4 units). The study of a selected area in marine biology (morphology, physiology, ecology, etc.). Subjects will vary depending on student demand and availability of instructors. Prerequisites: Consent of instructor. Offered on demand. (MLML 173)

MSCI 3740 Topics in Oceanography (1-4 units). The study of a selected area in oceanography. The subjects will vary depending on student demand and availability of instructors. Prerequisite: Consent of instructor. Offered on demand. (MLML 174)

MSCI 3750 Topics in Marine Science (4 units). The study of a selected area in marine sciences The subjects will vary from one offering to the next depending on student demand and availability of instructors. Prerequisite: Consent of instructor. Offered on demand. (MLML 175)

MSCI 3770Microscopic Techniques (3 units). Principles and techniques oflight and electron microscopy. Consideration of brightfield, darkfield, phase contrast, and interference contrast light microscopy, episcopic and diascopic illumination systems; photomicrography; preparation of materials for and operation of the scanning electron microscope. (Lecture, 2 hours; lab 3 hours) Prerequisites: One semester college physics and consent of instructor. (MLML 177) (Fall)

MSC1 4980 Independent Study (4 units). Faculty-directed study of selected research problems; open to undergraduate students with adequate preparation. Prerequisite: Consent of instructor. (MLML 180)

## Graduate

MSCI 5020 Marine Instrumental Analysis (4 units). Theory and use of advanced instrumentation; advanced field and laboratory techniques for the interpretation of data collected in marine science research. (Lecture, 2 hours; lab or field 6 hours) Prerequisites: MSCI 3420, 3430. (MLML 202) (Spring)

MSC15040 Sampling and Experimental Design (4 units). Basic design of experiments and field sampling for marine science. Discussions on random sampling, systematic sampling, subsampling survey techniques, and design of single multifactorial experiments using randomized and block experimental designs. Biases and problems of sampling marine biota. (Lecture, 4 hours) Prerequisites: MSCI 3030 and 3040. (MLML 204) (Fall)
MSCI 5110 Ecology of Marine Birds and Mammals (4 units). Community approach to the ecology of marine birds and mammals using experimental and sampling methodology. Examine distribution, abundance, trophic ecology, and behaviors of birds and mammals in Elkhorn Slough and Monterey Bay, (Lecture, 2 hours; Laboratory, 6 hours) Prerequisites: MSCI 3120, 3030 and 3040. (MLML 211) (Fall)
MSCI 5120 Advanced Topics in Marine Vertebrates (1-4 units). Advanced consideration of the ecology, physiology, and phylogeny of fishes, birds, or mammals, emphasizing current literature and research. Topics and emphasis will vary with term and instructor. May be repeated for credit when topics change. (Lecture, 2 hours; lab and field, 6 hours) Prerequisites: MSCI 3120, or 3130 and consent of instructor. (MLML 212) (Fall)

MSCI 5210 Advanced Topics in Marine Invertebrates (1-4 units). Advanced considerations of the ecology, physiology, and phylogeny of the various invertebrate phyla emphasizing current literature and research. Topics and emphasis will vary from term to term. May be repeated for credit when topics change. (Lecture, 2 hours; lab and field, 6 hours) Prerequisites: MSCI 3240 and consent of instructor. (MLML 221) (Fall)

MSCI 5220 Biology of the Mollusca (4 units). Systematics, functional morphology, ecology, and physiology. of the mollusca with emphasis on the marine forms. (Lecture, 2 hours; lab or field, 6 hours) Prerequisite: MSCI 3240 or consent of instructor. (MLML 222) (Fall)

MSCI 5310Biology of Seaweeds (4 units). Lectures-discussions on marine macroalgal biology with extensive reading of original literature. Ecologically oriented individual research projects involving laboratory culture and field experimentation. (Lecture 3 hours; lab or field, 6 hours) Prerequisites: MSCI 3310 or consent of Instructor. Offered on demand. (MLML 231)

MSCI 5330 Advanced Topics in Marine Ecology (1-4 units). Selected topics and current issues in marineecology. The subjects will vary depending on student demand and availability of instructors. Prerequisites: MSCI 3030 and consent of instructor. Offered on demand. (MLML 233)

MSCI 5340Advanced Biological Oceanography (4 units). Experimental techniques in- biological oceanography with emphasis on problems important in plankton ecology. The course includes lectures, labs, and discussions of current research problems. An individual research project involving analytical tools will be required. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: MSCI 3440 or consent of instructor. Offered on demand. (MLML 234)

MSCI 5420 Plate Tectonics ( 3 units). Historical background, modern theory and geophysical evidence of continental drift, sea floor spreading, and plate tectonics. Examinations of the impact of the recent revolution in historical geology. (Lecture, 3 hours) Prerequisite: MSCI 3410 or consent of instructor. Offered on demand. (MLML 242)

MSCI 5440 Paleoceanography (4 units). Interdisciplinary studies of the provenance, biologic, and geologic composition of marine sediments and of the organisms contributing to their formation; sedimentary processes affecting these sediments. (Lecture, 2 hours; lab, 6 hours) Prerequisites: MSCI 3410 or consent of instructor. (MLML 244) (Spring)

MSCI 5450 Deep-Sea Sedimentation (4 units). Study of the types of marine sediment found in the deepest part of all oceans; the sedimentary processes responsible for the deposition, preservation and re-deposition of these sediments. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: MSCI 3410 or consent of the instructor. (MLML 245) (Fall)

MSCI 5510 Marine Geochemistry (4 units). Geochemical processes in the oceans: thermodynamics of low-temperature aqueous reactions, weathering, oxidationreduction and biologically mediated reactions, processes occurring at the sea floor and air-sea interface. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MSCI 3430, quantitative analysis, one year calculus, or consent of instructor. Offered on demand. (MLML 251)

MSCI 5610 Ocean Circulation and Mixing (4 units). The mathematical description of the distribution of properties (density, dissolved oxygen, etc.) in the oceans relating to physical and biochemical processes. Theory of distribution of variables, geostrophic method. (Lecture, 3 hours; lab or field, 3 hours) Prerequisites: MSCI 3420, one year calculus, or consent of instructor. College physics strongly recommended. (MLML 261) (Spring)

MSCI 5620 Satellite Oceanography (4 units). Basic principles of remote sensing of the oceans. Topics to include: Electromagnetic radiation, blackbody radiation; atmospheric scattering and absorption; principles of radio metric measurements; ocean color sensing; atmospheric correction; image registration, mapping; image processing and enhancement; ocean colorimagery and temperature imagery. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: MSCI 3420, MSCI 3440 or consent of instructor. Computer literacy recommended. (MLML 262) (Spring)
MSCI 5630 Computer Applications in Oceanography (4 units). Lecture, discussion and practical experience with multi-user computer for marine science applications: use of existing programs and subroutine libraries; computercommunications; scientific
programming for data I/O and analysis. Semester project required. (Lecture, 2 hours; Lab, 6 hours) Prerequisite: MSCI 3040, college math, and consent of instructor. (MLML 263) (Fall)

MSCI 5710 Population Biology (3 units). Principles of the interaction among marine organisms which result in the alteration of population structures; techniques for assessment and management of animal populations. (Lecture, 2 hours; lab or field, 3 hours) Prerequisites: MSCI 3030, 3040, or consent of instructor. (MLML 271) (Spring)

MSCI 5720 Subtidal Ecology (4 units). The ecology of nearshore rocky subtidal populations and communities with emphasis on kelp forests. Lectures and discussions of original literature. Field work with SCUBA including group projects on underwater research techniques and community analysis, and individual research on ecological questions chosen by the student. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MLML diver certification and marine ecology. Knowledge of marine algae, invertebrates, and statistics is recommended. (MLML 272) (Spring)

MSCI 5740 Advanced Topics in Oceanography (1-4 units). The study of a selected area in oceanography. The subjects will vary depending on student demand and availability of instructors. Prerequisite: Consent of instructor. Offered on demand. (MLML 274)

MSCI 5804 Scientific Writing ( 2 units). Techniques and strategies of scientific writing used for proposals, journal submission, and abstracts for meetings. Prerequisites: Graduate standing and consent of instructor. (Discussion, 2 hours) (MLML 280) (Fall)

MSCI5850 Graduate Seminar in Marine Biology (2 units). Seminar will be held on topics changing each semester. Each student will be required to give at least one seminar. May be repeated once for credit. Prerequisite: Consent of instructor. (MLML 285) (Fall)

MSCI 5860 Graduate Seminar in Marine Geology ( 2 units). Seminar will be held on topics changing each semester. Each student will be required to give at least one seminar. May be repeated once for credit. Prerequisite: Consent of instructor. (MLML 286) (Spring)

MSCI 5870 Graduate Seminar in Oceanography (2 units). Seminar will be held on topics changing each semester. Each student will be required to give at least one seminar. May be repeated once for credit. Prerequisite: Consent of instructor. (MLML 287) (Spring)

MSCI 5980 Research in the Marine Sciences (1-4units). Independentinvestigations of an advanced character for the graduate student with adequate preparation. Prerequisite: Consent of instructor. (MLML 298) (Fall, Spring) NOTE: Stanislaus students must file Individual Study forms.

MSCI 5990 Thesis (1-6 units). Preparation, completion, and submission of an acceptable thesis for the Master's Degree in compliance with department regulations. Prerequisites: Open only to graduate students advanced to candidacy for the Master's Degree. (MLML 299) (Fall, Spring)


## Mathematics

Office: Science Building 239, (209) 667-3461
Chair: Louis A. Feldman
E-mail: math@chem.csustan.edu
Faculty: Thomas J. Abram, Judith L. Clarke, S. Abdul Fazal, Louis A. Feldman, Ralph L. James, Dennis H. Nemzer, Dana M. Reneau, Terrie L. Short, Viji K. Sundar

Emeritus Faculty: Amberse M. Banks, Shan-Wang Chang, Narendra L. Maria

The Department of Mathematics offers the degrees Bachelor of Arts, and Bachelor of Science, Mathematics. Both degree programs can be used to acquire preparation for various careers in business, education, government, and industry. Both degree programs can be used to acquire preparation for advanced study in mathematics and/or its applications. Within the Bachelor of Arts Degree is an option to complete an approved Mathematics Subject Matter Preparation Program, which fulfills the subject matter prerequisites for entry into a credential program to obtain a single subject teaching credential in Mathematics. The Bachelor of Science degree program is oriented more towards the various applications of mathematics. The department offers concentrations in Mathematical Computing and Operations Re-search-Statistics within the Bachelor of Science degree program. A student may focus on a specific career objective in the applications of mathematics by completing one of the concentrations in the Bachelor of Science degree program. The department also offers a concentration in Mathematics for the Bachelor of Arts degree in Liberal Studies. In addition, the department offers a minor in Mathematics.

The degree programs presuppose seven semesters of high school level mathematics: algebra ( 2 years), plane geometry ( 1 year), and trigonometry ( $1 / 2$ year); solid geometry and physics are desirable. Deficiencies may be made up by proper selection of courses in the lower division. Recommended courses in lower-division supporting fields are one year of computer science, or economic theory, or general physics with calculus.

Courses in mathematical computing, mathematics, operations research and statistics are designed to provide quality undergraduate training in the mathematical sciences and to serve the needs of majors in mathematics, the natural and social sciences, and other fields. The degree programs of the Department of Mathematics provide preparation for various careers in the mathematical sciences.

## Bachelor of Arts or Bachelor of Science, Mathematics

## Requirements

1. Complete University General Education-Breadth Requirements for a bachelor's degree ( 51 units minimum).
2. Complete the following prerequisites to the major (20, 23 , or 25 units):

MATH 1410, 1420 Calculus, I, II, 8 units
MATH 1620 Probability and Statistics, 4 units (not required of transfer students who have taken a statistics course at another institution)
MATH 2410 Multivariate Calculus, 4 units
MATH 2510 Linear Algebra and Applications, 4 units
For the Bachelor of Arts in Mathematics with the Mathematics Subject Matter
Preparation Program and for the Bachelor of Science in Mathematics, also complete:
CS 1500 Computer Programming I, 3 units
In addition, for the Bachelor of Arts in Mathematics with the Mathematics
Subject Matter Preparation Program, complete two of the following:
MATH 1412 Calculus I Laboratory, 1 unit
MATH 1422 Calculus II Laboratory, 1 unit
MATH 2412 Multivariate Calculus Laboratory, 1 unit
MATH 2512 Linear Algebra and Applications Laboratory, 1 unit
3. Complete the major of not less than 31 upper-division units. All courses
which apply to the major must be completed with a grade of "C-" or better.
4. Complete the following upper-division units ( 15 units):

MATH 3250 Ordinary Differential Equations, 4 units
MATH 4110 Introduction to Real Analysis I, 4 units
MATH 4510 Modern Algebra with Applications I, 4 units
MATH 4600 Complex Variables, 3 units
5. The following are strongly recommended for all mathematics majors.
a. The University upper-division writing proficiency requirement be satisfied by MATH 4960 Senior Seminar in Mathematics
b. Depending on the student's area of interest, complete at least one of the following sequences of courses outside the discipline of mathematics:
CS 1500, 2500 Computer Programming I, II, 6 units
ECON 2500, 2510 Principles of Economics I, II, 6 units
PHYS 2250, 2260 General Physics T, II, 8 units
6. Complete the following upper-division units for the desired degree program:
a. For the Bachelor of Arts Major in Mathematics
i. Complete the following courses (8 units):

MATH 4111 Introduction to Real Analysis II, 4 units
MATH 4511 Modern Algebra with Applications II, 4 units
ii. Select upper-division courses in mathematics as approved by the major adviser (8 units).
b. For the Bachelor of Arts Major in Mathematics with the Mathematics Subject Matter Preparation Program:
i. Complete the additional upper-division courses listed in the Core of the Mathemãtics Subject Matter Preparation Program (9 units).
ii. Complete the additional upper-division courses listed in the Breadth and Perspective of the Mathematics Subject Matter Preparation Program (11 units).
c. For the Bachelor of Science Major in Mathematics
$i$ Complete two of the following (sequences) as approved by the major adviser ( 16 units).

1. MATH 3250, 4250 Ordinary Differential Equations, Partial Differential Equations, 8 units
2. MATH 4350, 4360 Numerical Análysis I, II, 8 units
3. MATH 4451, 4461 Linear Programming and Applications, Introduction to Operations Research, 8 units
4. MATH 4651, 4661 Modern Probability Theory, Statistical Inference, 8 units
ii. Select upper-division courses in mathematics as approved by the major adviser, so the total upper-division units is 31 ( $0-4$ units).

## Elective Concentrations within the Degree Major for the Bachelor of Science

A student who elects to have a concentration in Mathematical Computing or Operations Research-Statistics may do so by completing the prerequisites to the major, the requirements for the major, and the requirements forthe concentration. The Department of Mathematics offers the following concentrations:

1. Mathematical Computing Concentration ( 31 units)
a. Complete the requirements for the major so as to include MATH 4350, 4360 Numerical Analysis I, II, 8 units
b. Select upper-division courses in Mathematics and/or computer science related to mathematical computing as approved by the major adviser, 8 units.
2. Operations Research-Statistics Concentration (31 units)
a. Complete the requirements for the major so as to include:
i. MATH 4451, 4461 Linear Programming and Applications, Introduction to Operations Research, 8 units
ii. MATH 4651, 4661 Modern Probability Theory, Statistical Inference, 8 units

## Mathematics Subject Matter Preparation Program

Fulfils subject matter prerequisite for entrance into a credential program for a single subject teaching credential in mathematics.

Complete the following courses and other requirements:

1. Core (33 units):

MATH 1410 Calculus I, 4 units
MATH 1420 Calculus II, 4 units
MATH 1620 Probability and Statistics, 4 units
MATH 2410 Multivariate Calculus, 4 units
MATH 2510 Linear Algebra and Applications, 4 units
MATH 3060 Modern Geometry, 3 units
MATH 3110 History of Mathematics, 3 units
MATH 3600 Theory of Numbers, 3 units
MATH 4510 Modern Algebra with Applications I, 4 units
2. Breadth and Perspective ( 23 units):

CS 1500 Computer Programming I, 3 units
MATH 1412* Calculus I Laboratory, 1 unit
MATH 1422* Calculus II Laboratory, 1 unit
MATH 2412* Multivariate Calculus Laboratory, 1 unit
MATH 2512* Linear Algebra and Applications Laboratory, 1 unit
MATH 3250 Ordinary Differential Equations, 4 units
MATH 4020 Mathematics for Secondary Teachers, 4 units
MATH 4022 Mathematics for Secondary Teachers Laboratory, 0 units
MATH 4600 Complex Variables, 3 units
MATH 4651 Modern Probability Theory, 4 units

MATH 4960 Senior Seminar in Mathematics, 3 units *Completion of two of these laboratories is required.

## 3. Other Requirements:

A student must meet specified academic standards in order to obtain Department certification for having completed the Mathematics.Subject Matter Preparation Program. A brochure describing the entire program will be available from the Department of Mathematics after August 31, 1995.

## The Minor

## Requirements (20 units)

1. Complete MATH 1410, 1420 Calculus I, II, 8 units
2. Select upper-division courses in mathematics as approved by the minor adviser, for a minimum of 12 units.

## Liberal Studies Concentration (20 units)

Complete twenty units in mathematics as approved by the major adviser, including a minimum of 15 upper-division units.

## Teaching Credentials

Majors in mathematics interested in multiple subject or single subject credentials are referred to the "School of Education" section of this catalog for a description of teaching credential programs. Students may fulfill the subject matter prerequisites to enter a teaching credential program to obtain a single subject teaching credential in mathematics by completing the Mathematics Subject Matter Preparation Program described previously.

## Course Descriptions Prebaccalaureate

Note: Courses numbered 0001-0999 are prebaccalaureate level and do not carry unit credit toward the 124 units required for a Bachelor's degree.
MATH 0101 Pre-Algebra (3 units). (Replaces MATH 0100) This course is designed specifically to help college students fill the gaps in their mathematical backgrounds in preparation for further math courses. The course is a review of arithmetic, basic geometry, and pre-algebra skills. Prerequisite: ELM score of 360 or below or consent of instructor.

MATH 0102 Elementary Algebra (3 units). (Replaces MATH 0100) Continuation of MATH 0101. Review of elementary algebra including exponents, polynomials, fractions, radicals, and elementary inequalities. Prerequisite: ELM score of 370 to 470 , inclusive, or satisfactory completion of MATH 0101, or consent of instructor.

MATH 0105 Intermediate Algebra ( 3 units). Continuation of MATH 0102. Exponents, fractions, radicals, elementary inequalities, polynomials, logarithmic and exponential functions. This course is designed to help college students fill the gap in their mathematical background in preparation for further math courses. Prerequisite: ELM score of 480 , or satisfactory completion of MATH 0102 or consent of instructor.

## Lower Division

MATH 1000 Math for LiberalArts Students ( 3 units). An introductory course which provides an overall view of contemporary mathematics for students who have no technical background. The course emphasizes mathematics as used in real life problems. Topics may be selected from the areas of elementary number theory, metric system, geometry, probability, statistics, power of the pocket calculator, and computers. Prerequisites: MATH 0105, or a passing score on the ELM test or equivalent. (CAN MATH 2)

MATH 1030 Elementary Foundations of Mathematics I (3 units). Elementary set theory, number systems, properties of real numbers, solutions of equations and inequalities. Recommended for students seeking an elementary teaching credential. Prerequisites: MATH 0105, or a passing score on the ELM test, or equivalent. (CAN MATH 4)

MATH 1032 Elementary Foundations of Mathematics Lab I (1 unit). Activities to introduce and reinforce the skills and objectives of MATH 1030. Guided discovery of concepts using manipulatives and interactive learning. Prerequisites: MATH 1030 or concurrent enrollment in MATH 1030.

MATH 1040 Elementary Foundations of Mathematics II (3 units). Continuation of MATH 1030. Functions and graphs, elementary probability and statistics, Euclidean geometry, measure, introduction to analytic geometry. Recommended for students seeking an elementary teaching credential. Prerequisite: MATH 1030 with a grade of "C-" or better.

MATH 1042 Elementary Foundations of Mathematics Lab II (1 unit). Activities to introduce and reinforce the skills and objectives of MATH 1040. Guided discovery of concepts using manipulatives and interactive learning. Prerequisites: MATH 1040 or concurrent enrollment in MATH 1040.

MATH 1100 Precalculus (4 units). Introduction to analytic geometry, functions, circular and trigonometric functions, trigonometric identities, transcendental functions, complex numbers. Prerequisites: MATH 0105, or a passing score on the ELM test or equivalent. (CAN MATH 16)

MATH 1102 Precalculus Laboratory (1 unit). Advanced problem-solving and collaborative learning in precalculus mathematics. To receive credit, students must attend one of thë 2 -hour sessions each week. Prerequisite: MATH 1100 or concurrent enrollment in MATH 1100.

MATH 1410 Calculus I (4 units). Inequalities, functions and graphs, limits and continuity, the derivative, differentiation of algebraic and trigonometric functions, applications of differentiation, the definite integral, conic sections. Prerequisite: MATH 1100 with a grade of "C-" or better, or equivalent. (CAN MATH 18)

MATH 1412 Calculus I Laboratory (1 unit). Advanced problem-solving and collaborative learning in Calculus I mathematics. To receive credit, students must attend one of the 2 -hour sessions each week. Prerequisite: MATH 1410 or concurrent enrollment in MATH 1410.

MATH 1420 Calculus II ( 4 units). Exponential functions, parametric equations, thorough techniques of integration, applications of the definite integral, introduction to first order ordinary differential equations, L'Hôpital's rules, infinite series. Prerequisite: MATH 1410 with a grade of "C-" or better. (CAN MATH 20)

MATH 1422 Calculus II Laboratory (1 unit). Advanced problem-solving and collaborative learning in Calculus II mathematics. To receive credit, students must attend one of the 2-hour sessions each week. Prerequisite: MATH 1420 or concurrent enrollment in MATH 1420.

MATH 1500 Finite Mathematics (3 units). Counting processes, elementary probability, systems of linear equations and inequalities, matrices, linear programming, simplex method, Markov chains, selected applications. Prerequisites: MATH 0105 or passing score on the ELM examination or equivalent.

MATH 1600 Statistics (4 units). Introductory course designed for students in the behavioral, biological, and social sciences. The description of sample data, probability and probability distributions, sampling and estimation, testing hypotheses, correlation and regression, introduction to analysis of variance. (Lecture, 3 hours; laboratory, 2 hours) Prerequisites: MATH 0105 , or a passing score on the ELM test or equivalent and concurrent enrollment in MATH 1602. (CAN STAT 2)

MATH 1602 Statistics Laboratory (0 units). Experiments and calculations in statistics. Prerequisite: Concurrent enrollment in MATH 1600.

MATH 1610 Statistics for Decision Making (3 units). Introductory course for students in business administration. Data summarization, review of probability distributions, estimation, hypothesis testing, correlation, regression, index numbers, time series. Use of statistical computer packages. Prerequisite: MATH 0105 , or a passing score on the ELM test, or equivalent.

MATH 1620 Probability and Statistics (4 units). Introductory course formathematics and computer science majors. Combinatorics, probability and random variables. Descriptive statistics, estimation, hypothesis testing, correlation and regression. Use of computers for simulation and statistical analysis. Prerequisite: MATH 1410 with a grade of " $\mathrm{C}-$ " or better.

MATH 1910 Calculus with Applications I (3 units). The fundamental concepts of calculus and their applications to problems in the behavioral, biological, chemical, decision, and social sciences will be introduced. Functions, graphs, limits, the derivative, applications of the derivative, definite integral. This course is not open to students who are seeking a Bachelor of Arts degree in mathematics, or physics; nor is it open to students seeking a Bachelor of Science degree in chemistry, physics, or mathematics. Prerequisites: MATH 0105, or a passing score on the ELM test, or equivalent. (CAN MATH 30)

MATH 1920 Calculus with Applications II (3 units). Fundamental concepts of calculus and their applications to the behavioral, biological, chemical, decision, and social sciences will be introduced. Logarithmic and exponential functions, trigonometric functions, techniques of integration, applications of the definite integral,
introduction to calculus in higher dimensions. This course is not open to students seeking a Bachelor of Arts degree in mathematics or physics; nor is it open to students seeking a Bachelor of Science degree in chemistry, physics, or mathematics. Prerequisite: MATH 1910 or 1410.
MATH 2300 Discrete Structures (3 units). (Replaces MATH 3500) Discrete mathematical structures and their application in computer science. Sets, logic, proof, relations and functions. Topics selected from combinatorics, recurrence equations and graph theory. Prerequisite: MATH 1420.

MATH 2410 Multivariate Calculus (4 units). Vectors in three dimensions, solid analytic geometry, partial differentiation, multiple integration, differentiation under the integral sign, vector field theory. Prerequisite: MATH 1420 with a grade of "C" or better (CAN MATH 22)

MATH 2412 Multivariate Calculus Laboratory (1 unit). Advanced problemsolving and collaborative learning in Multivariate Calculus mathematics. To receive credit, students must attend one of the 2-hour sessions each week. Prerequisite: MATH 2410 or concurrent enrollment in MATH 2410.

MATH 2510 Linear Algebra and Applications (4 units). (Formerly MATH 2500) Linear equations and matrices, vector spaces, inner product spaces, linear transformations, determinants, eigenvalues and eigenvectors, systems of linear differential equations, applications. Prerequisite: MATH 1420 with a grade of "C-" or better. (CAN MATH 26)

MATH 2512 Linear Algebra and Applications Laboratory (I unit). Advanced problem-solving and collaborative learning in Linear Algebra and Applications mathematics. To receive credit, students must attend one of the 2 -hour sessions each week. Prerequisite: MATH 2510 or concurrent enrollment in MATH 2510.

## Upper Division

MATH 3060 Modern Geometry ( 3 units). Logic of proofs, Hilbert's Axiom System. Incidence, separation, congruence, and continuity. Geometry and real numbers. Neutral Geometry. Non-Euclidean Geometry.Transformations. Prerequisites: MATH 1420 with a grade of "C-" or better.

MATH 3110 History of Mathematics (3 units). Origin and development of mathematical ideas from early civilization to the present time. Recommended for prospective and in-service teachers. Prerequisite: MATH 1420 with a grade of "C" or better.

MATH 3250 Ordinary Differential Equations (4 units). Linear ordinary differential equations, existence and uniqueness, series solutions, special functions, Laplace transforms, systems of linear equations. Prerequisite: MATH 1420 with a grade of "C-" or better.

MATH 3350 Applied Mathematical Models ( 3 units). Roles of mathematical models in society. Use of mathematical models to solve real world problems. Models in behavioral, life, management, and social sciences will be emphasized. Not applicable to the requirements for the majors or minor in mathematics. Prerequisite: MATH $1500,1600,1610$, or 1620 .

MATH 3400 Set Theory and Mathematical Logic (3 units). Basic set theory and logic (especially as they apply to writing and understanding mathematical proofs), relations, functions, the well-ordering theorum, mathematical induction, and cardinality. Prerequisite: MATH 1410 or PHIL 2100 or consent of instructor.

MATH 3600 Theory of Numbers ( 3 units). (Formerly MATH 4500) Study of the properties of integers including mathematical induction, well ordering principle, Euclid's algorithm, divisibility properties, prime numbers, congruence of numbers, calculations, conjectures, selected advanced topics, and selected applications. Prerequisite: MATH 1420 with a grade of "C-" or better.

MATH 4020 Mathematics for Secondary Teachers (4 units). Effective communication of mathematical ideas. Techniques for developing mathematical understanding and skills including explorations, constructing and analyzing models, collecting and representing data, presentation of arguments, and problem solving. Analysis and modeling of various forms of delivery of instruction. Prerequisites: MATH 2410, MATH 2510, junior standing or consent of instructor, and concurrent enrollment in MATH 4022 (description follows).

MATH 4022 Mathematics for Secondary Teachers Laboratory. Construction of mathematics to be taught. Communication with students who are developing their own mathematical understandings. Guiding tutees to their own discoveries of mathematical insights. Being a classroom facilitator and tutor at a local school for at least twenty hours. Prerequisite: Concurrent enrollment in MATH 4020.

MATH 4110 Introduction to Real Analysis I (4 units). (Formerly MATH 4100) The real number system, sequences, limits, point set topology, continuity, metric spaces, compactness, Bolzano-Weierstrass theorem, completeness, and differentiation. Prerequisites: MATH 2410, 2510, and nine upper division units in mathematics other than MATH 3350.

MATH 4111 Introduction to Real Analysis II (4 units). (Formerly MATH 4101) Riemann-Stieltjes integral, uniform convergence, implicit function theorem, construction and properties of Lebesgue measure, and the Lebesgue integral. Prerequisite: MATH 4110.

MATH 4250 Partial Differential Equations (4 units). (Formerly MATH 3260) Basic concepts, first order partial differential equations, classification of second order equations, initial value problems for wave equations, boundary value problems for Laplace and heat equations, maximum principle, existence and uniqueness theorems, applications. Prerequisite: MATH 2410 and MATH 3250 or consent of instructor. (Offered 1996-97 and alternate years thereafter.)

MATH 4350 Numerical Analysis I (4 units). Topics selected from floating point arithmetic, errors, nonlinear equations, interpolation, numerical differentiation and integration, linear and nonlinear systems, eigenvalues, numerical solution of ordinary and partial differential equations, approximation. Prerequisites: MATH 2510 and CS 1500 or consent of instructor. (Offered 1995-96 and alternate years thereafter.)

MATH 4360 Numerical Analysis II (4 units). Continuation of MATH 4350. Prerequisites: MATH 2410 and 4350 or consent of instructor. (Offered 1995-96 and alternate years thereafter.)

MATH 4451 Linear Programming and Applications (4 units). Vectors and matrices, linear programming theory. Computational techniques with emphasis on the simplex method. Post-optimal analysis, duality and its ramifications, integer programming, game theory. Prerequisites: MATH 2510 and CS 1500 or consent of instructor. (Offered 1996-97 and alternate years thereafter.).

MATH 4461 Introduction to Operations Research (4 units). Special types of linear programming, dynamic programming, network analysis, project planning and scheduling techniques, inventory theory, introduction to waiting line models. Prerequisites: MATH 1420 and CS 1500 or consent of instructor. (Offered 1996-97 and alternate years thereafter.)

MATH 4510Modern Algebra with Applications I (4 units). (Formerly MATH 3510)
An introduction to the development of the algebraic structures that arise in mathematics and its applications. Topics include groups, rings, integral domains, fields, vector spaces, and selected applications. Prerequisites: MATH 2410, MATH 2510 , and nine upper division units in mathematics and/or computer sciences other than MATH 3350, MATH 4020, and CS 4000.

MATH 4511 Modern Algebra with Applications II (4 units). (Formerly MATH 3511) Continuation of MATH 4510. Prerequisite: MATH 4510.

MATH 4600 Complex Variables ( 3 units). Complex numbers, analytic functions, Cauchy-Riemann equations, Cauchy theorem, Laurent series, calculus of residues, selected applications. Prerequisite: MATH 2410.

MATH 4651 Modern Probability Theory (4 units). (Formerly MATH3661) Concepts of sample space, probability, random variables, expectation, moments, elementary combinatorial analysis; probability generating, moment generating, distribution and density functions. Emphasis will be placed on applications. Prerequisites: MATH 1620 and MATH 2410 or consent of instructor.

MATH 4661 Statistical Inference (4 units). Review of relevant probability distributions, estimation theory, hypothesis testing, regression, correlation, and an introduction to non-parametric statistics with special emphasis on applications of data. Students will be encouraged to use statistical packages, e.g., BMD, SPSS, etc. Prerequisite: MATH 4651. (Offered 1995-96 and alternate years thereafter.)

MATH 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 6 units. At most, two units of MATH 4910 and/or MATH 4940 are applicable to the requirements for the majors or minor in mathematics. Prerequisites: Sophomore standing; consent of department Cooperative Education coordinator.

MATH 4940 Internship in Mathematics (1-4 units). This course is designed for students in mathematics who want to apply their educational experience as an intern to a practical situation in a public or private agency. At most, two units of MATH 4910 and/or MATH 4940 are applicable to the requirements for the majors or minor in mathematics. Prerequisite: Consent of Department Internship Coordinator.

MATH 4950 Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of mathematics. Topics vary each term. Different topics may be taken for credit. Prerequisites: Senior standing and consent of instructor.

MATH 4960 Senior Seminar in Mathematics (3 units). This course will synthesize mathematical knowledge and skills acquired in lower- and upper-division mathematics courses. Oral and written communication of mathematical ideas and problem solving will be emphasized. Satisfies upper-division writing proficiency requirement. Prerequisite: MATH 1620, 2410, 2510, completion of General Education-Breadth Requirement A, Communication Skills, declared major in mathematics or enrollment in Mathematics Subject Matter Preparation Program, senior standing, and 15 upperdivision units in mathematics applicable to a degree in mathematics or the Mathematics Subject Matter Preparation Program.

MATH 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Senior standing and consent of instructor.

## Postbaccalaureate

MATH 5100 Principles and Techniques of Applied Mathematics (4 units). Topics to be selected from the theory of distributions, Laplace and Fourier Transforms, difference equations, ordinary and partial differential equations, operator theory, and eigenfunction expansions. Prerequisite: MATH 4111 or 4250.

MATH 5950 Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of mathematics. Topics vary each term. Different topics may be taken for credit. Prerequisites: Postbaccalaureate standing and consent of instructor.

MATH 5980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Postbaccalaureate standing and consent of instructor.

## Professional Postgraduate

MATH 6980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Postbaccalaureate standing and consent of instructor.


## Modern Languages

Office: Classroom Building 237D, (209) 667-3686
Chair: James A. Wakefield, Jr.
Faculty: Robert K. Anderson, Julia G. Cruz, Richard A. Curry, Gisela Dardon, Michael C. Fuller, Gerhard Mack, Lilia G. Sánchez

Students in the Department of Modern Languages may obtain a Bachelor of Arts degree in French or Spanish; a Liberal Studies concentration in French, German or Spanish; or a degree minorin French, German or Spanish. In addition, the Department offers courses in critical foreign languages such as Chinese, Japanese, Russian, Latin, Cambodian, Hmong, and Portuguese.

Majors and/or minors in Modern Languages and Literatures are designed to assist students as they plan for their careers. Some students anticipate a teaching career at the elementary or secondary level, while others are training to meet the challenges of advanced studies in language and literature. A growing number will discover that foreign language ability and sensitivity to other cultures are important assets, especially in career choices such as social sciences, the foreign service, international finance and banking, and international business. Our goals are to assist students in perfecting their foreign language skills (all courses are taught in the target language); to deepen their knowledge of language and the humanities by introducing them to representative authors and ideas, and to acquaint them with the culture and traditions of the people whose languages they have chosen to study.

As today's students gain knowledge and understanding of other languages and cultures, they inevitably develop greater appreciation of their own. In the process, they find themselves better equipped to succeed in our modern society where multilingual and multinational interests are becoming swiftly and inexorably part of our daily lives.

## Critical Foreign Languages (FLAN)

The Critical Foreign Languages program offers instruction in languages which students have requested for professional or scholarly reasons but for which there is insufficient demand to justify a regular teaching staff. The format used in this program differs from that of traditional language classes. Here students are responsible for their own learning, working ten hours each week with a textbook and accompanying audio tapes. In addition, they meet in regularly scheduled tutorial sessions three hours per week for intensive oral drill with an educated native speaker of the language who is trained in this format and supervised by Modern Languages faculty. An outside examiner, who teaches the language at an accredited institution, determines the scope of the course, paces the work, examines students at the end of each semester, and assigns grades. These courses are listed under the prefix FLAN (Foreign Language).

## Course Descriptions

## Offered under Critical Foreign Languages Program

## Foreign Languages

FLAN 1010 Elementary Japanese I (4 units). Intensive introduction to Japanese, using the Jorden method. In this first semester, students do rigorous work in comprehension, speaking, and basic grammatical structures. This is not a "conversational Japanese" course. (Fall)

FLAN 1015 Elementary Italian I (4 units). First year Italian: Development of listening comprehension and speaking skills for oral proficiency. Introduction to Italian culture.

FLAN 1020 Elementary Japanese II (4 units). Continuation of FLAN 1010. Students continue intensive oral and grammatical work. Introduction to the Japanese writing system. Prerequisite: FLAN 1010 or equivalent. (Spring)

FLAN 1030 Elementary Russian I (4 units). First-year Russian, oral proficiency approach; understanding, speaking, reading, and writing; introduction to Russian culture. (Fall)

FLAN 1040 Elementary Russian II (4 units). Continuation of FLAN 1030. Prerequisite: FLAN 1030 or equivalent, or consent of instructor. (Spring)

FLAN 1050 Elementary Chinese I (4 units). Intensive introduction to Chinese. In this first semester, students do rigorous work in comprehension, speaking, and basic grammatical structures. This is not a "conversational Chinese" course. (Fall)

FLAN 1060 Elementary Chinese II (4 units). Continuation of FLAN 1050. Students continue intensive oral and grammatical work. Introduction to the Chinese writing system. Prerequisite: FLAN 1050 or equivalent. (Spring)

FLAN 1070 Elementary Cambodian I (4 units). Intensive introduction to spoken Cambodian (Khmer). Includes an introduction to Cambodian culture. (Fall)

FLAN 1071 Elementary Cambodian for School Personnel 1 (3 units). Introduction to Cambodian (Khmer) language and culture. This course closely parallels FLAN 1070 but emphasizes vocabulary selected to be most useful to school personnel dealing with the Cambodian refugee population.

FLAN 1075 Written Cambodian for Cambodian (Khmer) Speakers I (3 units). This course introduces native speakers of Khmer to that language's traditional written system. Students will write Khmer for personal needs (letters), read simple texts, and develop greater vocabulary and structural control of the language. Prerequisite: Fluent conversational command of Cambodian language. (Fall)

FLAN 1076 Written Cambodian for Cambodian (Khmer) Speakers II (3 units). This course is a continuation of Written Cambodian for Cambodian (Khmer) Speakers I. Native and other advanced speakers will develop greater vocabulary and structural control of the written language through readings and written compositions about related topics. Prerequisite: FLAN 1075 or consent of instructor.
FLAN 1080 Elementary Cambodian II (4 units). Continuation of FLAN 1070. Prerequisites: FLAN 1070 or equivalent. (Spring)

FLAN1081 Elementary Cambodianfor School Personnel II (3 units). A continuation of FLAN 1071. Introduction to Cambodian (Khmer) language and culture. This course closely parallels FLAN 1080 but emphasizes vocabulary selected to be most useful to school personnel dealing with the Cambodian refugee population.

FLAN 1090 Elementary Latin I (3 units). An intensive beginning course which progresses rapidly through the rudiments of the language by means of lecture, drill, and close study of selected passages from ancient authors. (Fall)

FLAN 1091 Elementary Latin II (3 units). A continuation of Elementary Latin I. Prerequisite: Elementary Latin I or equivalent. (Spring)

FLAN 1092 Elementary Hmong I (4 units). Beginning Hmong; development of listening comprehension and speaking skills for oral proficiency. Introduction to Hmong culture.

FLAN 1095 Written Hmongfor Hmong Speakers 1 (3 units). This course introduces native speakers of Hmong to the Romanized Hmong written system. Students are introduced to traditional Hmong literature (history and folklore) as well as to contemporary writers in Hmong. Students are expected to develop reading comprehension of Hmong at least at the equivalent of a traditional third-year language student; they also produce written compositions in Hmong. Prerequisite: Native fluency in Hmong.

FLAN 1096 Written Hmong for Hmong Speakers II (3 units). This course for native speakers of Hmong is an advanced study of the Romanized Hmong written system. Students will continue development of reading and writing skills through further study of traditional and contemporary Hmong literature. They will produce written compositions in response to what they read. This course is a continuation of Written Hmong for Hmong Speakers I. Prerequisite: FLAN 1095.

FLAN 2010 Intermediate Japanese I( $\mathbf{3}$ units). Second-year Japanese, emphasizing oral proficiency. Understanding, speaking, reading, and writing Japanese. Prerequisite: FLAN 1020 or equivalent. (Fall)

FLAN 2020 Intermediate Japanese II (3 units). Continuation of FLAN 2010. Prerequisite: FLAN 2010 or equivalent. (Spring)

FLAN 2030 Intermediate Russian I ( 3 units). Second-year Russian, emphasizing oral proficiency. Understanding, speaking, reading, and writing Russian. Prerequisite: FLAN 1040 or equivalent. (Fall)

FLAN 2040 Intermediate Russian II (3 units). Continuation of FLAN 2030. Prerequisite: FLAN 2030 or equivalent. (Spring)

FLAN 2050 Intermediate Chinese I (3 units). Second-year Chinese, emphasizing oral proficiency. Understanding, speaking, reading, and writing Chinese. Prerequisite: FLAN 1060 or equivalent. (Fall)

FLAN 2060 Intermediate Chinese II (3 units). Continuation of FLAN 2050. Prerequisite: FLAN 2050 or equivalent. (Spring)

FLAN 2950 Selected Topics in FLAN (Topics to be specified in Class Schedule) (15 units). Development of a selected topic in critical foreign languages. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

FLAN 4950 Selected Topics in FLAN (Topics to be specified in Class Schedule) (15 units). Development of a selected topic in critical foreign languages. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

FLAN 4980 Individual Study (1-4 units). For advanced undergraduate students prepared for independent work and in need of advanced and specialized study in critical foreign languages. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

FLAN 6000 Selected Topics in Foreign Languages (1-5 units). Courses offered through Continuing and Extended Education. Topics vary each term. These courses are not applicable to a California State University, Stanislaus degree program in Modern Languages, nor are they applicable to General Education credit.

## French

Note: A student who can demonstrate equivalent preparation may be exempt from 4 to 14 units of the lower-division requirement. Two years of college-level French or the equivalent is required for admission to upper-division courses.

## Bachelor of Arts, French

## Requirements

1. Complete University requirements for Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major ( 14 units):

FREN 1010, 1020 Elementary French I, II, 8 units
FREN 2010, 2020 Intermediate French I, II, 6 units
3. Complete the major of not less than 24 upper-division units; of these no more than 8 units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.
Note: Completion of an academic minor is not required but is strongly recommended for single subject credential candidates.

## The Major (24 units)

1. Complete the following required courses in the major field ( 10 units):

FREN 3010, 3020 Advanced French Grammar and Composition I, II, 6 units
FREN 3500 French Phonetics, 3 units
FREN 3510 French Conversation, 1 unit
2. Select elective courses in the major field as follows ( 14 units):
a. Two courses from the following sequence ( 6 units):

FREN 3300 Aspects of French Non-Fiction, 3 units
FREN 3310 Aspects of French Drama, 3 units
FREN 3320 Aspects of French Poetry, 3 units
FREN 3330 Aspects of the French Novel, 3 units
FREN 3340 Aspects du Conte Français, 3 units
b. Upper-division elective courses to total not less than 8 units

## The Minor

## Requirements (26 units)

1. Complete the following lower-division courses ( 14 units):

FREN 1010, 1020 Elementary French I, II, 8 units FREN 2010, 2020 Intermediate French I, II, 6 units
2. Complete upper-division course work as follows ( 12 units):
a. FREN 3010, 3020 Advanced French Grammar and Composition I, II, 6 units
b. One course from the following sequence ( 3 units):

FREN 3300 Aspects of French Non-Fiction, 3 units
FREN 3310 Aspects of French Drama, 3 units minimum of 14 college-level units.

## Liberal Studies Concentration

## Requirements ( $\mathbf{2 0}$ units minimum)

1. Complete the following courses (6-12 units):

FREN 2010, 2020 Intermediate French I, II, or equivalent, 0-6 units
FREN 3010, 3020 Advanced French Grammar and Composition I, II, 6 units
2. Select two courses from the following ( 6 units):

FREN 3300 Aspects of French Non-Fiction, 3 units
FREN 3310 Aspects of French Drama, 3 units
FREN 3320 Aspects of French Poetry, 3 units
FREN 3330 Aspects of the French Novel, 3 units
FREN 3340 Aspects du Conte Français, 3 units
3. Select upper-division electives in French by advisement, 3-8 units

## Teaching Credentials

Those interested in completing the single subject waiver program in French should obtain the up-to-date description of the program currently available in the Department of Modern Languages. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed in obtaining a single subject credential.

## Course Descriptions

## Lower Division

FREN 1010 Elementary French I (4 units). First-year French, oral proficiency approach; understanding, speaking, reading, and writing; introduction to French culture. (Fall)

FREN 1020 Elementary French II (4 units). Continuation of FREN 1010. Prerequisite: FREN 1010 or equivalent, or consent of instructor. (Spring)

FREN 1987 Basic Conversation Adjunct (1 unit). A course designed to supplement lower-division language courses to help students improve their oral competence in French. Prerequisite: Current or previous enrollment in a lower-division French course. (Fall, Spring)

FREN 1988 Basic Conversation Adjunct (2 units). A course designed to supplement lower-division language courses to help students improve their oral competence in French. Prerequisite: Current or previous enrollment in a lower-division French course. (Winter)

FREN2010 Intermediate French I(3 units). Second-year French, emphasizing oral proficiency approach. Extensive review' of the morphology and syntax of the language. Consideration of French culture. Prerequisite: FREN 1020 or equivalent, or consent of instructor. (Fall)
FREN 2020 Intermediate French II (3 units). Continuation of FREN 2010. Prerequisite: FREN 2010 or equivalent, or consent of instructor. (Spring)

## Upper Division

FREN 3010 Advanced French Grammar and Composition I (3 units). Oral and written practice in French, syntactic analysis, written and oral composition, and supplementary reading. Conducted in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor. (Fall)

FREN3020 Advanced French Grammar and Composition II (3 units). Continuation of FREN 3010. Prerequisite: FREN 3010 or equivalent, or consent of instructor. (Spring)

FREN 3200 Culture et Civilisation Françaises (3 units). An introduction to the development of French civilization from its beginning to the present, with emphasis on contemporary France, as seen through literature, art, music. Conducted in French. Prerequisite: FREN 2020 or equivalent.
FREN 3300 Aspects of French Non-Fiction ( 3 units). A course dealing with the development and evolution of French nonfiction, particularly essays, from Montaigne to the present. Conducted in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 3310 Aspects of French Drama (3 units). A course dealing with selected French dramatic works, from the Middle Ages to the present. Conducted in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 3320 Aspects of French Poetry (3 units). A course dealing with the development and evolution of French poetic forms, from the Middle Ages to the present. Conducted in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 3330 Aspects of the French Novel ( 3 units). A course dealing with the development and evolution of the French novel, from its beginnings to the present. Conducted in French. Prerequisite:FREN 2020 or equivalent, or consent of instructor.

FREN 3340 Aspects du Conte Français (3 units). A detailed study of the short story genre in French literature, from the earliest examples (the fabliaux) to the present (Vercors, Camus, Sartre). The bulk of the course will deal with the great 19th-century conteurs: Flaubert, Daudet and Maupassant. Conducted in French. Prerequisite: FREN 2020 or consent of instructor.

FREN 3500 French Phonetics (3 units). A detailed study of modern French phonology and its representation in the International Phonetic Alphabet, including work on dialectal differences as well as analysis of contrasts with English. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

## 292 / Modern Languages

FREN 3510 French Conversation (1 unit). A course designed for advanced students. Class work will include discussions of current (cultural) events and/or other topics of common interest. Course may be repeated once for credit. (Laboratory, 2 hours) Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 3930 French Literature in Translation (3 units). Studies in various aspects of French literature in English translation. Course content may vary from term to term. (Same as ENGL 3930)

FREN 4810 Linguistics and Language Instruction (3 units). An overview of the field of linguistics and its applicability for teaching foreign languages in the secondary schools. Satisfies upper division writing proficiency requirement. Prerequisite: Passing score on WPST and FREN 3010 or consent of instructor.

FREN 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing; consent of departmental coordinator.

FREN 4950 Selected Topics in French (Topics to be specified in Class Schedule) ( $\mathbf{1}-5$ units). Development of a selected topic in French. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

FREN 4980 Individual Study (1-4 units). For advanced undergraduate students prepared for independent work and in need of advanced and specialized study in French. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Postbaccalaureate

FREN 5980 Individual Study (1-4 units). For postbaccalaureate students prepared for independent work and in need of advanced and specialized study in French. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## German

## Degree Minor

## The Minor

## Requirements (26 units)

1. Complete the following lower-division courses ( 14 units): GERM 1010, 1020 Elementary German I, II, 8 units GERM 2010, 2020 Intermediate German I, II, 6 units
2. Complete the following upper-division courses ( 6 units):

GERM 3010, 3020 Advanced German Grammar and Composition I, II, 6 units
3. Not less than 6 units of additional courses in upper-division German, as approved by adviser.
Note: Of the 26 unit total, at least 12 units must be in upper-division courses, with a minimum of 14 college-level units.
Note: A student who can demonstrate equivalent preparation may be exempt from 4 to 14 units of the lower-division requirement. Two years of collegelevel German or the equivalent is required for admission to upper-division courses.

## Liberal Studies Concentration

## Requirements ( 20 units minimum)

1. Complete the following courses (12-18 units):

GERM 2010, 2020 Intermediate German I, II or equivalent, 0-6 units
GERM 3010 Advanced German Grammar and Composition I, 3 units
GERM 3110 Modern German Thought, 3 units
GERM 3201 Classics of German Literature, 3 units
GERM 3210 Modern German Fiction, 3 units
2. Select upper-division electives in German, by advisement, 3-8 units

## Teaching Credentials

## Single Subject Credential Waiver Program

Those interested in completing the single subject waiver program in German should obtain the up-to-date description of the program currently available in the Department of Modern Languages. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed in obtaining a single subject credential.

## Course Descriptions

## Lower Division

GERM 1010 Elementary German I (4 units). First-year German, oral proficiency approach; understanding, speaking, reading, and writing; introduction to German culture. (Fall)

GERM 1020 Elementary German II (4 units). Continuation of GERM 1010. Prerequisite: GERM 1010 or equivalent, or consent of instructor. (Spring)

GERM 1987 Basic Conversation Adjunct (1 unit). A course designed to supplement lower-division language courses to help students improve their oral competence in German. Prerequisite: Current or previous enrollment in a lower-division German course. (Fall, Spring)

GERM 1988 Basic Conversation Adjunct ( 2 units). A course designed to supplement lower-division language courses to help students improve their oral competence in German. Prerequisite: Current or previous enrollment in a lower-division German course. (Winter)

GERM 2010 Intermediate German I'(3 units). Second-year German; intensified review of grammar. Special emphasis will be given to the development of increased skills in the reading, writing, speaking, and understanding of German. Consideration of German culture. Prerequisite: One year of college-level German or equivalent, or consent of instructor. (Fall)

GERM 2020 Intermediate German II (3 units). Continuation of GERM 2010. Prerequisite: GERM 2010 or equivalent, or consent of instructor. (Spring)

## Upper Division

GERM 3010 Advanced German Grammar and Composition I (3 units). Oral and written practice in German, syntactical analysis, written and oral composition, and supplementary reading. Prerequisite:Two years of college-level German or equivalent, or consent of instructor.

GERM 3020 Advanced German Grammar and Composition II (3 units). Continuation of GERM 3010. Prerequisite: GERM 3010 or equivalent, or consent of instructor.

GERM 3110 Modern German Thought (3 units). An introduction to the German mind as seen through literature, politics, history, religion, music. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3201 Classics of German Literature (3 units). Major works of German literature from the beginnings to the 19th century, within the context of literaryphilosophical movements. Readings include works of Walter von der Vogelweide, Grimmelshausen, Lessing, Goethe, Schiller, Eichendorff, Kleist, Büchner. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3210 Modern German Fiction (3 units). Major works of German literature from the turn of the century to the present. Selected readings will include works of Brecht, Kafka, Mann, Hesse, Grass, Böll. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3220 Special Study: Genre ( 3 units). Studies in various genres. Course content may vary from term to term. Typical courses include: The German Theatre; Masterpieces of German Poetry; The Novelle in German Literature. Different titles may be taken for credit under this course number. Prerequisite: Two years of collegelevel German or equivalent, or consent of instructor.

GERM 3230 The German Theatre ( 3 units). A study of major German dramas from the Storm and Stress period to the present. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3240 Masterpieces of German Poetry ( 3 units). The reading and study of the highlights of German poetry, leading to an appreciation and understanding of the richness and diversity of the genre. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.
GERM 3250 The Novelle in German Literature (3 units). The history and forms of the German novelle, as manifested in the best known examples of the genre. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3500 German Phonetics ( 3 units). A detailed study of modern German phonology and its representation, including work on dialectical differences as well as analysis of contrasts with English. Prerequisite: One year of college-level German or equivalent, or consent of instructor.
GERM 3510 German Conversation (1 unit). Specifically designed to improve listening comprehension and speaking proficiency in German through free conversation, oral reports, and laboratory work. This course may be repeated twice for credit. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3930 German Literature in Translation (3 units). Studies in various aspects of German literature in English translation. Course content may vary from term to term. (Same as ENGL 3930)

GERM 4810 Linguistics and Language Instruction (3 units). An overview of the field of linguistics and its applicability for teaching foreign languages in the secondary schools. Satisfies upper division writing proficiency requirement. Prerequisite: passing score on WPST and GERM 3010 or consent of instructor.

GERM4910Cooperative Education (2-4units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of eight units depending upon departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator.

GERM 4950 Selected Topics in German (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in German. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

GERM 4980 Individual Study (1-4 units). For the advanced undergraduate student prepared for independent work, and in need of advanced and specialized study in German. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Postbaccalaureate

GERM 5980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Portuguese

PORT 1010 Elementary Portuguese I (4 units). (Formerly FLAN 1016). First year Portuguese. Development of listening comprehension, speaking, reading and writing skills to bring about oral proficiency. Introduction to the Portuguese culture.

PORT 1020 Elementary Portuguese II (4 units). (Formerly FLAN 1026). First year Portuguese. Continuation of FLAN 1016. Prerequisite: FLAN 1016 or PORT 1010 or consent of instructor.

PORT 2010 Intermediate Portuguese I (3 units). (Formerly FLAN 2016). An intermediate-level course in the Portuguese language, emphasizing expanding competency in speaking, understanding, reading, and writing Portuguese in the context of culture. Prerequisite: FLAN 1016 or equivalent, or consent of instructor.

PORT 2020 Intermediate Portuguese II (3 units). (Formerly FLAN 2026). Continuation of FLAN 2010. Prerequisite: FLAN 2010 or equivalent, or consent of instructor.

PORT 3010 Advanced Portuguese I ( 3 units). Oral and written practice of the language through class discussion of selected works and written compositions about related topics. Prerequisite: Two years of college-level Portuguese or equivalent, or consent of instructor.

PORT 3020 Advanced Portuguese II (3 units). Continuation of PORT 3010. Prerequisite: PORT 3010 or equivalent, or consent of instructor.

PORT 3200 Portuguese Culture(s) (3 units). A survey of persisting features of the Portuguese cultural identity in Europe and in the Americas, including heritage, lifestyles and major institutions. Taught in Portuguese. Prerequisite: PORT 2020 or consent of instructor.

PORT 3510 Portuguese Conversation (I unit). A course designed for intermediate and advanced students interested in improving oral proficiency through free conversation and discussion of current cultural Portuguese issues. Prerequisite: PORT 2010 or consent of instructor.

PORT 3930 Survey of Portuguese and Brazilian Literatures in Translation (3 units). A presentation of major works and writers to reveal the interest and the originality of Portuguese and Brazilian literatures through the ages. Conducted in English.

## Spanish

Note: A student who can demonstrate equivalent preparation may be exempt from 4 to 14 units of the lower-division requirement. Two years of college-level Spanish or the equivalent is required for admission to upper-division courses.

## Bachelor of Arts, Spanish

## Requirements

1. Complete the requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 14 units):

SPAŃN 1010, 1020 Elementary Spanish I, II, 8 units
SPAN 2010, 2020 Intermediate Spanish I, II, 6 units, or
SPAN 2011, 2015 Spanish for the Native Speaker, I, II, 6 units $\dagger$
3. Complete the major of not less than 24 upper-division units; of these, no more than $8^{\circ}$ units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.
Note: Completion of an academic minor is not required, but is strongly recommended for single subject credential candidates.

## The Major ( 24 units)

1. Complete SPAN 3010, 3020 Advanced Spanish I, II, 6 units
2. Select three courses from the following ( 9 units):

SPAN 3200 Literature \& Civilization of Spain I, 3 units
SPAN 3210 Literature \& Civilization of Spain II, 3 units
SPAN 3300 Literature \& Civilization of Spanish America I, 3 units
SPAN 3310 Literature \& Civilization of Spanish America II, 3 units
3. Select a minimum of nine units of additional upper-division Spanish course work, as approved by the major adviser.

## The Minor

## Requirements (26 units)

1. Complete the following lower-division courses ( 14 units):

SPAN 1010, 1020 Elementary Spanish I, II, 8 units
SPAN 2010, 2020 Intermediate Spanish I, II, 6 units, or
SPAN 2011, 2015 Spanish for the Native Speaker I, II, 6 units $\dagger$
2. Complete the following upper-division courses ( 6 units):

SPAN 3010, 3020 Advanced Spanish I, II, 6 units
3. Complete additional courses in upper-division Spanish, as approved by the department, to total not less than 6 units.
Note: Of the 26 unit total, at least 12 units must be in upper-division courses, with a minimum of 14 college-level units.

[^15]
## Liberal Studies Concentration

## Requirements ( 20 units)

1. Complete the following courses ( $0-6$ units):

SPAN 2010, 2020 Intermediate Spanish I, II, 0-6 units, or
SPAN 2011, 2015 Spanish for the Native Speaker or equivalent, 0-6 units
2. Complete the following courses ( 6 units):

SPAN 3010, 3020 Advanced Spanish I, II, 6 units
3. Complete 8-14 units of upper-division electives in Spanish by advisement.

## Teaching Credentials

Those interested in completing the single subject waiver program in Spanish should obtain the up-to-date description of the program currently available in the Department of Modern Languages.

Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed in obtaining a single subject credential.

## Course Descriptions

Lower Division
SPAN 1010 Elementary Spanish I (4 units). First-year Spanish. Oral proficiency approach; understanding, speaking, reading, and writing; introduction to Hispanic cultures. (Fall)

SPAN1015 Elementary Spanish-Intensive (4 units). A beginning intensive Spanish course (a minimum of four hours per day) in which the primary goal is proficiency in communication. While the course is designed primarily to develop the ability to understand and speak "everyday Spanish" as naturally and spontaneously as possible, it also enables participants to cultivate their reading and writing skills in the target language.

SPAN 1020 Elementary Spanish II (4 units). Continuation of SPAN 1010. Prerequisite: SPAN 1010 or equivalent. (Spring)

SPAN1025 Elementary Spanish II-Intensive (4units). A second semester intensive Spanish course (a minimum of four hours per day) in which the primary goal is proficiency in communication. The course is designed to develop the ability to understand, speak, read, and write the target language as naturally and spontaneously as possible.

SPAN 1987 Basic Conversation Adjust (1 unit). A course designed to supplement lower-division language courses to help students improve their oral competence in Spanish. Prerequisite: Current or previous enrollment in a lower-division Spanish course. (Fall, Spring)

SPAN 2010 Intermediate Spanish 1 (3 units). Second-year Spanish, with emphasis on oral proficiency. Includes review of language structure patterns and reading assignments. Consideration of Hispanic cultures. Prerequisite: One year collegelevel Spanish or equivalent. (Fall)

SPAN 2011 Spanish for Native Speakers I (3 units). Beginning Spanish for native Spanish speakers with minimal formal training in the language. Cognition of language structures through reading, writing, and speaking. (Fall)

SPAN 2015 Spanish for Native Speakers II (3 units). Intermediate Spanish for native Spanish speakers with minimal formal training in the language. Cognition of language structures through reading, writing, and speaking. Prerequisite: SPAN 2011 or consent of instructor. (Spring)

SPAN 2020 Intermediate Spanish II (3 units). Continuation of SPAN 2010. Prerequisite: SPAN 2010 or equivalent. (Spring)

SPAN2950 Selected Topics in Spanish (Topic to be specified in Class Schedule)(15 units). Development of a selected topic in Spanish. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

SPAN 3010 Advanced Spanish 1 ( 3 units). Oral and written practice of the language through class discussion of selected works, and written compositions about related topics. Required of majors and minors. Prerequisite: Two years of college-level Spanish or equivalent, or consent of instructor. (Fall)

SPAN 3020 Advanced Spanish II (3 units). Continuation of SPAN 3010. Required of majors and minors. Prerequisite: SPAN 3010 or equivalent, or consent of instructor. (Spring)

SPAN 3200 Literature \& Civilization of Spain I (3 units). A course dealing with the development of Spanish literature from its beginnings to 1700. This course also covers.the history and civilization of the same period. Prerequisite: SPAN 3010 or consent of instructor. (Fall)

SPAN 3210 Literature \& Civilization of Spain II(3 units). A course dealing with the development of Spanish literature from 1700 to the present time. This course also covers the history and civilization of the same period. Prerequisite: SPAN 3010 or consent of instructor. (Spring)

SPAN 3300 Literature \& Civilization of Spanish America I (3 units). A course dealing with the development of Spanish American literature from its beginnings to 1880. This course also covers the history and civilization of Spanish America during the same period. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3310 Literature \& Civilization of Spanish America II (3 units). A course dealing with the development of Spanish American literature from 1880 to the present. This course also covers the history and civilization of Spanish America during the same period. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3520 Spanish Conversation (I unit). A course designed to provide the participant the opportunity to develop a greater degree of oral spontaneity in the Spanish language. This course may be repeated for credit. Prerequisite: SPAN 2020 or equivalent, or consent of instructor.

SPAN 3530 Phonology and History of the Spanish Language (3 units). A study of the phonological, morphological, and syntactical changes of the Spanish language from Vulgar Latin to modern times. Also an analysis of modern Spanish phonetics and phonemics with emphasis on contrasts with English. Prerequisite: SPAN 2020 or equivalent, or consent of instructor.

SPAN 3700 La Literatura Femenina Hispánica (3 units). Special study in women writers of the Hispanic World. Course content may vary from term to term: prose, poetry, theater, etc. Conducted in Spanish. Prerequisite: Two years of college-level Spanish or consent of instructor.

SPAN 3701 Women in Hispanic Literature (3 units). A thematic study of women as literary characters and as authors as presented in representative works of eight centuries of Spanish-speaking countries. All required readings and class lectures will be conducted in English.

SPAN 3800 El Cuento Hispánico ( 3 units). A course dealing with the development and evolution of short story writing in Spain or Latin America. Conducted in Spanish. Prerequisite: Two years of college Spanish or consent of instructor.

SPAN 3900 Cultura y Literatura Chicana (3 units). A course dealing with the cultural background of the Chicano. Special emphasis will be given to works (prose, poetry, theater) written by contemporary Chicano writers. Conducted in Spanish and English. Prerequisite: Student must be bilingual.

SPAN3930 Spanish/Latin-American Literature in Translation (3 units). Studies in various aspects of Hispanic literature in English translation. Course content may vary from term to term. (Same as ENGL 3930)

SPAN 3970 Contemporary Latin-American Prose in Translation (3 units). Studies in various aspects of Latin-American prose in English translation. Course content may vary from term to term.

SPAN 4030 Gramática Española (3 units). Oral and written practice in Spanish; syntactical analysis. Prerequisite: SPAN 2020 and/or consent of instructor.

SPAN 4201 Teatro Hispánico (3 units). A course dealing with the development and evolution of the theater in Spain and/or Spanish America. Course content may vary from semester to semester. Conducted in Spanish. Prerequisite: Two years of collegelevel Spanish or consent of instructor.

SPAN 4230 La Novela Hispánica (3 units). A course with special focus on the development of the novel in Spain and/or Spanish America. Course content may vary from semester to semester. Conducted in Spanish. Prerequisite: Two years of collegelevel Spanish or consent of instructor.

SPAN 4231 La Novela de la Revolución Mexicana (3 units). Study of selected works by Mexican writers about the Mexican Revolution. To acquaint the student with the writer of a genuine Mexican literature which reflects the Mexican society and its roots and politics. Prerequisite: Two years of college-level Spanish or consent of instructor.

SPAN 4240 Cervantes (3 units). A study of the works of Cervantes, including Don Quijote. Prerequisite: SPAN 3010 or čonsent of instructor.

SPAN 4600 Literatura Mexicana ( 3 units). Authors of Mexico and their works from Cortes to the contemporary period. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 4810 Linguistics and Language Instruction (3 units). An overview of the field of linguistics and its applicability for teaching foreign languages in the secondary schools. Satisfies upper division writing proficiency requirement. Prerequisite: passing score on WPST and SPAN 3010 or consent of instructor.

SPAN4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator.

SPAN 4950 Selected Topics in Spanish (Topics to be specified in Class Schedule) ( $1-5$ units). Topics vary each term; different topics may be taken for credit. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 4980 Individual Study (1-4 units). For students prepared for independent work and in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Postbaccalaureate

SPAN 5980 Individual Study (1-4 units). For postbaccalaureate students needing advanced or specialized study. May be repeated for 6 units. Prerequisite: Consent of instructor.


# Multidisciplinary Studies 

Office: Coordinator:

Library Building 105, (209) 667-3254
Jay Christofferson

The University offers multidisciplinary courses outside the departmental and school structure. These courses are given the MDIS prefix.

## Course Descriptions

 Lower DivisionMDIS 1000 First-Year Experience (3 units). A student-centered course that introduces college-level modes of discussion, analysis, argument, and orderly presentation. The course content is based on contemporary issues and values, including the values and directions to be discovered in a university education. Students are offered the opportunity to translate their personal values into effective career and life choices. Prerequisites: MDIS 1000 and LIBS 1000 cannot both be taken for credit.

MDIS 2000 Library Resources ( 2 units). A Library course in which basic library research is taught. Students will learn how to access information found in the various library collections by computer or through traditional sources. (Fall, Spring)

MDIS 2500 Leadership Development (2 unit). This course explores leadership theories and their applications in organizations, especially within a University context. Emphasis is placed on skill building through interactive learning and a service learning project. Prerequisite: Consent of instructor. (Fall, Spring)

MDIS 2950 Selected Topics in Multidisciplinary Studies (Topics to be Specified in Class Schedule) (1-5 units). Development of a selected topic in multidisciplinary study. Topics vary each term. Different topics may be taken for credit.

## Upper Division

MDIS 3000 Introduction to Gerontology ( 3 units). A broad overview of the current concepts, issues, and processes associated with human aging and the latter part of the life cycle. The problems and challenges facing the older person will be explored from the perspectives of various disciplines as they contribute to our understanding of related systems. Prerequisite: Junior or senior standing. (Offered alternate years).

MDIS 3010 Seminar in Community Learning (1 unit). A discussion seminar for students doing community service projects. The course will require students from various disciplines to exchange ideas with each other and participating faculty as they assess the effectiveness of their service learning efforts.

MDIS 3400 Latin-American Cultures (3 units). A survey of Latin-American cultures, to include ethnic heritage, rural and urban life-styles, major institutions, social classes, family life, views on reality, values and contemporary issues. Taught in English.

MDIS 4400 Politics of the Environment (3 units). Study of environmental problems arising from human use of natural resources and of actions taken to deal with the problems. Will examine environmental policy.

MDIS 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised, paid employment in a particular multidisciplinary program. Students are placed in private or public sector positions under the supervision of the employer and the departmental Cooperative Education Coordinator. May be repeated for a total of 8 units, depending upon program policy. Prerequisites: Sophomore standing; consent of departmental Co-op coordinator. (Fall, Winter, Spring)

MDIS 4930 Peer Advising (2 units). This course explores principles for effectively communicating with individuals from diverse backgrounds in a group setting. Sociological analysis of transition and adaptation styles are included. Participant observation is employed as students impart information and become active listeners in the academic setting. Prerequisite: Consent of instructor.

MDIS 4935 Peer Advising Internship (2 units). This course provides an opportunity to acquire supervised, practical experience as a peer adviser in the University setting. Attendance at regularly scheduled meetings and a written journal are required. May be repeated for credit. Prerequsite: MDIS 4930 or consent of instructor.

MDIS 4950 Selected Topics in Multidisciplinary Studies (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in multidisciplinary study. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MDIS 4980 Individual Study (1-4 units). For undergraduate students prepared for independent study designed to supplement regular course offerings. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Postbaccalaureate

MDIS 5900 Introduction to Graduate Field Research Methods (3 units). To provide basicknowledge and skills requisite to conducting field research; covers philosophical foundations of social research, research design, methods, analysis, basic SPSS, and interpretation. Quantitative and qualitative approaches will be considered. Prepares students to conduct research directed to meeting requirements for M.A. Special Major thesis or projects. (Successful completion of research prospectus meets Graduate Writing Competency Requirement.) (Fall)

MDIS 5950 Selected Topics in Multidisciplinary Studies (Topics to be specified in Class Schedule) (1-5 units). Development of a selected topic in multidisciplinary study. Topics vary each term, thus differenttopicsmay be taken for credit. Prerequisite: Consent of instructor.

304 / Multidisciplinary Studies
MDIS 5960 Graduate Project (1-6 units). A terminal graduate project; intended for M.A. Special Majors. Prerequisite: Consent of instructor and major adviser.

MDIS 5980 Individual Study (1-4 units). For postbaccalaureate students prepared for independent work and in need of advanced integrated studies. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MDIS 5990 Thesis (1-6 units). Thesis research; intended for M.A. Special Majors. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and approval of major adviser.


# Music 

Office: Music Building 3, (209) 667-3421
Chair: Edward C. Harris
Faculty: Ginger Covert Colla, Robert Danziger, Sylvia M. Ghiglieri, David S. Goedecke, Edward C. Harris, Deborah H. Kavasch, James M. Klein, Joe M. Miller
Emeritus Faculty: Joseph E. Bruggman
The Department of Music is a Member of the National Association of Schools of Music and offers the degree of Bachelor of Arts in Music and a concentration in music for the Liberal Studies baccalaureate.

The degree program is designed for the study of music within a liberal arts college curriculum and is intended to provide the students with a comprehensive undergraduate education, an overview of the many professions available to the college trained musician, and an opportunity to begin the development of an area of concentration.

The department also offers courses which provide cultural and aesthetic enrichment for the general university student and the university community at large. The performing ensembles present concerts on campus and on annual tours. The department sponsors programs by visiting artists and cooperates with other University fine arts departments to stage major performances and workshops.

## Department Requirements

1. All students contemplating a major or minor in music are required to declare a major performing medium (voice, keyboard, or orchestral instrument) upon entering the program, and will take studio instruction in their major performing medium in accordance with the Degree Major in Music and the Degree Minor in Music. At the end of the first semester of study, all students must demonstrate minimum performance levels established by the Department of Music for the major. Fifth-year credential students are encouraged to continue studio instruction with permission of their applied music teacher.
2. Transfer students must be evaluated by the department before registering for their first semester on campus. This evaluation includes proficiency examinations in keyboard skills, sight singing, theory, and dictation. An assessment of performance abilities in the student's major performing medium will be made no later than the end of the first semester of studio instruction in accordance with the departmental requirement.
3. All music majors and minors will be evaluated by a committee at the end of each semester of applied study in their performing medium.
4. Students are required to perform in recital each semester, normally during the Directed Listening Recital Hour as part of the required course in applied music.
5. Music majors are required to attend departmental recitals and concerts as announced at the beginning of each semester. Enrollment by all music majors in Directed Listening (MUS 2880 or 4880) is required each semester to fulfill this requirement (8 semesters minimum). Transfer students will be evaluated upon entry into the Music program for Directed Listening requirements. Music minors are required to register for Directed Listening (MUS 2880/4880) each semester of applied study only ( 4 semesters minimum).
6. All music majors are required to demonstrate an acceptable level of performance skill in both piano and voice. All majors must enroll in an appropriate piano course until their piano proficiency exam has been passed. Lower-division students must fulfill these requirements by the end of the sophomore year. Students transferring in at the upper-division level must complete these requirements by the end of the junior year. Class instruction is offered at the beginning level in both piano and voice. Students must consult their advisers for specific requirements.
7. Music majors are required to participate in the appropriate major performing group (chorale, wind ensemble, orchestra) each term, utilizing their major performing medium. Keyboard and guitar majors normally enroll in Chorale as their major performing group. Part-time music majors (taking fewer than 7 units per semester) must participate in an ensemble until they have completed 8 semester units ( 4 lower-division and 4 upper-division). Music minors are required to participate in the appropriate major performing group (chorale, wind ensemble, orchestra) for each semester that they are enrolled in applied study.
8. All music majors must pass a junior qualifying examination before registering for upper-division applied music.
9. To be approved for graduation, a music major must maintain a 2.5 GPA in all music course work. In addition, a student must earn a grade of "C-" or better in all music classes required for the Bachelor of Arts in Music degree.
10. The department of Music offers numerous scholarships based upon musical and scholastic performance as well as need. For scholarship information contact the Department of Music Office.

## Bachelor of Arts in Music

Completion of the major in music prepares a student to apply for admission to the teaching credential program, to apply for graduate-level study, or to pursue a variety of professional careers, dependent upon specific areas of specialization and student interest. Emphasis is placed on the cultivation of individual student potential through study and experience in analysis, performance, theory, history, literature, and composition.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major ( 27 units):

| MUS 1220, 1230 | Theory I, II, 6 units |
| :--- | :--- |
| MUS 1320, 1330 | Eartraining and Sightsinging I, II, 2 units |
| MUS 2220, 2230 | Chromatic Harmony, Twentieth Century |
|  | Techniques, 6 units |
| MUS 2320, 2330 | Eartraining and Sightsinging III, IV, 2 units |
| MUS 2400,2410,2440 | Major Group Performance, 4 units |
| MUS 1610,1640, 1670 | Freshman Level applied study, 2 units |
| MUS 2610, 2640,2670 | Sophomore Level applied study, 2 units |
| MUS 2900 | Music History and Literature I, 3 units |

3. Complete the major of not less than 31 upper-division units as approved by the major adviser; of these no more than eight units of CR-graded course work from courses graded exclusively CR/NC may apply toward the major.
4. Completion of a.minor is not required.

## Senior Year Requirement

The music major is a four-year course of study culminating in the presentation of a solo recital, or the completion of a faculty approved project. The decision as to which option to follow normally will be made after the junior qualifying examination.

1. The Solo Recital Track includes, in addition to the recital requirement, two semesters of applied study at the 4000 level and a faculty hearing of the recital material no later than one month before it is to be presented. Students intending to pursue the Recital Track must make that interest known at their final faculty hearing at the 3000 level of applied study. The recital itself will be a public presentation of a minimum of thirty minutes of literature demonstrating a mastery of performance practices related to several style periods. The recital may include ensembles where the student's performing medium is featured. In all cases, faculty approval of the recital itself is a requisite for graduation. One unit of credit is earned through registering for MUS 4900 (only during the term in which the recital is completed).
2. Students selecting the Project Track must have successfully completed two semesters of applied study at the 3000 level. One additional year of senior study is required. The nature and scope of the project must be determined by the student and a faculty member qualified to supervise the study, and must be approved by the music faculty before the student registers for the first semester of the senior year. Unit credit for the project is earned through registering in MUS 4900, Senior Project (only during the term in which the project is completed).

## The Major ( $\mathbf{3 1}$ units minimum)

1. Complete the following courses ( 21 units minimum):

MUS 3100, 3200 Music History and Literature II, III, 6 units
MUS 3250 18th Century Counterpoint, 2 units
MUS $3260 \quad$ Form and Analysis, 2 units
MUS 3270 Basic Conducting, 2 units
MUS 4400, 4410, 4440 Major Group Performances, 4 units
MUS 3610, 3640, 3670 Junior Level applied study, 2 units
MUS 4610, 4640, 4670 Senior Level applied study, 2 units
MUS 4900 Senior Recital or Project, 1 unit
2. Under the direction of the major adviser, complete 10 units of study from the following areas of concentration:
a. Choral/Vocal Emphasis

MUS 3645 Lyric Diction I, 1 unit
MUS 4280 Choral Conducting, 2 units
MUS 4569 Vocal Literature, 1 unit
MUS 4570 Choral Literature Seminar, 2 units
MUS 4571 Vocal Pedagogy and Choral Technique, 2 units
Electives as approved by adviser, up to 2 units.
Note: The single subject credential student in music must consult the faculty adviser in Music Education for details regarding specific music education courses.
b. Instrumental Emphasis

MUS 3240 Orchestration, 2 units
MUS 4290 Instrumental Conducting, 2 units
MUS 4550 Instrumental Literature Seminar, 3 units
Electives as approved by adviser, 3 units
Note: The single subject credential student in music is required to complete MUS 3650, 3660, String Techniques I, II, 2 units; and MUS 3680, Instrumental Techniques, 4 units, in place of electives.
c. Keyboard Emphasis

MUS 3460 Harpsichord Literature, 2 units
MUS 3620 Accompanying, 2 units
MUS 4450 Piano Pedagogy, 2 units
MUS 4451 Piano Literature, 2 units
Electives as approved by adviser, 2 units
Note: The single subject credential student in music must consult the faculty adviser in music education for details regarding specific education courses.

## The Minor

## Requirements (24 units)

1. Complete 16 units of lower-division course work from the following courses:

| MUS 1220, 1230 | Theory I, II, 6 units |
| :--- | :--- |
| MUS 1320, 1330 | Eartraining and Sightsinging I, II, 2 units |
| MUS 1610, 1640, 1670 | Freshman Level applied study, 2 units |
| MUS 2400, 2410, 2440 | Major Group Performance, 4 units |
| MUS 2610, 2640, 2670 | Sophomore Level applied study, 2 units |
| Note: One or more of the above courses may be repeated as needed. |  |

2. Complete the following upper-division courses ( 6 units):

MUS 3100, $3200 \quad$ Music History and Literature II, III, 6 units
3. Electives as approved by the minor adviser, 2 units.
4. All minors must enroll in Directed Listening (MUS 2880/4880) and an appropriate major performing ensemble during each semester of applied study. (See Department Requirements.)

Note: Of the 24 units total, at least 8 must be in upper-division courses. See the department for further information.

## Liberal Studies Concentration

Complete a minimum of 20 units, including at least 15 units of upper-division courses.

## Requirements ( 20 units minimum)

1. Complete a minimum of 5 units from the following courses:

MUS 1000 Introduction to Music, 3 units*
MUS 1190 Music Fundamentals, 3 units*
MUS 1220 Theory I, 3 units
MUS 1600 Basic Class Piano, 1 unit

[^16]| MUS 1620 <br> MUS 1630 |  | Basic Class Guitar, 1 unit |
| :---: | :---: | :---: |
|  |  | MUS 1630 $\quad$ Basic Class Voice, 1 unitMUS $2400,2410,2440$ Major Group Performance, $1-4$ units |  |
|  |  |  |  |
|  | MUS 2600 Intermediate Class Piano, 1 unit |  |
|  | MUS 2630 | Intermediate Class Voice, 1 unit |
|  | MUS 2650 | Intermediate Class Guitar, 1 unit |
| 2. | Complete a minimum of 15 units from the following courses: |  |
|  | MUS 3100 | Music History and Literature II, 3 units |
|  | MUS 3200 | Music History and Literature III, 3 units |
|  | MUS 3270 | Basic Conducting, 2 units |
|  | MUS 3410 | History of Jazz, 3 units |
|  | MUS 3340 | Music in Elementary School, 3 units |
|  | MUS 3341 | Music for the Classroom Teacher, 3 units |
|  | MUS 3400 | American Music, 3 units |
|  | MUS 3650, 3660 String Technique I, II, 1 unit each |  |
|  | MUS 3400 Instrumental Techniques, 1-4 units |  |
|  |  |  |  |  |
|  | Electives 1-3 units |  |
| Teaching Credential |  |  |

The major requirements in music for students interested in obtaining a single "subject teaching credential are the same as those listed for the music major. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed in obtaining a single subject credential.

It is possible to prepare to enter the credential program in four years by following the general program listed below.

Genèral Education, 40 units
Music Major, 58 units
Music Education:
MUS 3340 Music in Elementary Schools, 3 units
MUS 3370 Music in Secondary Schools, 3 units

## Music Courses for Non-Majors

For the student not majoring in music, the Music Department offers courses for cultural and aesthetic enrichment:

MUS 1000 Introduction to Music, 3 units
MUS 1190 Music Fundamentals, 3 units
MUS 1600 Basic Class Piano, 1 unit
MUS 1620 Basic Class Guitar, 1 unit
MUS 1630 Basic Class Voice, 1 unit
MUS 2000 Music of World Cultures, 3 units
MUS 2600 Intermediate Class Piano, 1 unit
MUS 2630 Intermediate Class Voice, 1 unit
MUS 2650 Intermediate Class Guitar, 1 unit
MUS 3341 Music for the Classroom Teacher, 3 units
MUS 3400 American Music, 3 units
MUS 3410 History of Jazz, 3 units
All students are welcome to participate in the various performance courses (chorale, wind ensemble, jazz ensemble, orchestra and small ensembles).

## Course Descriptions

## Lower Division

MUS 1000 Introduction to Music (3 units). A course for the general student which surveys musical elements, genres, forms, and styles. The growth and development of music through history from early times to the present will be studied. (Fall, Winter, Spring)

MUS 1190 Music Fundamentals (3 units). A beginning course in music reading, notation, intervals, scales, theory, and eartraining. Designed primarily for the student pursuing the liberal studies major, the general student, and the music student who does not qualify for enrollment in MUS 1220. (Fall, Winter, Spring)

MUS 1220 Theory I ( 3 units). Review of rudiments of music notation, scales, key signatures, intervals, triads, and inversions of triads. Emphasis is placed on analysis, creations of melodies based upon techniques of various musical periods, and fourpart chorale style harmony. To be taken concurrently with MUS 1320. Prerequisite: Ability to read treble and bass clefs. Music major or minor or consent of instructor. (Fall)

MUS 1230 Theory II (3 units). Continuation of MUS 1220, beginning with construction of an underlying tonal harmonic (triadic) continuum. Emphasis will be on chord connection, employment of triadic inversions, and study of basic harmonic rhythm leading to the creation of two, three, and four part textures within a harmonic fabric. To be taken concurrently with MUS 1330. Prerequisite: MUS 1220. (Spring)

MUS 1320 Eartraining and Sightsinging I (1 unit). Pentatonic and diatonic melodies conducted and sung in solfeggio syllables; 'two-part rhythm exercises; simple keyboard harmony drills which parallel concurrent theoretical studies; beginning self-accompanied singing exercises, melodic, harmonic and rhythm dictation; and sightsinging. To be taken concurrently with MUS 1220. Prerequisite: music major or minor, or consent of instructor. (Fall)

MUS 1330 Eartraining and Sightsinging II (1 unit). Continuation of MUS 1320. More advanced diatonic melodies; three-part rhythm exercises; keyboard harmony exercises; self-accompanied singing exercises; melodic, harmonic, contrapuntal and rhythmic dictation; and sightsinging. To be taken concurrently with MUS 1230. Prerequisite: MUS 1220 or equivalent. (Spring)

MUS 1600 Basic Class Piano (1 unit). Basic keyboard experience in reading and playing music from beginning to intermediate level with emphasis on the fundamentals of music theory and structure. May be repeated for a total of 6 units. Music majors should consult keyboard coordinator for special requirements. (Fall, Spring)

MUS 1610 Freshman-Level Keyboard (I unit). Instruction in technical, stylistic and aesthetic elements of artistic performance. Designed for music majors or minors whose performance medium is a keyboard instrument. May be repeated for a total of 4 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 1620 Basic Class Guitar (1 unit). A basic course in folk guitar skills for those who may or may not have any previous musical training. May be repeated for a total of 2 units. (Fall)

MUS 1630 Basic Class Voice (1*unit). Introduction to singing, vocal technique, posture, breathing, tone production, and problems of tension and relaxation. May be repeated for a total of 4 units. (Fall, Spring)

MUS 1640 Freshman-Level Voice (1 unit). Instruction in technical, stylistic and aesthetic elements of artistic performance. For music majors or minors whose performance medium is voice. May be repeated for a total of 4 units. Prerequisite: Consent ôf instructor. (Fall, Spring)

MUS 1670 Freshman-Level Orchestral Instruments (1 unit). Instruction in technical, stylistic, and aesthetic elements of artistic performance. For music majors or minors whose performance medium is strings, woodwinds, brasses, or percussion. May be repeated for a total of 4 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 2000 Music of World Cultures ( 3 units). An introduction to the music of various world cultures, with attention to the music of non-western peoples. (Fall, Spring)

MUS 2100 Jazz Improvisation (1 unit). An extensive study of jazz improvisation, including performance techniques, concepts and styles. Students will acquire theoretical knowledge and will apply it to performance. Students will then improvise on jazz standards. Students must provide their own instrument. Prerequisite: Knowledge of major/minor scales and major, minor, and dominate 7th chords.

MUS 2220 Chromatic Harmony ( 3 units). Continuation of MUS 1230. Emphasis will be on an understanding of 19th century harmonic practice, including altered and extended chords, work in advanced modulation procedures, and more sophisticated harmonic progressions. Writing for the keyboard and for other instrumental and vocal combinations will be encouraged. Works from Beethoven through Wagner will be analyzed and extensive time will be spent creating original works in conscious imitation of various 19th century styles. To be taken concurrently with MUS 2320. Prerequisite: MUS 1230. (Fall)

MUS 2230 Twentieth Century Techniques (3 units). Continuation of MUS 2220. Examination of impressionistic devices, quartal harmony, nontonal and atonal compositional processes. Emphasis upon 20th century western music. Numerous original compositions required. To be taken concurrently with MUS 2330. Prerequisite: MUS 2220. (Spring)

MUS 2320 Eartraining and Sightsinging III (I unit). Continuation of MUS 1330. Diatonic and chromatic melodies, more advanced two- and three-part rhythm exercises, self-accompanied singing exercises, keyboard harmony, dictation, and sightsinging. To be taken concurrently with MUS 2220. Prerequisite: MUS 1330 or equivalent. (Fall)

MUS 2330 Eartraining and Sightsinging IV (1 unit). Continuation of MUS 2320. Diatonic, chromatic, modal, and 20th century melodies; four-part rhythm exercises; more advanced self-accompanied singing exercises; advanced melodic, contrapuntal, rhythmic and four-part chorale style dictation; and sightsinging To be taken concurrently with MUS 2230. Prerequisite: MUS 2320 or equivalent. (Spring)

MUS 2400 Orchestra (1 unit). The study and performance of standard orchestral music. Students will participate in all public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill. (Fall, Spring)

MUS 2410 Concert Chorale (1 unit). Study and performance of choral masterworks. Open to all students. A voice test will be given. Students will participate in all public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable singing voice. (Fall, Spring)

MUS 2430 University Chambers Singers (1 unit). A select vocal ensemble specializing in music written for small choral ensembles. A high level of musicianship is required. Prerequisites: Ability to read music well and consent of instructor. May be repeated for a total of 8 units. (Fall, Spring)

MUS 2440 Wind Ensemble (1 unit). Study and performance of materials for the wind band, and for various combinations of wind and percussion instruments. Students will participate in all public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill. (Fall, Spring)

MUS 2480 Jazz Ensemble (1 unit). Study and performance of materials for the jazz ensemble. Students will participate in jazz concerts and study improvisation; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill. (Fall, Spring)

MUS 2490 Vocal Ensemble (1 unit). Study and performance of small ensemble literature for two or more voices. This course will from time to time undertake the performance of chamber operas; field trips and off-campus performances may be required by the instructor. Prerequisite: Consent of instructor. (As required)

MUS 2500 Instrumental Chamber Ensemble (1 unit). Study and performance of materials for small ensembles. Students will participate in public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisites: An acceptable degree of performance skill and consent of the instructor. (As required)

MUS 2600 Intermediate Class Piano (1 unit). For general students, music minors, and music majors whose performance area is not piano. Keyboard experience in reading and playing music of intermediate level, such as the Bach inventions, classical sonatinas, and easier Romantic literature. May be repeated for a total of 8 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 2610 Sophomore-Level Keyboard (1 unit). Continuation in technical, stylistic, and aesthetic elements of artistic performance. Designed for music majors or minors whose performance medium is a keyboard instrument. May be repeated for a total of 4 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 2630. Intermediate Class Voice (1 unit). Continuation of MUS 1630. Study of the easier song literature of such composers as Brahms, Schumann, Barber and others. For general students, music minors, and music majors whose performance medium is not voice. May be repeated for a total of 4 units. Prerequisite: MUS 1630 or consent of the instructor. (Spring)

MUS 2640 Sophomore-Level Voice ( 1 unit). Continuation of instruction in technical, stylistic, and aesthetic elements of artistic performance. For music majors or minors whose performance medium is voice. May be repeated for a total of 4 units. Prerequisite: MUS 1640 or consent of instructor.

MUS 2650 Intermediate Class Guitar (1 unit). Introduction to the classical guitar and its repertoire. Prerequisite: MUS 1620 or consent of the instructor. (Spring)

MUS 2660 Showband (1 unit). The study and performance of standard pep band material. The group will perform at home CSUS men's and women's basketball games. Prerequisite: Consent of instructor. (As required)

MUS 2670 Sophomore-Level Orchestral Instruments (1 unit). Continuation of instruction in technical, stylistic, and aesthetic elements of artistic performance. For music majors or minors whose performance medium is strings, woodwinds, brasses, or percussion. May be repeated for a total of 4 units. Prerequisite: MUS 1670 or consent of instructor. (Fall, Spring)

MUS 2710 Introduction to Electronic Music Laboratory (2 units). A survey of the literature and music related to the field of electronic music with emphasis upon aesthetic and stylistic elements. Instruction is also given in the operation of basic synthesizing equipment. Projects in electronic music composition are required. May be repeated for a total of 4 units. Prerequisite: MUS 2230 or consent of instructor. (As required)

MUS 2720 Advanced Electronic Music (2 units). Instruction in advanced synthesis techniques relating to current synthesizer technology. Musical Instrument Digital Interface (MIDI). MIDI software and computer music applications for music composition are required. May be repeated for a total of 4 units. Prerequisite: MUS 2710 or consent of instructor. (As required)

MUS 2733 Elizabethan Feaste of Stanislaus (2 units). Musical production experience of the Elizabethan period. Performance to include singers, instrumentalists, and actors. Prerequisite: Consent of instructor.

MUS 2880 Directed Listening (1 unit). Listening assignments of live performances sponsored through the Music Department. Attendance at a minimum of eighteen concerts per semester is required of each student. The department will provide periodic overviews and discussions of selected repertory performed. Required of all Music majors and minors enrolled in Applied Studies. (Fall, Spring)

MUS 2900 Music History and Literature I (3 units). A survey of music of selected non-Western cultures and Western European music history and literature spanning medieval and the Renaissance periods. Prerequisite: Consent of instructor. (Three semester rotation)

MUS 2923 Opera Scenes (I unit). This class explores preparation and interpretation of performing solos and ensembles from operatic literature. Individual coaching emphasizing fundamentals of acting and singing, interpretation, diction, and movement. Prerequisite: Consent of instructor. (Winter)

MUS 2950 Selected Topics in Music (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of music. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor. (Fall, Spring)

## Upper Division

MUS 3100 Music History and Literature II (3 units). A survey of history and literature spanning the Baroque and Classical periods. Prerequisite: Consent of instructor. (Three semester rotation)

MUS 3200 Music History and Literature III ( 3 units). A survey of music history and literature spanning the Romantic period and the twentieth century. Prerequisite: Consent of instructor. (Three semester rotation)

MUS 3240 Orchestration (2 units). The study and application of scoring techniques for small and large ensembles with particular attention to tone colors and combinations of instruments. Prerequisite: MUS 2230 or consent of instructor. (Spring)

MUS 3250 Eighteenth Century Counterpoint (2 units). Counterpoint based on the harmonic practice of J. S. Bach. Harmonic and formal analysis of Bach's inventions and selected fugues from the Well-Tempered Clavichord, emphasis on creative writing in contrapuntal two- and three-part forms. Upon enrolling for Eighteenth Century Counterpoint transfer students who have completed the equivalent of MUS 2220 and 2230 at some other institution must exhibit competency through written and aural examination in materials normally covered in the theory sequence offered at this University. Thus, enrollment may be initiated but not confirmed until successful passage of the required examination. Prerequisite: MUS 2230. (Fall)

MUS 3260 Form and Analysis (2 units). Analysis of various types of musical structure including large forms; emphasis on the comparison of styles and the development of an ability to write in various forms. Upon enrolling for Form and Analysis, transfer students who have completed the equivalent of MUS 2220 and 2230 at some other institution must exhibit competency through written and aural examination in materials normally covered in the theory sequence offered at this University. Thus, enrollment may be initiated but not confirmed until successful passage of the required examination. Prerequisite: MUS 2230. (Spring)

MUS 3270 Basic Conducting ( 2 units). The study and development of basic elements of conducting and fundamental reading applicable to both vocal and instrumental ensembles. Prerequisites: MUS 1220, 1230, 1320, 1330, and consent of the instructor. (Fall)

MUS 3340 Music in Elementary School (3 units). A study of music experience for children, preschool through sixth grade. A course for upper-division music majors, minors, or the equivalent. Prerequisites: Consent of instructor. (Fall)

MUS 3341 Music for the Classroom Teacher (3 units). Music activities suitable for children in grades K-6. Singing, movements, listening, and instrumental activities appropriate to child growth and development. Teaching a lesson in a lab situation will be required. A course for upper-division and graduate non-music majors. (Fall, Spring)

MUS 3370 Music in Secondary Schools (3 units). Contemporary trends in music education in the secondary school. Curriculum development, selection and organization of materials, and teaching techniques. Prerequisites: Consent of credential adviser and instructor. (Spring)

MUS 3400 American Music ( 3 units). A comprehensive survey and study of the music of the United States and the contributions of American composers from the American Revolution to the present. (Fall, Spring)

MUS 3410 History of Jazz (3 Units). An introduction to jazz with concentration on its evolution and its development in the United States. Prerequisite: Junior standing. (Fall, Winter, Spring)

MUS 3460 Harpsichord Literature ( 2 units). A study of the various styles and forms of harpsichord literature from the sixteenth century through the eighteenth century with some performance of smaller pieces. Prerequisite: Consent of instructor. (Fall in alternating years)

MUS 3610 Junior-Level Keyboard (1 unit). Continuation in instruction in technical, stylistic, and aesthetic elements of artistic performance. Designed for music majors or minors whose performance medium is a keyboard instrument. May be repeated for a total of 4 units. Prerequisites: MUS 2610 or consent of instructor, and successful completion of a performance examination. (Fall, Spring)

MUS 3620 Accompanying (1 unit). Techniques of accompanying for various performance media. Reading skills are stressed. Students are assigned to work with other student performers or classes. May be repeated for a total of 8 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 3630 Class Harpsichord (1 unit). For music majors and minors whose performance area is not harpsichord. May be repeated for a total of 8 units. Prerequisite: Consent of instructor.

MUS 3640 Junior-Level Voice (1 unit). Continuation of instruction in technical, stylistic, and aesthetic elements of artistic performance. For music majors or minors whose performance medium is voice. May be repeated for a total of 4 units. Prerequisites: MUS 2640 or consent of instructor, and successful completion of a performance examination. (Fall, Spring)

MUS 3645 Lyric Diction I (1 unit). Fundamentals of technique in articulation and pronunciation as applied to singing in English, Italian, and Ecclesiastical Latin. Drills in acquiring maximum fluency and flexibility of speech organs involved in diction, and a study of the International Phonetic Alphabet will be included. Prerequisite: Consent of instructor. (Spring in alternating years)

MUS 3646 Lyric Diction II (1 unit). Fundamentals of technique in articulation and pronunciation as applied to singing in German and French, including drills for acquiring maximum fluency and flexibility of speech organs involved in diction, and a continuation of the study of the International Phonetic Alphabet. Prerequisite: Consent of instructor. (Spring in alternating years)

MUS 3650 String Technique I (1 unit). Development of basic technique of playing violin and viola. Prerequisite: Consent of instructor. (Fall in alternating years)

MUS 3660 String Technique II (1 unit). Continuation of MUS 3650; emphasis will be on technique of playing cello and double bass. Prerequisite: MUS 3650 or consent of instructor. (Spring in alternating years)

MUS 3670 Junior-Level Orchestral Instruments (1 unit). Continuation of instruction in technical, stylistic, and aesthetic elements of artistic performance. For music majors or minors whose performance medium is strings, woodwinds, brasses, or percussion. May be repeated for a total of 4 units. Prerequisites: MUS 2670 or consent of instructor, and successful completion of a performance examination. (Fall, Spring)

MUS 3680 Instrumental Techniques (1 unit). A four-term sequence covering all basic brass, woodwind, and percussion instruments for students planning to enter the teaching credentials program and for the music student who wishes to study a secondary musical instrument. May be repeated for a total of 4 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 3690 Marching Band Techniques (1 unit). A study of current marching band techniques. Course investigates charting techniques, showmanship, marching styles, and musical literature for the marching band. Outside field work required. Prerequisite: Ability to read music. (As required)

MUS 4100 Jazz Improvisation (1 unit). An extensive study of jazz improvisation, including performance techniques, concepts and styles. Students will acquire theoretical knowledge and will apply it to performance. Students will then improvise on jazz standards. Students must provide their own instrument. Prerequisite: Knowledge of major/minor scales and major, minor, and dominate 7th chords.

MUS 4200 Composition ( 2 units). Composition in various styles, textures, and instrumental and vocal combinations. The nature and scope of projects will be determined by discussion between instructor and student and will be compatible with the student's needs and abilities. Public performance of original works will be encouraged. May be repeated for a total of 8 units. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 4210 Advanced Composition (2 units). For qualified students in need of advanced study in composition. May be repeated for a total of 6 units. Prerequisite: Senior or graduate standing or consent of instructor. (Fall, Spring)

MUS 4220 Advanced Theory Project (2 units). For qualified students in need of advanced or specialized study in theory. May be repeated for a total of 6 units. Prerequisites: Senior or graduate standing or consent of instructor. (Fall, Spring)

MUS 4280 Choral Conducting (2 units). A continuation of MUS 3270 with emphasis on performance of standard choral literature. Study and application of the interpretive aspect of conducting. May be repeated for a total of 4 units with the consent of the instructor. Prerequisites:MUS 3270 and consent of instructor. (Spring)

MUS 4290 Instrumental Conducting ( 2 units). A continuation of MUS 3270 with emphasis on further development of baton technique. Emphasis will also be placed on rehearsal procedures and methods, interpretation, score reading, and analysis. May be repeated for a total of 4 units with the consent of instructor. Prerequisites: MUS 3270 and consent of instructor. (Spring)

MUS 4400 Orchestra ( 1 unit). The study and performance of standard orchestra music. Students will participate in all public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill. (Fall, Spring)

MUS 4410 Concert Chorale (1 unit). Study and performance of choral masterworks. Open to all students. A voice test will be given. Students will participate in all public performances; field trips and off-campus performances may be required by the instructorr. May be repeated for a total of 8 units. Prerequisites: Ability to read music and an acceptable singing voice. (Fall, Spring)

MUS 4430 University ChamberSingers (1 unit). A select vocal ensemble specializing in music written for small choral ensembles. A high level of musicianship is required. Prerequisites: Ability to read music well and consent of instructor. (Fall, Spring)

MUS 4440. Wind Ensemble (1 unit). Study and performance of materials for the wind band, and for various combinations of wind and percussion instruments. Students will participate in all public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill. (Fall, Spring)

MUS 4450 Piano Pedagogy ( 2 units). Methods and materials for teaching piano at the beginning and the intermediate levels. Prerequisite: consent of instructor. (Fall in alternating years)

MUS 4451 Piano Literature ( 2 units). Study of selected major piano works of representative master composers from Bach to the present. Prerequisite: Consent of instructor. (Spring in alternating years)

MUS 4480 Jazz Ensemble (1 unit). Study and performance of materials for the jazz ensemble. Students will participate in jazz concerts and study improvisation; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill. (Fall, Spring)

MUS 4490 Vocal Ensemble (1 unit). Study and performance of small ensemble literature for two or more voices. This course will from time to time undertake the performance of chamber operas; field trips and off-campus performances may be required by the instructor. Prerequisite: Consent of instructor. (As required)

MUS 4500 Instrumental Chamber Ensemble (1 unit). Study and performance of materials for small brass and woodwind ensembles. Students will participate in all public performances; field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisites: An acceptable degree of performance skill and consent of the instructor. (As required)

MUS 4550 Instrumental Literature Seminar (3 units). Study of literature for orchestra, band, chamber groups, and solo playing, elementary through advanced levels. Students will perform some music and will discuss performance preparation. Prerequisite: Consent of instructor. (Spring)

MUS 4569 Vocal Literature ( 1 unit). A survey of music written for the solo voice from the Middle Ages through the Twentieth Century. Prerequisite: Consent of instructor. (Spring in alternating years)

MUS 4570 Choral Literature Seminar (2 units). A study of literature suitable for large and small choral organizations, including music for madrigal groups, glee clubs, and church choirs. Prerequisite: Consent of instructor. (Fall in alternating years)
MUS 4571 Vocal Pedagogy and Choral Techniques (2 units). A study of teaching methods and physiology for the applied teacher of voice and the choral conductor, including voice classification procedures, vocalises, and rehearsal and performance management. Prerequisite: Consent of instructor. (Fall in alternating years)

MUS 4610 Advanced Keyboard (1 unit). For music majors whose performance medium is a keyboard instrument. Study and performance of an advanced repertoire with emphasis upon development of style and interpretation as well as technique. May be repeated for a total of 8 units. Prerequisites: Successful completion of juniorlevel performance examination and consent of instructor. (Fall, Spring)

MUS 4640 Advanced Voice (1 unit). Vocal technique for the advanced student; study of German lieder, French and Italian repertoire, and solo material in cantata, oratorio, and opera. Formusic majors whose performance mediumis voice. May be repeated foratotal of 8 units. Prerequisite: Successful completion of junior-level performance examination. (Fall, Spring)

MUS 4660 Showband (1 unit). The study and performance of standard pep band material. The group will perform at home CSUS men's and women's basketball games. Prerequisite: Consent of instructor. (As required).

MUS 4670 Advanced Orchestral Instruments (I unit). Advanced instruction in orchestral instruments; strings, woodwinds, brasses, and percussions. For music majors whose performance medium is in one of these categories. May be repeated for a total of 8 units. Prerequisite: Súccessful completion of junior-level performance examination. (Fall, Spring)

MUS 4700 Collegium Musicum (2 units). Music students will study and apply early music performance practices. Prerequisite: Ability to sing and/or play Renaissance or Baroque instruments. (As required)

MUS 4710 Introduction to Electronic Music Laboratory (2 units). A survey of the literature and music related to the field of electronic music with emphasis upon aesthetic and stylistic elements. Instruction is also given in the operation of basic synthesizing equipment. Projects in electronic music composition are required. May be repeated for a total of 4 units. Prerequisite: MUS 2230 or consent of instructor. (As required)

MUS 4720 Advanced Electronic Music (2 units). Instruction in advanced synthesis techniques relating to current synthesizer technology. Musical Instrument Digital Interface (IDI). MIDI software and computer music applications for music composition are required. May be repeated for a total of 4 units. Prerequisite: MUS 4710 or consent of instructor. (As required)

MUS 4733 Elizabethan Feaste of Stanislaus (2 units). Musical production experience of the Elizabethan period. Performance to include singers, instrumentalists, and actors. Prerequisite: Consent of instructor.

MUS 4880 Directed Listening (1 unit). Listening assignments of live performances sponsored through the Music Department. Attendance at a minimum of eighteen concerts per semester is required of each student. The department will provide periodic overviews and discussions of selected repertory performed. (Fall, Spring)

MUS 4900 Senior Recital or Project (1 unit). The preparation and presentation of either a public recital or an equivalent project in the music discipline. Students giving Senior Recitals must have at least two semesters of senior-level applied instruction. Students who select the Project Track must have completed at least two semesters of junior-level applied study. Prerequisites: Senior standing and completion of two semesters of applied study at the appropriate level. (Fall, Spring)
MUS 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline . Students are placed in private or public sector positions under the supervision of the employer and department Co-op coordinator. May be repeated for a total of 8 units depending upon the department policy. Prerequisites: Sophomore standing and consent of department chair. (Fall, Winter, Spring)

MUS 4923 Opera Scenes (1 units). This class explores preparation and interpretation of performing solos and ensembles from operatic literature. Individual coaching emphasizing fundamentals of acting and singing, interpretation, diction, and movement. Prerequisite: Consent of instructor.

MUS 4950 Selected Topics in Music (Topics to be specified in Class Schedule) (15 units). Development of a selected branch of music. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor. (Fall, Spring)

MUS 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and Department Chair. (Fall, Spring)

## Postbaccalaureate

MUS 5000 Music Bibliography and Research (3 units). An introduction to problems facing the graduate student in music. This will include, methods for dealing with such problems as: attitude and aims of the music scholar, studies in bibliography, reference materials, sources, editions, and editing procedures; included will be oral and written reports, reviews, outline procedures for term papers, articles and theses. Required of all Master of Arts Interdisciplinary Studies candidates in music. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)
MUS 5100 Analytic Techniques (3 units). The development of stylistic insight and analytical skills through close historical and analytic examination of music. Examples from Gregorian chant through the present will be studied. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)

MUS 5210 Advanced Brass Techniques and Materials ( 2 units). The purpose of this advanced course is to study, in depth, teaching and performing techniques peculiar to brass instruments; to gain additional proficiency in playing; to study teaching materials suitable for both individual and group instruction; and to review, in depth, standard solo and ensemble literature for these instruments. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)

MUS 5220 Advanced Woodwind Techniques and Materials (2 units). This course provides an opportunity for the graduate student to study the techniques peculiar to instruments of the woodwind family; to gain additional proficiency in playing; to study teaching materials suitable for both individual and group instruction; and to become familiar with the standard solo and small ensemble literature of these instruments. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)

MUS 5230 Choral Arranging ( 3 units). Study of the techniques and methods of arranging music for choirs. Examples of successful choral arrangements will be analyzed. Students will apply acquired skills to selected compositions and melodies. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)

MUS 5290 Advanced Conducting ( 2 units). The preparation of scores in the media of band, orchestra, and chorus for performance. Special emphasis on effective rehearsal procedure, stylistic values, and score analysis. Prerequisite: Postbaccalaureate status. (As required)

MUS 5310 Philosophy of Music Education (3 units). A survey of contemporary aesthetic, philosophical, psychological, and sociological trends in music education. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)

MUS 5320 Seminar in Music Education (3 units). An orientation to graduate study in music education and a seminar in current problems encountered by music educators in the field. Prerequisite: Postbaccalaureate status and consent of instructor. (As required)

MUS 5950 Selected Topics in Music (Topics to be specified in Class Schedule) (15 units). Development of a selected branch of music. Topics may vary each term. Different topics may be taken for credit. Prerequisites: Postbaccalaureate status and consent of instructor. (As required)

MUS 5960 Graduate Project (2-6 units). For qualified postbaccalaureate students. Prerequisites: Postbaccalaureate status and consent of Graduate Committee. (As required)

MUS 5980 Individual Study ( $1-4$ units). For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Postbaccalaureate status, and consent of instructor and Department Chair. (As required)


Nursing
Office: Classroom Building 223, (209) 667-3141
Chair: June Boffman
Faculty: June Boffman, Nancy Clark, Diana Katsma, Paula LeVeck, Christine H. Souza
Emeritus
Faculty: Jacqueline B. Johnson

The Department of Nursing offers the Bachelor of Science, Nursing degree. This program is accredited by the National League for Nursing (NLN).

## Bachelor of Science, Nursing

The nursing major provides registered nurses with the broadened educational base necessary both for professional practice and for pursuing a graduate education in nursing. Through this course of study, nurses can

- expand their scope of practice,
- function both independently and interdependently with other health care professionals in a wide variety of settings, and
- assume greater responsibility in meeting our society's present and future health care needs.


## Minimum Admission Requirements to the Upper-Division Nursing Major:

Students seeking to enter the program must have:

1. completed 60 semester units of baccalaureate-level transferable college credit,
2. completed an AD or Diploma in nursing with a minimum of 30 semester units of nursing course work, earning a "C-" or better in each course,
3. completed at least half of the University's General Education breadth requirements, including completion of a college-level English composition course,
4. completed an acceptable college-level chemistry course, equivalent to CHEM 1000 , of at least 3 semester units with a grade of "C-" or better,
5. a current license as a Registered Nurse in California,
6. file an application to the University, and
7. file an application to the Department of Nursing.

By the time classes begin and until graduation, students who are admitted to the nursing major must have individual professional malpractice insurance in force. The minimum coverages must be at least $\$ 1,000,000$ each claim and $\$ 3,000,000$ aggregate per year. See the Nursing Student Handbook for other liability and health requirements.

The University reserves the right to limit the enrollment of students in the nursing major to available space and clinical facilities. Students need to be admitted to the Nursing major or have permission of the department chair/instructor in order to enroll in NURS 3100,3200 , or 3600.

## Continuance in the Nursing Major

Students must maintain a minimum grade of " C -" in courses constituting the nursing major. With department approval, a student may repeat a nursing course one time. If class enrollment is limited, priority will be given to students who are maintaining regular progression in the program. Students repeating nursing courses must earn grades of "C-" or better to remain in the program.

A student whose pattern of behavior is found to be unsafe may be terminated from a clinical practicum for reasons of unsafe practices at any time during the semester and receive a non-passing grade for the course. In order to continue in the nursing program, a student who is terminated from a clinical practicum must apply for readmission to the nursing program.

## Requirements

1. Complete requirements for the Bachelor of Science degree ( 51 units minimum).
2. Complete the major of 37 upper-division units. NURS 3500, 4200, and 4300 must be taken CR/NC. All other courses must be taken for a letter grade.
3. Complete 9 upper-division units which meet the upper-division General Education requirements. Completion of a minor is not required.

## The Major (37 units)

Complete the following courses:
NURS 3000 Health Assessment, 3 units
NURS 3100 Professional Nursing, 3 units
NURS 3200 Pathophysiological Concepts Applied to Nursing, 3 units
NURS 3310 Nursing Leadership and Management, 3 units
NURS 3400 Community Health Nursing, 3 units
NURS 3410 Community Healṭh Nursing Practicum, 4 units
NURS 3500 Clinical Nursing Contract Preparation, 1 unit
NURS 3600 Transcultural Nursing.Care, 3 units
NURS 4010 Issues Facing the Profession, 3 units
NURS 4100 Introduction to Nursing Research, 3 units
NURS 4200, 4300 Advanced Clinical Nursing I, II, 2 units
NURS 4210, 4310 Advanced Clinical Nursing Practicum I, II, 6 units
Note: $\quad$ To complete major requirements, a student must fulfill 9 upper-division units which meet the upper-division General Education requirements.

## Typical Student Program

Full-Time Track:

Fall
NURS 3000 (3)
NURS 3100 (3)
NURS 3200 (3)
NURS 3600 (3)
Electives

Fall
NURS 4100 (3)
NURS 4200 (1)
NURS 4210 (3)

Junior Level
Winter
Electives

Senior Level
Winter
Electives

## Spring

NURS 3310 (3)
NURS 3400 (3)
NURS 3410 (4)
NURS 3500 (1)
Electives

Spring
NURS 4010 (3)
NURS 4300 (1)
NURS 4310 (3)

Part-time tracks can be obtained from the Nursing Department.
Note: NURS 3100 is recommended as the beginning class for part-time students; other first semester courses may be taken simultaneously or G.E. can be taken as needed.
Note: All courses are not offered every semester. Full-time students have priority for course enrollment.

## Course Descriptions

NURS 2040 Better Health with Self-Care (2 units). Study of basic human needs in a complex society. Main focus is self-care during health, developmental, and life style changes. Persons will be studied in relation to their psycho-social-cultural and physiological needs. (Lecture, 2 hours) (Fall, Spring)

NURS 3000 Health Assessment (3 units). Assists the student in assuming new responsibilities for determining health status and self-care needs of individuals. Focus is on history taking, physical examination, and determining nursing diagnoses. (Lecture, 2 hours; laboratory, 3 hours) (Fall, Spring)

NURS 3100 Professional Nursing (3 units). Introduces professional nursing concepts and theories with an emphasis on the self-care model, nursing process, communication, and the teaching role. (Lecture, 2 hours; Discussion, 2 hours) (Fall, Spring)

NURS 3200 Pathophysiological Concepts Applied to Nursing ( 3 units). Focus is on understanding human needs for self-care action, in health and health deviation states, based on scientific principles and concepts using the nursing process. (Lecture, 3 hours) (Fall)

NURS 3310 Nursing Leadership and Management ( 3 units). Focuses on the professional nursing roles of leader, manager, and change agent. Presents theories of group dynamics, leadership, organization, planned change, power and conflict. (Lecture, 3 hours) Prerequisite: NURS 3100 and satisfactory score on the WPST. Recommended: CS 1000, CS 1500, CIS 2000, CS 4000 or CIS 3780; ENGL 2000 or PHIL 2000. (Spring)

NURS 3400 Community Health Nursing ( 3 units). Theory and principles applied to the nursing role in the promotion of health and prevention of disease. Study of the problems and delivery of care occurs at several levels: individuals, family, community and society. The self-care approach is used in the analysis of health at each level. Prerequisites: NURS 3000, 3100, 3600; completion of or concurrent enrollment in NURS 3200, 3310. (Fall, Spring)

NURS 3410 Community Health Nursing Practicum (4 units). Clinical experience in community health agencies under the leadership of nursing faculty. (Laboratory, 12 hours) Prerequisites: NURS 3000, 3100, 3300; completion of or concurrent enrollment in NURS 3200, 3310 and 3400. (Fall, Spring)

NURS 3500 Clinical Nursing Contract Preparation (1 unit). Students will prepare a formal learning contract for use in the Advanced Clinical Nursing Practicum (seminar, 1 hour). Prerequisites: Completion of NURS 3000, 3100, 3200, 3600. Completion of or concurrent enrollment in NURS 3310, 3400, and 3410. (Must be taken the semester prior to NURS 4200 and 4210.) (Spring)

NURS 3600 Transcultural Nursing Care (3 units). Provides the theoretical and experiential foundation for nurses to safely and effectively meet the health care needs of culturally diverse clients in a variety of practice settings. (Lecture 3 hours) (Fall)

NURS 4010 Issues Facing the Profession (3 units). Examines issues central to the profession of nursing. Ethics and historical perspectives provide the foundation for student proposals on the future direction of nursing. Advocacy and sociopolitical awareness for nurses is stressed. (Lecture, 3 hours) Prerequisites: Senior standing in the nursing major. (Spring)

NURS 4100 Introduction to Nursing Research ( 3 units). Introduction to basic concepts of nursing research. Emphasis on evaluation of research and application of findings in nursing practice. (Lecture, 3 hours) Prerequisite: Math 1600, or its equivalent, senior standing in the nursing major, or consent of instructor. (Fall)

NURS 4200 Advanced Clinical Nursing I (1 unit). Seminar discussion of theoretical components of nursing applied in advanced clinical nursing practicum. Problems and experiences in the clinical setting are correlated with current literature and theories. (Seminar, 1 hour) Prerequisites: NURS 3500; concurrent enrollment in NURS 4210. (Fall)

NURS 4210 Advanced Clinical Nursing Practicum I (3 units). Student-designed study focusing on the area of clinical practice of their choice. This is an opportunity for students to explore new areas of practice under the guidance of nursing faculty and community-based preceptors. (Laboratory, 9 hours) Concurrent enrollment in NURS 4200 is required. Prerequisites: NURS 3500 and senior standing in nursing program. (Fall)

NURS 4300 Advanced Clinical Nursing II (1 unit). See NURS 4200 for course description. (Seminar, 1 hour). Prerequisite: Completion of or concurrent enrollment in NURS 4200. (Spring)

NURS 4310 Advanced Clinical Nursing II (3 units). Continuation of NURS 4210. (Laboratory, 9 hours). Concurrent enrollment in NURS 4300 is required. Prerequisites: Senior standing in nursing program and completion of NURS 4210. (Spring)

NURS 4600 NCAST II Nursing Child Assessment (4 units). This course provides an opportunity to gain an understanding of the role of environmental conditions, parent/child characteristics and their interactions. Measurement and meaning of the interaction, as well as identification of problems and interventions will be highlighted. Open to all majors. (Winter)

NURS 4950 Selected Topics in Nursing (Topics to be specified in Class Schedule) ( $\mathbf{1}-5$ units). Development of a selected topic or a set of related topics in nursing. Topics vary each term, thus different topics may be taken for credit to a maximum of 12 units. Prerequisite: Consent of instructor. (Offered on demand)

NURS 4960 Senior Seminar (1-4 units). Seminar for seniors in nursing. Review and discussion of selected topics in nursing. Each student is expected to report on an individual project. Prerequisite: Consent of instructor. (Offered on demand)

NURS 4980 Individual Study (1-4units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Offered on demand)

## Postbaccalaureate

NURS 5980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor. (Offered on demand)


## Philosophy

Office: Library 195, (209) 667-3361
Chair: James A. Tuedio
Faculty: Valerie Broin, Joy Gordon, Diane Perpich, James A. Tuedio, Andrew Young
Emeritus
Faculty: William H. Hayes

The philosophy curriculum stresses development of critical reasoning skills at all stages of course work. We cultivate the skills required to engage in a careful reading and analysis of original philosophical texts, and we emphasize the study of writings that have historical significance (drawing primarily from the early Greek and modern European traditions). We also focus considerable attention on recent developments in Continental Philosophy (including phenomenology, hermeneutics, and postmodern approaches to philosophical genealogy and deconstruction).

Through a discussion of the guiding ideas in these texts, students gain historical perspective on the evolution of our cultural traditions. They also gain critical perspective on the operative assumptions that ground our sense of cultural and personal identity in a rapidly changing world.

The central issues raised in these courses concern the relation of moral judgment to evaluation, subjective perspective to the desire for objective understanding, language-games to discourses of power (including critical perspectives on metaphysical discourses), and critical approaches to the study and assessment of art and literature.

Many of our courses focus on the challenges and opportunities facing a multicultural society, including issues relating to self-development, cultural diversity, and the need to agree on shared principles as a basis for preserving or enhancing a sense of community. We also discuss the contingencies underwriting the judgments that give privilege to some values over others, and that serve to legitimize some voices at the expense of others.

Our courses are designed to promote careful discussion of the relevance of ideas and positions. We stress the practice of sound reasoning techniques as a basis for discerning and defending philosophical principles and, in our study of the historical conditions that sustain our beliefs, we emphasize reflective analysis of implications that follow from principled commitments.

## Bachelor of Arts, Philosophy

## Requirements

1. Complete University requirements for the Bachelor of Arts degree (51 units minimum).
2. Complete the following prerequisites to the major ( 9 units):

PHIL 2100 Logic, 3 units
PHIL 2200 Ancient Philosophy, 3 units
PHIL 2230 Modern Philosophy, 3 units
3. Complete the major of at least 26 upper-division units.

## The Major (26 units)

1. Complete the following courses (26 units):

PHIL 3300 Theory of Knowledge, 4 units
PHIL 3400 Ethics, 4 units
PHIL 3500 Philosophy of Mind, 4 units
PHIL 4200 Advanced Studies in the History of Philosophy, 4 units
PHIL 4260 Twentieth Century Philosophy, 3 units
PHIL 4450 Philosophy of Religion, 4 units, or
PHIL 4500 Aesthetics, 4 units,
PHIL 4960 Senior Seminar, 3 units, or
PHIL 4990 Senior Thesis, 3 units

## The Minor

The philosophy minor is designed for students majoring in other fields who desire concentrated study in areas of philosophical thinking considered relevant to personal or professional development.

## Requirements ( 17 units minimum)

Complete a minimum of 17 units of philosophy course work chosen in consultation with a department adviser. Of these 17 units, at least 11 units must represent upper-division course work (excluding "Classics of Western Philosophy," which may only be applied against the remaining six units of study if a student also wishes to count PHIL 1010 Introduction to Philosophy). Students will be encouraged to tailor their philosophy minor to emphasize philosophical issues and methods.deemed relevant to their primary field of interest or chosen profession.

## Liberal Studies Concentration

## Requirements ( $\mathbf{2 0}$ units)

1. Complete 13 units distributed as follows:
a. PHIL 1010 Introduction to Philosophy, 3 units, or

PHIL 2100 Logic, 3 units
b. PHIL 2200 Ancient Philosophy, 3 units, or

PHIL 2230 Modern Philosophy, 3 units
c. PHIL 3300 Theory of Knowledge, 4 units, or PHIL 3400 Ethics, 4 units, or HIST 3891 The Oriental Mind, 3 units
d. PHIL 4260 20th Century Philosophy, 3 units
2. Complete seven units of upper-division electives, as approved by adviser.

## Course Descriptions <br> Lower Division

PHIL 1010 Introduction to Philosophy (3 units). Introduction to philosophical method by examining traditional and contemporary philosophical problems. Close textual analysis, with an emphasis on expository argumentative writing assignments. (CAN PHIL 2) (Fall, Spring)

PHIL 2000 Philosophical Inquiry (3 units) Introduction to the practice of philosophical inquiry, emphasizing critical reasoning skills and argumentative writing. Basic instruction in the composition of defensible arguments with an emphasis on philosophical composition and analysis. Prerequisite: Completion of A. 1 \& A. 2 GE requirements. (Formerly MDIS 1020)' (Fall, Spring)
PHIL 2100 Logic ( 3 units). Analysis of the methods and principles of deductive reasoning, including traditional logic; introduction to symbolic logic and to principles of inductive reasoning. Prerequisite: ENGL 1000 or equivalent.

PHIL 2200 Ancient Philosophy ( 3 units). A study of the main themes and issues in the history of early Western philosophy from the pre-Socratics to the end of the Hellenistic era, emphasizing the writings of Plato and Aristotle.

PHIL 2230.Modern Philosophy (3 units). A study of the main themes and issues in the history of 17th and 18th century European philosophy. Special attention will be paid to the close relationship between the development of philosophical ideas during this period and the rise of modern science. Emphasis will be placed on the writings of Descartes, Hume, and Kant.

PHIL 2400 Contemporary Moral Issues (3 units). Introduction to major philosophical standpoints in ethics, emphasizing the moral philosophies of Aristotle, Kant, and Mill. Applications and evaluation of these standpoints in the context of contemporary moral issues. Emphasis on critical analysis of personal as well as social issues. (CAN PHIL 4)

PHIL 2950 Selected Topics in Philosophy (Topics to be specified in Class Schedule) (1-5 units). Development of a selected topic in philosophy. Topics generally vary each term. Different topics may be taken for credit.

## Upper Division

PHIL 3010 Classics of Western Philosophy ( 3 units). Introduction to the history, methods, and problems of philosophy, for upper-division students. A student wishing to begin 'a minor or concentration in philosophy at the upper-division level may substitute this course for lower-division course work in philosophy. (Fall, Spring)

PHIL 3300 Theory of Knowledge (4 units). Analysis of the concepts of knowledge, truth, belief, evidence, certainty; readings in classical and contemporary theories. Emphasis on problems relating to skepticism and the quest for certainty. Prerequisites: 3 units in philosophy and sophomore standing. (Every other Spring, alternating with PHIL 4260.)

PHIL 3400 Ethics ( 4 units). Analysis of philosophical theories concerning the concepts of right and wrong, good and bad, utility and duty, freedom, obligation, responsibility; readings will be drawn from classical and contemporary sources. Satisfies upper division writing proficiency requirement. Prerequisites: 3 units in philosophy and sophomore standing. (Winter)

PHIL 3500 Philosophy of Mind (4 units). A study of historical and contemporary reflections on the nature of mental experience and the structures of mental processing, and approaches to the "mind-body" problem. Particular attention will be paid to issues of central importance to contemporary philosophers working in the areas of phenomenology and cognitive science. Satisfies upper division writing proficiency requirement. Prerequisites: 3 units in philosophy and sophomore standing. (Fall)

PHIL 4150 Cognitive Phenomenology (3 units). Introduction to phenomenological method as an approach to the study of the mind's relation to its environment. Readings will stress Husserl's theory of intentionality, Merleau-Ponty's phenomenology of perception, and related developments in phenomenological psychology, with a view to understanding the relationship between subjectivity and information processing. Prerequisite: PHIL 3300 or 3500 . (Every other Spring, alternating with PHIL 4300.)

PHIL 4200 Advanced Studies in the History af Philosophy (4 units). Intensive study of two or three major works by a major thinker in the history of Western philosophy (including evaluation of secondary source material). Texts will be chosen on the merit of the enduring character of their treatment of classic philosophical issues. This course may be repeated for credit, providing the focus and readings do not overlap previous course content. Satisfies upper division writing proficiency requirement. Prerequisites: PHIL 2230, 3010, or equivalent, and upper-division standing. (Fall)

PHIL 4260 Twentieth Century Philosophy ( 3 units). Intensive study of themes and issues in epistemology, philosophy of mind, and/or philosophy of language from the standpoints of the Pragmatist, Phenomenological, and Analytic traditions in 20th century philosophy. Prerequisites: Two upper-division philosophy courses. (Every other Spring, alternating with PHIL 3300.)
PHIL 4300 Philosophy of Language ( 3 units). Intensive study of recent theories of meaning and of the relationship between thought and language. Course themes will include meaning and reference, language games, speech acts, and language as the communication of thoughts, feelings, and information. Discussions will also focus on the application of language theory to problems in the artificial intelligence movement. Prerequisite: PHIL 3300 or 3500 . (Every other Spring, alternating with PHIL 4150.)

PHIL 4401 Professional Ethics (3 units). Intensive study of moral issues and conflicts that arise when one attempts to reconcile the priorities of professional responsibilities and the world of business with those of an ethical frame of mind. Emphasis on issues surrounding the concepts of duty, rights, autonomy, justice, and regulation in the world of business together with extended reflections on the relationship between moral responsibility and the professions (drawing from specific fields like medicine and law). (Fall, Spring)

PHIL 4450 Philosophy of Religion (4 units). Analysis of religious concepts with emphasis on the logic of religious discourse. Satisfies upper division writing proficiency requirement. Prerequisites: Two upper-division philosophy courses. (Every other Spring, alternating with PHIL 4500.)

PHIL 4500 Aesthetics (4 units). Philosophy of art; analysis of aesthetic experience; principles of criticism. Satisfies upper division writing proficiency requirement. Prerequisites: Two upper-division philosophy courses. (Every other Fall, alternating with PH̦IL 4450.)

PHIL 4950 Selected Topics in Philosophy (Topics to be specified in Schedule of Classes) ( $1-5$ units). Development of a selected topic in philosophy. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

PHIL 4960 Senior Seminar (3 units). Reading and class discussion leading to the writing, oral presentation, and defense of a philosophical essay by each student. May be repeated once. Prerequisites: Three upper-division philosophy courses. (Spring)

PHIL. 4980 Individual Study (1-4 units). For undergraduate students prepared for independent study to supplement regular course offerings. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

PHIL 4990 Senior Thesis (1-4 units). Research and critical analysis of a major philosophical theme or issue, emphasizing primary and relevant secondary readings. It is expected that the thesis will include analysis and critique of at least one contemporary philosophical work together with an evaluation of critical responses. Prerequisites: Senior standing and advanced course work in philosophy.

## Postbaccalaureate

PHIL 5980 Individual Study (1-4 units). For postbaccalaureate students prepared for independent work, and in need of advanced and specialized study in philosophy. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.


# Physics, Physical Sciences and Geology 

Office:<br>Chair:<br>E-mail: physics@chem.csustan.edu<br>Faculty: Tai L. Chow, Marvin W. Johnson, Ian M. Littlewood, Lu Rose Zhang<br>Emeritus<br>Faculty: James M. Goodwin, Ervin H. Schwarcz

The Department of Physics and Geology offers the degrees of Bachelor of Arts and Bachelor of Science, Physics, and Bachelor of Arts, Physical Sciences. A student may pursue a physical sciences major by electing one of the following concentrations: applied physics, earth and space sciences, or environmental sciences. A student may also pursue a physical sciences major without a concentration by completing sufficient upper-division units.

The Department also offers degree minors in the following areas: physical sciences, physics, and microelectronics .

A concentration in physical sciences and in physics for the Bachelor of Arts degree in liberal studies is available. Students interested in a single subject credential in the sciences with a concentration in Physics should see the paragraph on Teaching Credentials in this section.

Students interested in graduate work in physics, physical sciences, or astronomy can earn a Master of Arts or Master of Science degree through the special major program. See the "Graduate Program" section of this catalog for details.

## Bachelor of Science, Geology (See "Geology" section)

## Bachelor of Arts and Bachelor of Science, Physics

The curriculum in physics is designed to give the student a thorough understanding of the fundamentals and modern applications of physics. The Bachelor of Science program prepares the student for graduate school, a career in scientific research and development, or industrial work. It is also intended for those students who wish to prepare for interdisciplinary studies on the graduate level in fields such as astronomy and astrophysics, atmospheric science, biophysics, engineering, environmental science, geophysics, or physical oceanography. The Bachelor of Arts degree program is designed for students seeking to enter professions requiring a moderate training in physics.

The lower-division requirements of both degree programs can also be used to prepare for study in engineering. After completion, the student can transfer to engineering programs for upper-division course work and study in engineering.

## Requirements

1. Complete University requirements for the Bachelor of Arts or Bachelor of Science degree ( 51 units minimum).
2. Complete the following prerequisites to the major (32-35 units):
a. Required courses in major field:

PHYS 2250, 2260 General Physics I, II, 8 units
PHYS 2252, 2262 General Physics Laboratory I, II, 2 units
b. Required courses in supporting fields:
i. CHEM 1100, 1110 Principles of Chemistry I, II, 10 units
ii. MATH 1410, 1420 Calculus I, II, 8 units

MATH 2410 Multivariate Calculus, 4 units
iii. Bachelor of Arts students complete additionally:

CS 1500 Computer Programming I, 3 units
3. Complete the major of not less than 25 upper-division units as specified for the Bachelor of Arts degree, or 34 upper-division units as specified for the Bachelor of Science degree. No courses graded CR may be counted towards the major except for eight units graded exclusively CR/NC.
4. Completion of a minor is not required.

## The Bachelor of Arts Major (25 units)

1. Complete the following courses ( 22 units):

PHYS 3010 Introduction to Mathematical Physics I, 3 units
PHYS 3100 Classical Mechanics, 4 units
PHYS 3320, 3330 Electricity \& Magnetism I, II, 6 units
PHYS 3520 Modern Physics \& Quantum Mechanics, 3 units
PHYS 4102 Advanced Physics Laboratory, 2 units
PHYS 4250 Analog and Digital Electronics, 4 units
2. Complete at least three credit hours from the following courses:

PHYS 4300 Microprocessor Electronics, 3 units
PHYS 4302 Microprocessor Laboratory, 1 unit
PHYS 4560 Solid State Physics, 3 units
PHYS 4900 Modern Optics \& Lasers, 3 units

## The Bachelor of Science Major ( 35 units)

I. Complete the following courses ( 32 units):

PHYS 3010 Introduction to Mathematical Physics I, 3 units
PHYS 3100 Classical Mechanics, 4 units
PHYS 3320, 3330 Electricity and Magnetism I, II, , 6 units
PHYS 3520 Modern Physics and Quantum Mechanics, 3 units
PHYS 4102 Advanced Physics Laboratory, 2 units
PHYS 4250 Analog and Digital Electronics, 4 units
PHYS 4510 Quantum Mechanics I, 3 units
PHYS 4520 Quantum Mechanics II, 3 units
PHYS 4530 Thermal and Statistical Physics, 4 units
2. Select three units of upper-division electives in physics and physical sciences.

Note: The department recommends the following electives:
PHYS 3020 Introduction to Mathematical Physics II, 3 units
PHYS 4300 Microprocessor Electronics, 3 units
PHYS 4302 Microprocessor Laboratory, 1 unit
PHYS 4370 Relativity and Cosmology, 3 units

PHYS 4450 Nuclear and Particle Physics, 3 units
PHYS 4560 Solid State Physics, 3 units
PHYS 4900 Modern Optics \& Lasers, 3 units
PHYS 4930 Lasers and Holography, 4 units
ASTR 3000 Contemporary Astronomy, 3 units

## The Minor in Physics

## Requirements ( 18 units) .

Complete 18 units in physics as approved by the minor adviser, to include at least eight units in upper-division.

## The Minor in Microelectronics

The purpose of this degree minor is to provide students with a theoretical and practical understanding of analog/digital signal processing techniques and microprocessor interfacing techniques, with an emphasis on the design and implementation of instrumentation for scientific experiments.

## Requirements ( $\mathbf{2 5}$ units)

1. Complete the following lower-division courses (14 units):

CS 1500 Computer Programming I, 3 units
CS 2500 Computer Programming II, 3 units
CS 2700 Assembly Language \& Computer Architecture, 3 units
PHYS 2260 General Physics II, 4 units
PHYS 2262 General Physics Laboratory II, 1 unit
2. Complete the following upper-division courses ( 11 units):

CS 3740 Computer Organization, 3 units
PHYS 4250 Analog and Digital Electronics, 4 units
PHYS 4300 Microprocessor Electronics, 3 units
PHYS 4302 Microprocessor Laboratory, 1 unit

## Liberal Studies Concentration in Physics

## Requirements ( 20 units)

1. Complete the following lower-division courses ( 5 units):

PHYS 2260 General Physics II, 4 units
PHYS 2262 General Physics II Lab, 1 unit
2. Complete a minimum of 15 units chosen from upper-division courses in physics upon advisement.

## Bachelor of Arts, Physical Sciences

The Bachelor of Arts, Physical Sciences, is an interdisciplinary degree designed to prepare students for a greater diversity of professions requiring an understanding of the fundamentals of the physical sciences including courses in the following areas: Astronomy, chemistry, environmental sciences, geology, marine sciences, meteorology, and physics.

A student may pursue a physical sciences major by electing one of the following 'three concentrations: Applied physics, earth and space sciences, or environmental sciences.

A student may also pursue. a physical sciences major without a concentration by completing sufficient upper-division units in two areas of interest chosen from astronomy, chemistry, environmental sciences, geology, marine science, and physics. The student should consult with a departmental adviser as to the areas of interest and to the proper selection of courses to suit his or her aims.

Students interested in environmental design, technical administration in government and industry, laboratory technology, legal work pertaining to patents, or scientific librarianship and journalism, may elect this major as an opportunity to acquire an education tailored to their individual needs.

The physical sciences major whose interest is in marine geology and physical oceanography will be required to enroll in upper-division course work at the Moss Landing Marine Laboratories for fulfillment of major requirements. Refer to the "Marine Science" section of this catalog for description of Moss Landing course offerings.

Physical sciences majors interested in medical school, dental school, and other health professions such as pharmacy, physical therapy, or optometry should work out a plan of study as soon as possible with their major adviser and the Premedical and Health Professions Committee. See the "Premedical and Health Professions" section of this catalog.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 28 units):

$$
\begin{array}{lll}
\text { a. } & \text { PHYS 2250, 2260 } & \text { General Physics I, II, 8 units, and } \\
& \text { PHYS 2252, 2262 } & \text { General Physics Lab I, II, 2 units, or } \\
& \text { PHYS 2100, 2110 } & \text { Basic Physics I, II, 10 units } \\
\text { b. } & \text { CHEM 1100, 1110 } & \text { Principles of Chemistry I, II, 10 units } \\
\text { c. } & \text { MATH 1410,1420 } & \text { Calculus I, II, 8 units }
\end{array}
$$

3. Complete the major of not less than 24 upper-division units of physical sciences.
4. No courses graded CR may be counted toward the major except for 8 units taken in courses graded exclusively CR/NC.
5. No minor is required.

## The Major

Complete upper-division courses of not less than 24 units by satisfying either 1 or 2 below:

1. The student who pursues a physical sciences major without a concentration must select two areas of interest in physical sciences and complete upper-division courses of not less than 12 units from these areas. The student may, in consultation with the adviser, complete any other courses in physical sciences or mathematics to meet the total required for the major of 24 upper-division units.
2. The student may also pursue a physical sciences major by completing one of the following concentrations and other appropriate upper-division courses to satisfy the total required units for the major of 24 upper-division units.

## Environmental Sciences Concentration

## Requirements ( 24 units)

1. Complete all requirements of the ènvironmental science concentration, 13 upper-division units.
2. Select an additional 11 upper-division units of courses in consultation with the adviser.

## Space and Earth Sciences Concentration

## Requirements ( 24 units)

1. Select 12 units from the following:

ASTR 3000 Contemporary Astronomy, 3 units
ASTR 4200 . Planetary and Space Science, 3 units
GEOL 3000 Physical and Environmental Geology, 4 units
GEOL 3100, 3110 Earth Science I, II, 6 units
GEOL 3400 Plate Tectonics, 4 units
GEOL 4300 Minerals and Crystals, 3 units
GEOL 4600 Geology of Petroleum, 3 units
2. Select 12 upper-division units in physical sciences or mathematics, in consultation with the adviser. One elective course may be chosen from the following:

GEOG 3100 Climatology, 3 units
GEOG 3700 Cartography, 3 units
GEOG 4120 Geomorphology, 3 units

## Applied Physics Concentration

## Requirements ( 25 units)

1. Complete the following courses ( 13 units):

PHYS 3520 Modern Physics and Quantum Mechanics, 3 units
PHYS 4102 Advanced Physics Lab, 2 units
PHYS 4250 Analog and Digital Electronics, 4 units
PHYS 4930 Lasers and Holography, 4 units
2. Select 12 upper-division units in physical sciences or mathematics, in consultation with the adviser.

## The Minor in Physical Sciences

## Requirements ( 18 units)

Complete 18 units in physical sciences as approved by the minor adviser, to include at least eight units in upper-division.

## Liberal Studies Concentration in Physical Sciences

## Requirements ( 20 units)

1. Complete the following lower-division courses ( 5 units):
a. PHYS 2110 Basic Physics II, 5 units, with consent of adviser or
b. PHYS 2260 General Physics II, 4 units, and

PHYS 2262 General Physics Lab II, 1 unit
2. Select a minimum of 15 upper-division units chosen from physical science, astronomy, geology, or physics, with consent of the physical science adviser.

## Teaching Credentials

The waiver program for satisfying the subject matter competency requirements for the single subject teaching credential in the sciences was being revised at the time the catalog went to press. Students enrolled in the program before January 1, 1995 can satisfy the subject-matter competency requirements in Physical Science by completing the old waiver program or choose to complete the new waiver program. New students interested in a single subject teaching credential in the sciences must consult with their adviser about the content of the new program.

## Course Descriptions

## Physics: Lower Division

PHYS 1500 Energy and Matter (3 units). Survey of the basic concepts and principles of physics. Topics will range from classical Newtonian mechanics to modern theories of the atom and the nucleus. (Lecture, 3 hours) (Fall, Spring)

PHYS 1502 Energy andMatter Laboratory (1 unit). Optional laboratory to accompany PHYS 1500. Prerequisite: PHYS 1500 or concurrent enrollment in PHYS 1500. (Fall, Spring)

PHYS 2100 Basic Physics I ( 5 units). General physics without using calculus, Newtonian mechanics, wave motion, heat, and thermodynamics. Designed for general students and for students preparing for biology or medicine. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) (Formerly 1100). Prerequisites: Algebra and trigonometry, or consent of instructor. (CAN PHYS 2) (Fall)

PHYS 2110 Basic Physics II (5 units). Continuation of PHYS 2100. Electricity and magnetism, light, optics, atoms, and nuclei. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) (Formerly 1110). Prerequisite: PHYS 2100. (CAN PHYS 4) (Spring)

PHYS 2250 General Physics I (4 units). Calculus-based general physics course for science and mathematics majors. It covers basic mechanics, including motion in a plane, conservation of energy and momentum, rotational motion and angular momentum, harmonic motion and gravitation. Prerequisite: MATH 1410 or consent of instructor. (CAN PHYS 8) (Fall)

PHYS 2252 General Physics Laboratory I (1 unit). (Formerly 2350) Laboratory to accompany PHYS 2250. Prerequisite: PHYS 2250 or concurrent enrollment in PHYS 2250: (Fall)

PHYS 2260 General Physics II (4 units). Continuation of PHYS 2250. Covers electricity and magnetism, including electrostatics, basic circuits, magnetostatics, Faraday's Law and Induction, and electromagnetic oscillations. Prerequisite: PHYS 2250 and MATH 1420 or concurrent enrollment in MATH 1420. (CAN PHYS 12) (Spring)

PHYS 2262 General Physics Laboratory II (1 unit). Laboratory to accompany PHYS 2260. Prerequisite: PHYS 2260 or concurrent enrollment in PHYS 2260. (Formerly 2360) (Spring)

PHYS 2270 General Physics III (4 units). Continuation of PHYS 2260, covering thermodynamics, waves, optics, and introductory quantum mechanics. Prerequisites: PHYS 2260 and MATH 1420. (CAN PHYS 14)

PHYS 2272 General Physics Laboratory III (1 unit). Continuation of PHYS 2262, covering thermodynamics, waves and optics, and modern physics. (Formerly 2370) Prerequisites: PHYS 2260 and MATH 1420.

## Physics: Upper Division

PHYS 3010 Introduction to Mathematical Physics I (3 units). Matrix algebra, tensors, formulations of the partial differential equations of classical and quantum physics, and the mathematical methods required for their solutions; integral transformations, theory of residues and conformed mapping, special functions. Examples are given from all fields of physics. (Lecture, 3 hours) Prerequisite: PHYS 2260. (Fall)

PHYS 3020 Introduction to Mathematical Physics II (3 units). Continuation of PHYS 3010. Prerequisite: PHYS 3010. (Spring)

PHYS 3100 Classical Mechanics (4 units). Dynamics of particles and rigid bodies, gravitation. Lagrangian and Hamiltonian dynamics, theory of oscillations, and the wave equation. (Lecture, 4 hours) Prerequisite: PHYS 2260. (Fall)

PHYS 3320 Electricity and Magnetism I (3 units). Electrostatics, magnetostatics, electric current, electromagnetic induction, Maxwell's equations, electromagnetic waves, radiative reaction, electric and magnetic properties of materials, properties of wave guides. (Lecture, 3 hours) Prerequisite: PHYS 2260. (Fall)

PHYS 3330 Electricity and Magnetism II (3 units). Continuation of PHYS 3320. Prerequisite: PHYS 3320. (Spring)
PHYS 3520 Modern Physics and Quantum Mechanics (3 units). Special relativity, origin of quantum theory, the nuclear atom and Bohr theory, elements of quantum mechanics and applications, atomic and nuclear physics, some properties of solids, and elementary particles. (Lecture, 3 hours) Prerequisite: PHYS 2260 or consent of instructor. (Spring)

PHYS 3800 Fundamentals of Nuclear Energy ( 3 units). An introduction to the concepts, principles, systems and applications of nuclear processes; structure of atoms and nuclei; radioactivity, nuclear reactions, fission, fusion, nuclear systems, radioactive waste disposal, biological effects of radiation, and applications of nuclear radiation to biology, agriculture, art, and archeology. (Lecture, 3 hours) Prerequisite: A lower-division science course.

PHYS 4000 Modern Astrophysics (3 units). Application of modern physics to the study of stellar structure and stellar evolution; white dwarfs, neutron stars, pulsars and black holes; x-ray, gamma-ray, and gravitational radiation; quasars, formation of galaxy, and basic cosmological models. (Lecture, 3 hours) Prerequisite: PHYS 2110 or consent of instructor.

PHYS 4102 Advanced Physics Laboratory (1 unit): Project type experiments in mechanics; heat, electricity, and magnetism, optics, atomic physics, nuclear physics, etc. (Laboratöry, 3 hours) Prerequisite: PHYS 3520 or consent of instructor. This course may be repeated for a maximum of 6 units.

PHYS 4250 Analog and Digital Electronics (4 units). This course is an introduction to analog and digital electronics. Topics will be chosen from the following: AC and DC circuit analysis, diodes, transistors and operational amplifiers, feedback, active filters, transducers, Boolean logic, basic gates, sequential logic, flip-flops, counters, and an introduction to microprocessors. (Lecture, 3 hours; laboratory, 3 hours) (Formerly 4210 and 4220). Prerequisite: PHYS 2260. (Fall)

PHYS 4300 Microprocessor Electronics ( 3 units). Basic concepts and principles of microcomputer designs; microprocessor programming and operation; input and output; interfacing with other circuits, including analog-to-digital and digital-toanalog conversions. (Lecture, 3. hours) Prerequisite: PHYS 2260. (Spring)

PHYS 4302 Microprocessor Laboratory (1 unit). Laboratory to accompany PHYS 4300. Prerequisite: PHYS 4300 or concurrent enrollment in PHYS 4300. (Spring)

PHYS 4370 Relativity and Cosmology ( 3 units). Introduction to the physical basis and mathematical formulation of general relativity, experimental tests of general relativity, gravitational waves, gravitational collapse, cosmological implications of recent developments in general relativity. (Lecture, 3 hours) Prerequisite: PHYS 3520 or consent of instructor.

PHYSA400 Computer Simulation Methods in Physics (3 units). An introduction to computer simulation methods, with applications to physical systems. The course is organized with two weekly lectures in which the programming methods are presented. The lab is project-oriented and allows students the freedom to work at their own pace, and to pursue problems consistent with their own interests and background. (Lecture, 2 hours; laboratory, 3 hours). Prerequisite: PHYS 2270.

PHYS 4450 Nuclear and Particle Physics (3 units). Elements of nuclear structure; nuclear transformation; nuclear models; electromagnetic, weak, and strong interactions; properties of Leptons and Hadrons; symmetries and conservation laws; resonance particles, quarks and subhadronic particles; tools of nuclear and particle physics research. (Lecture, 3 hours) Prerequisite: PHYS 2260 or consent of instructor.

PHYS 4510 Quantum Mechanics I (3 units). Development of Schrodinger's equation and its interpretations. Mathematical techniques for solution of problems in one and three dimensions. Perturbation and scattering theory. Solution of the hydrogen atom problem. Application to atomic phenomena. (Lecture, 3 hours) Prerequisite: PHYS 3520 or consent of instructor. (Fall)

PHYS 4520 Quantum Mechanics II (3 units). Continuation of PHYS 4510. Prerequisite: PHYS 4510. (Spring)
PHYS 4530 Thermal and Statistical Physics (4 units). Thermodynamics and statistical mechanics. A unified approach following Gibbs, based on a mictoscopic description using quantum states. Fermi, Bose, and "Classical" systems are discussed with applications to standard and current topics. (Lecture, 4 hours) Prerequisite: PHYS 3520 or consent of instructor.

PHYS 4560 Solid State Physics (3 units). Crystal structure, metal crystals, molecular crystals. Thermal, electrical, magnetic properties of crystals. Free electron model of metals, band theory of solids. (Lecture, 3 hours) Prerequisite: PHYS 3520 or consent of instructor.

PHYS 4900 Modern Optics and Lasers (3 units). Principles of geometrical optics, reflection, refraction, polarization, coherence and interference, Kirchhoff's diffraction theory, Fourier methods in optics, optics of solids, lasers and holography. (Lecture, 3 hours) Prerequisite: PHYS 2260 or consent of instructor.

PHYS 4930 Lasers and Holography (4 units). Interference and coherent light, holographic recording and image reconstruction, properties of holograms and a geometric interpretation, semi-classical radiation fields, coherence theory, induced and spontaneous emission, theories and properties of lasers. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: Upper-division standing or consent of instructor.

PHYS 4950 Selected Topics in Physics (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of physics. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Upper-division standing or consent of instructor.

PHYS 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Upper-division standing and consent of instructor.

PHYS 4990 Undergraduate Thesis (1-2 units). Undergraduate thesis research. May be repeated for a total of 3 units. Prerequisites: Senior status with a major in physics, and GPA of 3.25 in all physics major courses completed at CSU Stanislaus.

## Postbaccalaureate

PHYS 5960 Graduate Project (1-6 units). For qualified students seeking a specialized project. Prerequisites: Consent of instructor and graduate adviser.

PHYS 5990 Thesis (1-6 units). Master's thesis research. May be repeated for a total of 6 units. Prerequisites: Classified graduate standing in M.A. Special Major Program and consent of graduate committee.

## Physical Sciences: Lower Division

PHSC 1300 Environmental Pollution (3 units). Survey of the pollution of the air, water, and land environment. The physical and chemical aspects of pollution by chemicals, pesticides, wastes, radioactivity, heat, and noise. Nuclear energy and radioactive pollution, solar energy and other alternative energies and their environmental effects. (Lecture, 3 hours) (Fall, Spring)

PHSC 2100 Atmosphere, Weather, and Climate (3 units). An introduction to weather and climate phenomena, with emphasis on the weather events that occur in California. Basic principles concerning behavior of the atmosphere and the physical processes underlying weather phenomena. Topics include cloud forms, precipitation, pollution, storms, weather maps, and elementary weather forecasting. (Lecture, 3 hours) (Fall)

## Physical Sciences: Upper Division

PHSC 3000 Energy, Ecology, and Environment (3 units). Fundamental physical science aspects of environmental science. Topics include air pollution and associated atmospheric science, water pollution, nuclear energy and radioactive pollution, thermal pollution, and other environmental subjects. (Lecture, 3 hours) Prerequisite: Upper-division standing or consent of instructor.

PHSC 3500 Solar and Other Alternative Energies ( 3 units). Introduces the various techniques for utilizing solar energy and brings the students up to date on work to the present time on the broad spectrum of solar energy systems. Other alternative energy sources such as fission and fusion powers, geothermal energy, energy from the wind and from solid waste will also be included. (Lecture, 4 hours) Prerequisite: Upperdivision standing or consent of instructor. (Fall, Spring)

PHSC 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisite: Sophomore standing and consent of departmental coordinator.

PHSC 4940 Physical Science Internship (1-4 units). For students in physics and physical science who wish to apply their educational experience to a practical situation in public or private agency. Prerequisites: Consent of the Internship Coordinator and upper-division standing.

PHSC 4950 Selected Topics in Physical Sciences (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of physical science. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

PHSC 4960 Physical Sciences Seminar (1 unit). Presentation and discussion of selected topics in physical sciences from current literature. May be repeated for credit. Prerequisite: Consent of instructor.

PHSC 4980 Individual Study (1-4 units). For students capable of independent work in need of advanced and specialized study. The Physical Sciences department encourages students to submit proposals in areas of their interest. Proposals should outline their projects and exhibit concrete plans for their successful completion. May be repeated for a total of 6 units. Prerequisites: Upper-division standing and consent of instructor.

## Astronomy: Lower Division

ASTR 2100 Descriptive Astronomy (3 units). Development of astronomical thought from Ptolemy to Einstein; the earth and the moon; atoms; light and the tools of astronomers; planets, comets, and meteors; the sun, stars, stellar evolution; galaxies and cosmology. (Lecture, 3 hours) Audio-tutorial program and materials available every semester; features self-paced study and individual tutoring. Students interested in audio-tutorial program should contact the department. (Fall, Spring)

ASTR 2112 Astronomy Laboratory (1 unit). Telescope observations of the moon, planets, their satellites, and sunspots. Laboratory experiments related to astronomy. Prerequisite: ASTR 2100 or concurrent enrollment in ASTR 2100. (Fall or Spring)

## Astronomy: Upper Division

ASTR 3000 Contemporary Astronomy (3 units). A survey of recent developments in astronomy; gamma ray, x-ray, ultraviolet, infrared, and gravitational astronomy; stars, interstellar molecules, stellar evolutions, neutron stars, pulsars, and black holes; galaxies, radio galaxies, quasars; new trends in cosmological thinking, new findings of space programs about the planets and the sun. (Lecture, 3 hours) Prerequisite: Upper-division standing or consent of instructor. (Fall, Spring)

ASTR 4000 Astrophotography ( 2 units). Theory of the photographic process; astrophotography of the moon, planets, star clusters and galaxies; photographic photometry; reduction of photographic data. (Lecture, 1 hour; activity, 2 hours)

ASTR 4200 Planetary and Space Science (3 units). Study of the structure and origin of the planets and their atmosphere. Emphasis will be placed on new developments of NASA space programs. (Lecture, 3 hours) Prerequisite: ASTR 2100 or consent of instructor.


## Politics and Public Administration

Office: Classroom Building 132, (209) 667-3388
Chair: Steven W. Hughes
Faculty: As'ad AbuKhalil, Kenneth Entin, Lawrence L. Giventer, April A. Hejka-Ekins, Judith J. Hendricks, Steven W. Hughes, William E. Neeley, Gary C. Shaw, John T. Wold
The Department of Politics and Public Administration offers the Bachelor of Arts, Political Science and Master of Public Administration (MPA) degrees. The department also sponsors an undergraduate concentration in Public Administration and minors in Political Science and Public Administration. Consult the "Graduate Studies in Public Administration" section for an explanation of MPA program requirements and course offerings.

The department provides support for numerous programs on campus, including social sciences, liberal studies, international studies, and Latin American studies. For further information, see the appropriate sections of this catalog.

The Public Service Internship Program enables undergraduate and graduate students to gain practical experience in a professional setting. Students are assigned to administrative, legislative, legal, and political agencies. Interns normally work 16-20 hours per week and receive academic credit through a special seminar or individual study.

## Careers in Law

Students who are interested in entering the legal profession are strongly encouraged to contact the prelaw adviser in the Department of Politics and Public Administration. The department suggests that prelaw students pursue an undergraduate program which provides (1) a knowledge of the foundations of human institutions and values; (2) a high degree of competency in analytical skills; and (3) effectiveness in comprehension and use of the English language.

Most law schools currently admit applicants with the highest overall grade point average andLaw School Admission Test (LSAT) scores. The importance of high grades in academic subject areas and a respectable score on the LSAT cannot be overstressed. Prelaw students should take the LSAT in the fall semester of the year preceding their anticipated admission to law school. Applications for the LSAT are available in the Department of Politics and Public Administration. (See below for a list of recommended courses.)

## Careers in Government, Public Agencies, and Private Organizations

The political science major and the concentration in public administration focus on the political/administrative process and the theoretical underpinnings of the discipline. Courses cover a wide range of subjects and should appeal to students interested in politics and administration at all levels.

## Careers in Foreign Affairs

The department offers courses for students interested in the foreign service, international organizations, and international business.

## Bachelor of Arts, Political Science

The principal objectives of the undergraduate programs are:

- To expose students to diverse concepts and theories in the major sub-areas of the discipline.
- To encourage students to think critically and creatively about politics.
- To provide appropriate pre-professional instruction for students who intend to enter graduate school, pursue a career in law or governmental affairs, or study for a teaching credential.


## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major (6-10 units):
a. Required courses in the major field ( 6 units):

PSCI 1201 American Government, 3 units
PSCI 2000 Introduction to Political Science, 3 units (recommended), or
PSCI 2030 Global Politics, 3 units
b. Strongly recommended:

MATH 1600 Statistics, 4 units
3. Complete the major ( 30 units):
a. PSCI 3000 Ancient \& Medieval Political Thought, or PSCI 3010 Modern Political Thought, 3 units
One 3000-level course from each of the following fields: American Politics, Comparative Politics, International Relations, 9 units Courses in Political Science as approved by major adviser, 18 units
b. Strongly recommended:

PSCI 4600 Statistical Analysis for Politics, 4 units
4. Completion of a minor is not required. Eight units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.

## Political Theory and Methodology

PSCI 3000 Ancient \& Medieval Political Thought, 3 units
PSCI 3010 Modern Political Thought, 3 units •
PSCI 3030 American Political Thought, 3 units
PSCI 3055 Marx on the Human Condition, 3 units
PSCI 4600 Statistical Analysis for Politics, 4 units
American Politics
PSCI 3210 Legislative Process, 3 units
PSCI 3220 Constitutional Law, 4 units
PSCI 3225 Civil Liberties, 4 units
PSCI 3230 Political Parties \& Interest Groups, 4 units
PSCI 3235 Political Campaigns and Elections, 3 units
PSCI 3304 Introduction to Public Administration, 4 units
PSCI 3314 Corruption in Government, 4 units
PSCI 3320 Executive Legislative Relations, 3 units
PSCI 3330 California Politics, 3 units

PSCI 3700 Ethnic and Gender Politics, 4 units
PSCI 4214 The Judicial Process, 4 units
PSCI 4220 Simulation--Supreme Court Decision Making, 3 units
PSCI 4230 The Chief Executive, 3 units
PSCI 4300 Organization Theory, 4 units.
PSCI 4305 Changing Sex Roles in Organizations, 3 units
PSCI 4311 Women in American Law, 3 units
PSCI 4314 Ethics in Government, 4 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4325 Land Use Planning, 3 units
PSCI 4330 Urban Politics, 4 units
PSCI 4340 Political Demography, 3 units
PSCI 4350 Government, Business and the Economy, 3 units
PSCI 4940 Public Administration Internship, 3 units

## Comparative Politics

PSCI 3410 Comparative Politics: Latin America, 4 units
PSCI 3430 Comparative Politics: Middle East, 3 units
PSCI 3444 Gender Issues in the Middle East, 4 units
PSCI 3450 Comparative Politics: Eastern Europe, 3 units
PSCI 3470 Comparative Politics: Asia, 3 units

## International Relations

PSCI 3600 International Relations, 4 units
PSCI 4640 Foreign Policy Issues, 3 units
PSCI 4654 Politics of the Arab-Israeli Conflict, 4 units
PSCI 4680 U.S.-Latin American Relations, 4 units

## Specialized Courses

PSCI 4950 Selected Topics in Political Science, 1-5 units
PSCI 4980 Individual Study, 1-4 units
Interdisciplinary
PSCI 4700 The Political Novel, 4 units

## Postbaccalaureate

PSCI 5980 Individual Study, 1-4 units
PSCI 5990 Thesis, 1-6 units

## Public Administration Concentration Within the B.A. Degree, Political Science

## Concentration Adviser: Kenneth Entin

## Requirements

1. Complete the following prerequisites in the major field ( 6 units):

PSCI 1201 American Government, 3 units
PSCI 2000 Introduction to Political Science, 3 units (recommended)
Note: Completion of the following course is strongly recommended: MATH 1600 Statistics, 4 units

346 / Politics and Public Administration
2. Complete the following courses in the political science core (9-11 units)

PSCI 3000 Ancient \& Medieval Political Thought, 3 units or
PSCI 3010 Modern Political Thought, 3 units
One 3000-level course in International Relations, 3-4 units
One 3000-level course in Comparative Politics, 3-4 units
3. Complete the following courses in the public administration core ( 16 units)
a. PSCI 3304 Introduction to Public Administration, 4 units
b. Four of the following courses:

PSCI 3030 American Political Thought, 3 units
PSCI 4300 Organization Theory, 4 units
PSCI 4314 Ethics in Government, 4 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4325 Land Use Planning, 3 units
PSCI 4340 Political Demography, 3 units
4. Complete two of the following courses not taken above (6-8 units)

PSCI 3030 American Political Thought, 3 units
PSCI 3210 Legislative Process, 3 units
PSCI 3220 Constitutional Law, 4 units
PSCI 3225 Civil Liberties, 4 units
PSCI 3314 Corruption in Government, 4 units
PSCI 3320 Executive Legislative Relations, 3 units
PSCI 3330 California Politics, 3 units
PSCI 3700 Ethnic and Gender Politics, 4 units
PSCI 4230 The Chief Executive, 3 units
PSCI 4305 Changing Sex Roles in Organizations, 3 units
PSCI 4311 Women in American Law, 3 units
PSCI 4314 Ethics in Government, 4 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4325 Land Use Planning, 3 units
PSCI 4330 Urban Politics, 4 units
PSCI 4340 Political Demography, 3 units
PSCI 4350 Government, Business and the Economy, 3 units
PSCI 4600 Statistical Analysis for Politics, 4 units
PSCI 4940 Public Administration Internship, 3 units
5. Complete two of the following courses in supporting fields ( 6 units)

COMM 3120 Management Communication, 3 units
COMM 4110 Organization Communication, 3 units
ECON 4050 Comparative Economic Systems, 3 units
ECON 4100 Labor Economics, 3 units
ECON 4415 International Economics, 3 units
ECON 4540 Public Finance \& Fiscal Policy, 3 units
ECON 4600 Urban Economics, 3 units
HIST 3640 Contemporary America, 3 units
SOCL 4800 Formal Organizations in Modern Society, 3 units
6. Complete other electives chosen in consultation with the academic adviser to total at least 33 upper-division units in political science.

## Minor in Political Science

## Requirements (19 units)

1. Complete the following courses ( 6 units):

PSGI 1201 American Government, 3 units
PSCI 2000 Introduction to Political Science, 3 units, or
PSCI 2030 Global Politics, 3 units
2. Complete upper-division courses as approved by the minor adviser for 13 units.

## Minor in Public Administration

## Requirements ( 22 units minimum)

1. Complete the following course ( 3 units):

PSCI 1201 American Government, 3 units
2. Complete the following upper-division courses (18 units minimum):
a. PSCI 3304 Introduction to Public Administration, 4 units
b. Five of the following courses:

PSCI 3030 American Political Thought, 3 units
PSCI 4300 Organization Theory, 4 units
PSCI 4314 Ethics in Government, 4 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4325 Land Use Planning, 3 units
PSCI 4340 Political Demography, 3 units
PSCI 4600 Statistical Analysis for Politics, 4 units

## Liberal Studies Concentration in Political Science

## Requirements ( 20 units)

Complete 20 units, including at least 15 upper-division units.

1. Complete one of the following courses ( 3 units):

PSCI 2000 Introduction to Political Science, 3 units or
PSCI 2030 Global Politics, 3 units
2. At least two upper-division courses selected from the area of Comparative/ International Politics ( $6-8$ units).
3. At least two upper-division courses selected from the area of American Politics (6-8 units).
4. Complete upper-division electives to complete the 20 units (1-5 units).

## Teaching Credentials

An approved single subject waiver is available for students who wish to declare government as their subject matter teaching area. Students must plan their academic program carefully with their adviser in order to complete the approved waiver program at the time of graduation.

## Prelaw Courses

## Prelaw Adviser: John T. Wold

Departmental majors contemplating a career in law should consider, in addition to the basic degree requirements, the following courses. The prelaw adviser will provide an additional list of complementary courses upon request.

American Politics (Public Law)<br>PSCI 3220 Constitutional Law, 4 units<br>PSCI 3225 Civil Liberties, 4 units<br>PSCI 4220 Simulation-Supreme Court Decision Making, 3 units<br>PSCI 4311 Women in American Law, 3 units<br>American Politics<br>PSCI 3030 American Political Thought, 3 units<br>PSCI 3210 Legislative Process, 3 units<br>PSCI 3230 Political Parties and Interest Groups, 4 units<br>PSCI 3235 Political Campaigns and Elections, 3 units<br>PSCI 3320 Executive Legislative Relations, 3 units<br>PSCI 3330 California Politics, 3 units<br>PSCI 4214 The Judicial Process, 4 units<br>PSCI 4230 The Chief Executive, 3 units<br>PSCI 4315 Public Policy Making, 3 units<br>PSCI 4325 Land Use Planning, 3 units<br>PSCI 4330 Urban Politics, 4 units<br>PSCI 4350 Government, Business, and the Economy, 3 units

## Course Descriptions

## Lower Division

PSCI 1201 American Government (3 units). Critical analysis of American political structures and processes. Meets U.S. Constitution and California state and local government requirements for General Education. (CAN GOVT 2) (Fall, Spring)

PSCI2000Introduction to Political Science (3 units). Examination of the foundations of political science and political behavior in the West. Emphasis is placed on broadening the understanding of political science as a discipline. Recommended for majors. (Fall)

PSCI 2030 Global Politics (3 units). An introduction to the basic characteristics of the modern interdependent world: interdependence, multiple perspectives, cultural diversity, ideological diversity, world capitalism, global politics, socialist revolution.

PSCI 2950 Selected Topics in Political Science (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of political science. Topics may vary each term. Different courses may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

PSCL 3000 Ancient \& Medieval Political Thought (3 units). Historical development of political philosophy from ancient times to seventeenth century. Prerequisite:PSCI 1201.
PSCI3010Modern Political Thought (3units). Political thought from the seventeenth century to present, with emphasis on such European philosophers as Hobbes, Locke, Rousseau, and Marx. Satisfies upper division writing proficiency requirement. Prereqưisite: PSCI 1201.
PSCI 3030American Political Thought(3 units). Examination of selected American views of political life. Individuals or movements from the following list will be selected and analyzed: Puritanism, Jefferson, Madison, Hamilton, Marshall, the Jacksonians, Pro- and Anti-Slavery Thought, Populism, Progressivism, Nativism and the Ethnic Experience, Black Political Thought, Contemporary Conservatism.

PSCI 3055 Marx on the Human Condition (3 units). This course will examine the human condition from the perspective of Marx. The focus in the course will be on the relationship between the individual and society. Topics for consideration include capitalism, alienation, wealth and poverty, power and the powerless. The course will end with an examination of the individual in socialist societies.

PSCI 3210 Legislative Process ( 3 units). An examination of the organization and operation of the United States Congress. Emphasis is placed on legislative behavior, committee decision-making, leadership strategies, and congressional reform. Prerequisite: PSCI 1201. (Fall)

PSCI 3220 Constitutional Law (4 units). A study of the nature and scope of judicial review in American politics, focusing specifically on the development of lines of precedence in the areas of presidential and congressional power, federalism, equal protection and privacy. Prerequisite: PSCI 1201.

PSCI 3225 Civil Liberties (4 units). An examination of selected issues in American civil liberties, emphasizing such areas as speech, press, religion, and criminal procedures. Designed especially for prelaw students. Prerequisite: PSCI 1201.

PSCI 3230 Political Parties and Interest Groups (4 units). Study of the organization and activities of political parties and interest groups in the American political system. Emphasis is placed on the varieties and techniques of interest groups, the role of parties in elections and party reform. Prerequisite: PSCI 1201.
PSCI 3235 Political Campaigns and Elections (3 units). An examination of the principal features and consequences of American political campaigns; emphasis is placed on campaign strategies, the media; polling, contributions, and electoral outcomes. Prerequisite: PSCI 1201.

PSCI 3304 Introduction to Public Administration (4 units). (Formerly PSCI 3300). This course is an introduction to the study of principles and problems in administrative procedure in public organizations. Specific areas of examination include the relationship between bureaucratic and democratic theory, organization theory, personnel administration, fiscal and budgetary policy, and regulatory administration. Satisfies upper division writing proficiency requirement. Prerequisite: PSCI 1201.

PSCI 3314 Corruption in Government (4 units). An exploration of the nature, scope, and impact of government corruption and reform measures employed to combat it. Special emphasis is placed on investigating systemic corruption and its politicaleconomic connections.

PSCI 3320 Executive Legislative Relations (3 units). An examination of the organizational and policy dimensions of presidential-and bureaucratic-congressional relations. Topics covered include executive privilege, congressional investigations, impoundment, impeachment, and the legislative veto. Prerequisite: PSCI 1201.

PSCI 3330 California Politics ( 3 units). A study of politics and decision-making in California. Emphasis is placed on the ways public officials and private groups interact in the political arena. Prerequisite: PSCI 1201.

PSCI 3410 Comparative Politics: Latin America (4 units). A general survey of the politics of Latin America. Course includes historical factors affecting the nature of contemporary politics; the nature of contemporary political developments; the role of such forces as military, the church, and the United States; and the nature of revolution in Latin America. Prerequisite: PSCI 1201. (Spring)

PSCI 3430 Comparative Politics: Middle East (3 units). A broad survey of Middle East politics since World War II. Emphasis will be given to the major issues facing the region, and economic links between the Middle East and the developed world.

PSCI 3444 Gender Issues in the Middle East (4 units). This course offers a study of women and sexuality in the Middle East region with special emphasis on the Arab world. It deals with the issues of gender conflict and the changing roles of women in society. The course deals extensively with the subject of the impact of Islam on the lives of women and men. The subject of feminism in the Middle East will also be covered.

PSCI 3450 Comparative Politics: Eastern Europe (3 units). An analysis of government, politics, and political development in Eastern European political systems. Prerequisite: PSCI 1201. (Fall)

PSCI 3470 Comparative Politics: Asia (3 units). A survey of the political systems of China, Japan, and India, and of selected other Asian nations. Description and analysis of government, political institutions, political culture, and historical background of the major Asian powers and of states where significant instability exists. Prerequisite: PSCI 1201.

PSCI 3600 International Relations (4 units). Introduction to the elements of international relations. Work in lab simulation will be an integral part of the course. Prerequisite: PSCI 1201. (Fall)

PSCI 3700 Ethnic and Gender Politics (4 units). This course will focus on the politics of ethnicity and gender. It will begin with a consideration of the Europatriarchal ideology underlying social relations in capitalist societies, investigate the impact of these relations on peoples experiencing colonization (Native Americans, AfricanAmericans, Mexican-Americans, Asian-Americans, other "third world" peoples and women everywhere) and discrimination because of sexual preferences, and conclude with critical perspectives arising out of contemporary liberation movements. (Same as WMST 3700)

PSCI 4214 The Judicial Process (4 units). (Formerly PSCI 4210). A study of judicial decision-making and of the organization of the American court systems. Emphasis is placed on both the federal and state courts. The course includes analysis of controversies surroúnding the courts, e.g., "assembly-line justice" in the trial courts. Prerequisite: PȘCI 1201. PSCI 3220 is strongly recommended.

PSCI 4220 Simulation-Supreme Court Decision Making (3 units). A study of decision-making in the United States Supreme Court through the use of discussions and simulations of the decision process. Prerequisite: PSCI 1201. (Spring)

PSCI 4230 The Chief Executive (3 units). A study of the chief executive in American national government. The roles, responsibilities, powers and limits of the President and other decision makers in the Executive Branch are analyzed; and the centrality of the executive in the American political system is emphasized. Prerequisite: PSCI 1201.

PSCI 4300 Organization Theory (4 units). The course concentrates on structural and behavioral approaches which have contributed to the understanding of organizations. The literature on organizations is reviewed. The meaning of organizations in contemporary society is emphasized. Prerequisite: PSCI 1201. PSCI 3304 recommended. (Spring)

PSCI 4305 Changing Sex Roles in Organizations (3 units). This course deals with changes in the work environment resulting from the influx and upward mobility of women into professional positions. It will address the dynamics of the change for both men and women. Specific topics include changing demographics, cultural taboos, problems and the legal climate. (Same as WMST 4305) (Summer)

PSCI 4311 Women in American Law (3 units). This course is designed to examine American law, focusing upon significant, recent, and current cases and opinion which act to discriminate between the rights, duties, and obligations of men and women on the basis of gender.

PSCI 4314 Ethics in Government (4 units). The primary goals of this course are to promote an awareness of ethical issues in government, the development of moral judgment and growing commitment to act responsibly in public service. Emphasis will also be placed on the linkages between the individual, political organizations and American society. Prerequisite: PSCI 1201 or consent of instructor.

PSCI 4315 Public Policy Making (3 units). This course will address two areas of the policy making process: a) the role of social/political institutions with particular attention to administrative agencies, interest groups, and the judiciary in addition to the presidency and Congress; b) principal models of policy formation including elitism, systems theory, and incrementalism. Policy making in a number of specific domestic problem areas will be studied. Prerequisite: PSCI 1201. PSCI 3304 recommended. (Spring)

PSCI 4325 Land Use Planning (3 units). An examination of city and county land use policy making and issues in California. Course focuses on the nature and design of general plans and zoning ordinances; the roles played by planners, planning commissions, city councils, Boards of Supervisors, and the courts; and the impact of land use decisions on agriculture and urban development in the Central Valley. Prerequisite: PSCI 1201.

## 352 / Politics and Public Administration

PSCI 4330 Urban Politics (4 units). Study of politics, organization, and problems at the urban level with emphasis on the responses of state and federal governments to the needs and demands of cities. Prerequisite: PSCI 1201.

PSC1 4340 Political Demography (3 units). Examination of the political and policy implications of population movements and trends. To be taken concurrently with PSCI 4342. Prerequisite: PSCI 1201.

PSCI 4342 PoliticalDemography Lab (1 units). Computer application of demographic methods and principles, includes mapping of demographic data. To be taken concurrently with PSCI 4340 Political Demography.

PSC1 4350 Government, Business, and the Economy (3 units). An examination of government regulation of the business community, the administration of national economic policy, and the impact of public policy and political events on private sector behavior. Prerequisite: PSCI 1201.

PSCI 4500 The Politics of World Hunger ( 4 units). A study of the nature and causes of world hunger. Includes an examination of such questions as: How extensive is world hunger? Who are the hungry? Is the situation getting worse or better? What can be done?

PSCI 4600 Statistical Analysis for Politics (4 units). This course will address applications of statistical analysis for political and social research, involving the use of computerized statistical programs for social science data analysis. (Formerly PSCI 4110)

PSCI 4640 Foreign Policy Issues ( 3 units). Seminar will deal with contemporary issues in international relations. This course may be repeated for credit once.

PSCI 4654 Politics of the Arab-Israeli Conflict (4 units). This course offers a study of the origins and evolution of the Arab-Israeli conflict in its various dimensions. The course will include a study of Zionism and Palestinian nationalism and their relations through history with Palestine/Israel. Prerequisites: PSCI 1201 or consent of instructor.

PSCI 4680 U.S.-Latin American Relations (4 units). U.S. policy towards Latin America: who makes it, how it is made, what is it. Latin American reactions to U.S. policy. Latin American policy initiatives. U.S. intervention in Latin America. Prerequisite: PSCI 1201.

PSCI 4700 The Political Novel (4 units). An examination of the ways in which political activity and belief give shape to certain novels, particularly in America.
PSCI 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator.

PSCI 4940 Public Administration Internship (3 units). Study of the scholarly and field dimensions of employment in public sector. This course is designed for students who are serving as interns in public agencies. Prerequisites: PSCI 1201, 3300.

PSCI 4950 Selected Topics in Politics and Public Administration (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of political science. Topics will vary each term. Different topics may be taken for credit.
PSCI 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

## Postbaccalaureate

PSC1 5980 Individual Study (1-4 units). For postbaccalaureate students who seek advanced and specialized study. Prerequisites: Consent of instrictor and approval of graduate adviser.
PSC1 5990 Thesis ( 1 - 6 units). Thesis research. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of graduate adviser.

## Graduate Studies in Public Administration Master of Public Administration (MPA) Program

Director: Lawrence L. Giventer

Graduate Studies in Public Administration is a comprehensive program of professional graduate-level study which leads to the Master of Public Administration degree. The program is offered by the Department of Politics and Public Administration. Its purpose is to educate and train administrators and policy analysts to pursue leadership and management careers at local, state, and national levels.

The objectives of the MPA program are:

- Tö provide education and skill acquisition for public service professionals with particular emphasis on the needs of government and non-profit organizations in Northern and Central California.
- To maintain and improve the capacity of local and regional governments to provide excellence in public service.
- To conduct research that will broaden the base of knowledge and skills in the field of public administration.
- To serve the regional community through faculty and student involvement in public affairs.
The program serves public service professionals seeking advanced education and training as part-time students and also serves full-time students preparing for careers in public service. Program courses are offered at two instructional centers-on-campus in Turlock and in Stockton.

The MPA Program is accredited by the National Association of Schools of Public Affairs and Administration (NASPAA) and has been placed on the national roster of programs conforming with NASPAA standards for professional graduate degrees in public administration.

## Prerequisites for Admission

1. A baccalaureate degree from an accredited college or university.
2. A GPA of 2.5 in the last 60 semester units attempted.
3. Three letters of recommendation.
4. Evaluation and approval of application by the Graduate Studies Committee in Public Administration.
5. Applicants whose native language is not English will be required to demonstrate proficiency in English by completing the Test of English as a Foreign Language (TOEFL) with a score of 550 or above (with part-scores of at least 54) prior to being admitted to the program.

## Requirements for the Degree (42 units)

1. All students are required to complete a minimum of 42 semester units of upperdivision and graduate courses and seminars. A minimum of 30 of these units must be in graduate courses and seminars.
2. Students who have not had formal study in politics, economics, statistics, and introductory computer applications are advised to complete undergraduate courses before enrolling in graduate-level courses in these subjects.
3. All students are required to complete successfully one of the following options in partial fulfillment of the upper-division degree requirements:

## a. Thesis

- Required and approved elective courses, 36 units
- Approved research methods courses, 3 units
- Thesis Research, 3 units minimum
- Submission of written thesis
- Passing an oral thesis defense
b. Comprehensive Examination
- Required and approved elective courses, 42 units
- Passing a written comprehensive examination

Note: $\quad$ The option is to be selected by the student in consultation with his/her adviser.
4. Students must complete the MPA program with a minimum grade-point average of 3.0 on all upper-division and graduate course work credited toward the MPA degree. No grade less than a " $B-$ " is acceptable for the completion of a required course. A student who receives less than a "B-" in a required course must take the course again. Any student who takes the same required course twice and does not receive a " $B$ " or better will be dropped from the program. No course with a grade below "C-" may count toward completion of the required units for the MPA degree. Any student who receives a grade lower than "C-" will have this performance reviewed by the Graduate Studies Committee and may be dropped from the program. Any student who completes more than two courses with a grade "C" or below will be dropped from the program. No course which is to be counted toward the degree may be graded credit/no credit, with the one exception of PADM 5940, Public Administration Internship.
5. A public service internship program is a strongly recommended part of the MPA program, especially for the "pre-service" student. Internship positions and standards of experiential internshipeducation are coordinated with local, county, regional, state, and federal administrative agencies, non-profit organizations, or the offices of elected officials. An internship generally involves part-time work for at least six months with a public sector organization. The intern works on agency assignments under the supervision of agency personnel while maintaining close liaison with the faculty internship program coordinator. As a general rule, interns are paid by the sponsoring agency. Interns are required to take PADM 5000, Administration in Public Affairs and PADM 5940, Public Administration Internship. Internship experience can be a valuable start to a professional career for the pre-service public administration student. Your academic adviser or the faculty internship program coordinator will be able to provide further specific information and guidance.
6. The degree of Master of Public Administration will be awarded upon certification of successful completion of degree requirements by the MPA Graduate Studies Conimittec.
7. All students are required to complete the following seven courses ( 21 units):

PADM 5000 Administration in Public Affairs, 3 units
PADM 5005 Public Finance/Fiscal Policy, 3 units
PADM 5010 Quantitative Analysis, 3 units
PADM 5015 Public Policy Analysis, 3 units
PADM 5100 Organizational and Administrative Theory, 3 units
PADM 5110 Public Personnel Administration, 3 units
PADM 5200 Public Agency Budgeting, 3 units
8. In addition to the above required courses, all students will complete a minimum of 21 elective units chosen in consultation with the adviser. Up to 12 units may be 4000 -series courses. These electives permit some specialization and may be selected to meet each student's career needs.

PADM 5106 Organizational Development/Group Dynamics, 3 units
PADM 5120 Collective Bargaining in the Public Sector, 3 units
PADM 5130 Organizations, Individuals, and Ethics, 3 units
PADM 5140 Combating Political Corruption, 3 units
PADM 5203 Local Government Budgeting Simulation, 3 units
PADM 5300 Urban/Regional Planning, 3 units
PADM 5400 Computer Applications in Public Administration, 3 units
PADM 5500 Administrative Law \& Public Policy, 3 units
PADM 5505 Intergovernmental Relations, 3 units
PADM 5554 Seminar in Case Analysis, 3 units
PADM 5600 Political Theory in Public Management, 3 units
PADM 5644 Bureaucracy in Novels and Plays, 3 units
PADM 5700 County Government Administration, 3 units
PADM 5710 Research Design in Public Administration, 3 units
PADM 5715 Health Services Administration, 3 units
PADM 5800 Seminar in Special Topics in Public Administration, 1-5 units
PADM 5940 Public Administration Internship, 3 units
PADM 5980 Individual Study, 1-4 units
PADM 5990 Thesis, 1-3 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4330 Urban Politics, 4 units
'PSCI 4350 Government, Business and the Economy, 3 units
PSCI 4600 Statistical Analysis for Politics, 4 units
ECON 4100 Labor Economics, 3 units
ECON 4300 Mathematical Economics, 3 units
ECON 4415 International Economics, 3 units
ECON 4600 Urban Economics, 3 units
GEOG 4350 Urban Geography, 4 units
MATH 4461 Introduction to Operations Research, 4 units
PHIL 4401 Professional Ethics, 3 units
Note: - Other 4000 or 5000 level courses, besides those listed here, may also be taken as electives toward the MPA degree if deemed relevant and approved in writing by your graduate adviser.

## Course Descriptions

PADM 5000 Administration in Public Affairs (3 units). A graduate introduction to the problems, principles, and theory encountered in the profession of public administration. Specific areas covered include the relationship between bureaucratic and democratic theory, organizational structure, policymaking, personnel administration, fiscal and budgetary processes, and administrative regulation. Prerequisite: PSCI 1201 or equivalent. (Fall, Spring)

PADM 5005 Public Finance/Fiscal Policy (3 units). An analysis of budgetary process, expenditure policy, debt policy, intergovernmental fiscal relations, and taxation on the federal, state, local, and county levels of government. Prerequisite: ECON 2500 or equivalent and classified standing in the MPA program. (Fall, Spring)

PADM 5010 Quantitative Analysis (3 units). A study of the basis of empirical research, and the collection and analysis of quantitative date for the purpose of decision making. Prerequisites: CS 1000, an introductory course in social science methodology or statistics (e.g., MATH 1600), or consent of instructor and classified standing in the MPA program. (Fall)

PADM 5015 Public Policy Analysis (3 units). A study of processes by which public policy is formulated, implemented, and evaluated. Emphasis will be placed on increasing understanding and developing skills of critical assessment and inquiry about policies with respect to (a) the development of courses of action for problem resolutions, (b) the environmental context of policy actions, (c) the application/ administration of public policy, (d) methods for the assessment of resultant impacts and consequences of policy actions. Prerequisites: PADM 5000 and 5010. (Spring)

PADM 5100 Organizational and Administrative Theory (3 units). Examination of the development and current emphases in organization theory from scientific management to existentialism. Focus is on the use of theory in public management. Prerequisite: Classified standing in the MPA program. (Fall)

PADM 5106 Organizational Development/Group Dynamics (3 units). This course uses an experiential skill-building approach towards improved interpersonal and group relations in a public sector environment. Students learn how to diagnose and influence the decision making behavior of small groups. Prerequisite: Classified standing in the MPA program or consent of instructor. (Spring)

PADM 5110 Public Personnel Administration (3 units). An intensive overview of the personnel functions of public management. Topics include staffing, training and development, merit systems, labor relations, equal employment opportunity and affirmative action, and job evaluation. Prerequisite: Classified standing in the MPA program. (Fall)
PADM 5120 Collective Bargaining in the Public Sector (3 units). General survey of employer-employee relations in the public sector. Particular attention paid to developments in public employee collective bargaining legislation and present state of the art of negotiations for conflict resolution in the public sector. Prerequisite: Classified standing in the MPA program or consent of instructor. (Fall)

PADM 5130 Organizations, Individuals and Ethics (3 units). This course addresses ethical dilemmas inherent in the tension between organizations and individuals. Conceppts include: Administrative discretion, organizational roles and role conflicts, organizational norms, procedures and structures, and responsible behavior. Skill development in ethical decision-making is emphasized. Case studies from the public sector are used. Prerequisite: Classified standing in the MPA program. (Fall, Winter)
PADM 5140 Combating Political Corruption (3 units). This course explores the nature and dynamics of political corruption in terms of waste, fraud, and abuse especially asit relates to the public sector. Particular emphasis on systemic corruption and the role of the whistleblower is examined. Prerequisite: PADM 5000 and classified standing in the MPA program.

PADM 5200 Public Agency Budgeting (3 units). This course covers line-item; performance, and program budgets at various governmental levels. Capital budgets and fiscal techniques are explored. PADM 5005 recommended. Prerequisite: Classified standing in the MPA program. (Spring)
PADM 5203 Local Government Budgeting Simulation (3 units). A hands-on simulation of the formation, adoption, and implementation of a city budget. Prerequisites: Classified standing in the MPA program and PADM 5200.
PADM 5300 Urban/Regional Planning (3 units). The structure and role of urban and regional planning; the planning process, policy tools, planning models, urban indicators, growth limits, and policy objectives. Prerequisite: Classified standing in the MPA program or consent of the instructor. (Fall, Spring)
PADM 5400 Computer Applications in Public Administration (3 units). This course develops the knowledge and skills in computing needed by public administrators, planners, and policy analysts. The focus is on the use of computer programs important to effective public management. Applications include data base management, spreadsheet analysis, statistical analysis, presentation graphics, communications, word processing, bibliographic retrieval, and project management. Examples are drawn from government and nonprofit organization settings. Prerequisite: CS 1000 or equivalent and classified standing in the MPA program. (Winter)

PADM 5500 Administrative Law and Public Policy (3 units). Examination of the basic principles of constitutional and administrative law, leading cases, judicial decisions affecting powers, procedures and processes of governmental agencies, e.g., decision making processes in execution of administrative legislation, adjudication and discretion duties, and the rights and liabilities of public officials. Prerequisite: Classified standing in the MPA program. (Spring))
PADM 5505 Intergovernmental Relations (3 units). An examination of the administrative, political, and fiscal dimensions of intergovernmental relations. Course focuses on the development of the federal system, the character of interlevel contacts, and the main features of intergovernmental transfers. Prerequisite: Classified standing in the MPA program. (Fall, Spring)

PADM5554 Seminar in Case Analysis (3 units). A seminar which examines various issues in public administration at the national, state, and local levels via the case method. Prerequisites: Classified standing in the MPA program or consent of instructor.

PADM 5600 Political Theory in Public Management (3 units). This course focuses on the evolution of Western political ideals and values. Students read and discuss works by such philosophers as Plato, Aristotle, Machiavelli, Locke, Marx, and Rawls. Political values and concepts discussed are related to contemporary problems of public management. Prerequisite: Classified standing in the MPA program. (Fall)

PADM 5654 Bureaucracy in Novels and Plays (3 units). An examination of public administration principles and practices as portrayed in fiction. Prerequisites: Classified stand in MPA program or consent of instructor.

PADM 5700 County Government Administration (3 units). A seminar designed to orient students with the politics, structure, and functions of county government in the United States. Particular attention is paid to functional areas of county responsibility (e.g., budgeting, planning, personnel) and the range of current problems faced by counties. Prerequisite: Classified standing in the MPA program. (Fall)

PADM 5710 Research Design in Public Administrätion (3 units). A research practicum which focuses on the design and conduct of field research on local governmental issues and processes. Required of MPA students conducting thesis research. Open to other graduate students with consent of instructor. Prerequisite: Classified standing in the MPA program or consent of instructor. (Spring)

PADM 5715 Health Services Administration (3 units). This course addresses management processes and policy issues unique to health care delivery. Topics will include advanced study of finance, program evaluation, planning, regulation, and the political and social environment of health services. Prerequisite: PADM 5000 or consent of instructor. (Spring)

PADM 5800 Seminar in Special Topics in Public Administration (1-5 units). Analysis of selected topics in public administration. Topics may vary each semester. Such topics may include professionalism, public policy, and politics; urban area administration and policy; social science implications in public policy. Prerequisite: Classified standing in the MPA program. (Fall, Winter, Spring, Summer)

PADM 5940 Public Administration Internship (3 units). Study of the scholarly and field dimensions of employment in public sector. This course is designed for students who are serving as interns in public agencies. Prerequisite: Classified standing in the MPA program. (Spring)

PADM 5980 Individual Study (1-4 units). For postbaccalaureate students in public administration who seek advanced and specialized study. Prerequisites: Consent of instructor and approval of graduate adviser.

PADM 5990 Thesis (1-3 units). Thesis research. To be repeated for a minimum of 3 units. Prerequisites: Classified standing in MPA program, consent of instructor, and approval of graduate adviser.


## Psychology

Office: Classroom Building 231, (209) 667-3386
Email: marji@toto.csustan.edu
Chair: Gary D. Novak
Faculty: Rita Ann Asher, Victoria Cortez, Susan Goodwyn, Bruce E. Hesse, Jane S. Howard, Marvalene Hughes, Thomas M. Kimlicka, Elizabeth Leonard, Jamie McCreary, Cynthia L. Morgan, Lin S. Myers, Todd D. Nelson, Gary D. Novak, Gina M. Pallotta, Stanley E. Sherman, Harold Stanislaw, James A. Wakefield, Jr.

## Emeritus

Faculty: W. Mack Goldsmith
The Department of Psychology offers the degrees Bachelor of Arts, Master of Arts, and Master of Science. Concentrations in Counseling Psychology and Behavior Analysis are available in the Master of Science program. Within the Bachelor of Arts program, optional concentrations in Developmental Psychology and Experimental Psychology are offered and a Counseling Psychology concentration is under development. The Department of Psychology also offers a minor in Psychology and a concentration within Liberal Studies.

The University offers a Bachelor of Arts, Social Sciences, with an interdepartmental major in psychology and any other two disciplines within the social sciences. (For further information, see the "Social Sciences" section of this catalog.)

## Bachelor of Arts, Psychology

The major program is designed for those who (1) wish to extend their education in the liberal arts with an emphasis on psychology, (2) plan to enter a profession or occupation in which a strong background in psychology is necessary, or (3) wish to prepare for graduate work in psychology.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 6 units):
a. PSYC 2010 Introduction to Psychology, 3 units, or equivalent
b. PSYC 2020 Introduction to Psychological Methods, 3 units, or equivalent

Note: This course is a prerequisite to many regular upper-division psychology courses.
3. Complete the following courses in supporting fields ( $7-8$ units):
a. ANTH 2060 Introduction to Cultural Anthropology, 3 units, or COGS 2100 Introduction to Cognitive Studies, 3 units, or SOCL 1010 Introduction to Sociology, 3 units, or COMM 2011 Approaches to Human Communication, 4 units

360 / Psychology
b. BIOL 1010 Principles of Biology, 3 units, and BIOL 1020-1029 Special Laboratory Studies, 1 unit, or ZOOL 1050 Introduction to Zoology, 4 units
c. MATH 1600Statistics, 4 units
4. Complete the major of 30 upper-division units, as approved by the major adviser; majors must take all courses counted toward the major for a letter grade if the letter grade option is available. In addition, no more than 6 units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major (including Winter Term and field work).
5. A maximum of 3 units of combined field work, internships, and cooperative education can be applied toward the psychology major.
6. Students are permitted to complete the writing proficiency requirement through a Psychology course or one in any other discipline. It is strongly recommended that students consider PHIL 3500 Philosophy of the Mind, as a means of completing the Writing Proficiency requirement.
Note: Completion of a minor is not required. Any student seeking an exemption from a Psychology Department requirement should consult with the major adviser and file a petition with the department chair.

## The Major ( $\mathbf{3 0}$ units)

1. Complete the following required courses (7 units):
a. PSYC 3000 Experimental Methods and Design, 4 units, and
b. PSYC 4020 History of Psychology, 3 units, or

PSYC 4900 Advanced General Psychology, 3 units
2. Complete a broad basic program with one course selected from each group below (12 units):
a. Fundamentals of Psychology

PSYC 3400 Introduction to Perception, 3 units PSYC 3700 Introduction to Learning and Motivation, 3 units PSYC 4400 Cognitive Processes, 3 units
b. Biological Bases of Psychology

PSYC 3090 Comparative Animal Behavior, 3 units
PSYC 3100 Introduction to Physiological Psychology, 3 units PSYC 4110 Behavior Genetics, 3 units PSYC 4720 Experimental Analysis of Behavior, 3 units
c. Principles of Human Behavior

PSYC/CDEV 3140 Human Development I: Childhood, 3 units PSYC/CDEV 3240 Human Development II: Adolescence, 3 units PSYC 3310 Introduction to Social Psychology, 3 units PSYC 3320 Introduction to Personality, 3 units PSYC/CDEV 3340 Human Development III: Adulthood and Aging, 3 units
d. Foundations of Applied Psychology

PSYC 3160 Introduction to Psychological Testing, 3 units PSYC 3350 Introduction to Study of Abnormal Behavior, 3 units PSYC 3790 Introduction to Counseling Theory, 3 units
3. Complete at least two laboratory courses in connection with the courses listed in Section 2. They may be selected from the courses listed below ( 2 units):

PSYC 3080 Comparative Animal Behavior Laboratory, 1 unit
PSYC 3102 Introduction to Physiological Psychology Lab, 1 unit

PSYC 3120 Human Development Research Laboratory, 1 unit
PSYC 3302 Social Psychology Laboratory, 1 unit
PSYC 3410 Perception Laboratory, 1 unit
PSYC 3710 Learning and Motivation Laboratory, 1 unit
PSYC 4722 Experimental Analysis of Behavior Laboratory, 1 unit
4. Select upper-division electives with the assistance of the major adviser ( 9 units).

## Concentration in Developmental Psychology

The concentration in Developmental Psychology provides the opportunity to study human developmental processes from a psychological perspective. The concentration prepares students considering careers in child development centers, child welfareclinics, and related agencies. Moreover, it provides the academic background for those planning graduate work in Developmental Psychology and related fields. In addition to a firm grounding in basic psychology, the concentration extends psychological prinćiples to various aspects of human development.

## Requirements (39 units)

1. Complete the prerequisites to the major ( 6 units).
2. Complete the requirements for a degree major in psychology with the following restrictions (30 units):
a. Human Development I must be taken in Section 2c.
b. Human Development Research Laboratory must be taken in 'Section 3.
c. Upper-division electives in Section 4 should be selected from the courses - listed below:

PSYC 3160 Introduction to Psychological Testing, 3 units
PSYC 3170 Early Cognitive Development, 3 units
PSYC 3180 Early Social and Emotional Development, 3 units PSYC/CDEV 3240 Human Development II: Adolescence, 3 units
PSYC/CDEV 3340 Human Development III: Adulthood and Aging, 3 units
PSYC 4110 Behavior Genetics, 3 units
PSYC 4130 Psychological Disorders of Children, 3 units
PSYC 4150 Learning Disabilities, 3 units
3. Complete three additional elective courses beyond those required for the major (9 units).

## Concentration in Experimental Psychology

This concentration is for the undergraduate psychology major who intends to pursue graduate training in the area of experimental or clinical psychology. It provides a strong background in the areas of statistics and experimental methodology, which are two areas required for admission by psychology graduate schools. In addition to methodology, the student is exposed to a greater breadth of content areas in the field of experimental psychology than is required by the major. Finally, the student is provided with technical skills which greatly enhance the ability to conduct independent research, a requirement of all graduate programs.

## Requirements (39 units minimum)

1. Complete the prerequisites to the major ( 6 units).
2. Complete the requirements for the degree major in psychology with the following restrictions ( 30 units):

362 / Psychology
a. History of Psychology must be taken in Section 1.
b. Upper-division electives in Section 4 should be selected from the courses listed below:

PSYC 3090 Comparative Animal Behavior, 3 units
PSYC 3100 Introduction to Physiological Psychology, 4 units
PSYC/CDEV 3140 Human Development I: Childhood, 3 units
PSYC 3310 Introduction to Social Psychology, 3 units
PSYC 3400 Introduction to Perception, 3 units
PSYC 3700 Introduction to Learning and Motivation, 3 units
PSYC 4110 Behavior Genetics, 3 units
PSYC 4400 Cognitive Processes, 3 units
PSYC 4720 Experimental Analysis of Behavior, 3 units
3. Take one additional course in Section $2 a$ and one additional course in Section $2 b$ (6 units).
4. Complete Senior Thesis (PSYC 4990, 3 units), or take two additional laboratory courses (2-3 units).

## Degree Minor

## Requirements ( 18 units)

1. Complete the following lower-division courses ( 6 units):

PSYC 2010 Introduction to Psychology, 3 units
PSYC 2020 Introduction to Psychological Methods, 3 units
2. Complete a minimum of 12 units of upper-division psychology courses with one course selected from each of the following four groups within the psychology major. Of these, no more than 3 units of CR-graded course work (including Winter Term and field work) may be applied to the minor.
a. Fundamentals of Psychology
b. Biological Bases of Psychology
c. Principles of Human Behavior
d. Foundations of Applied Psychology.

## Liberal Studies Concentration

## Requirements ( 18 units)

1. Complete PSYC 2020, Introduction to Psychological Methods, 3 units.
2. Complete a minimum of 15 units of upper-division psychology courses with at least one course selected from each of the following four groups within the psychology major:
a. Fundamentals of Psychology
b. Biological Bases of Psychology
c. Principles of Human Behavior
d. Foundations of Applied Psychology
3. No more than 3 units of CR-graded course work (including Winter Term and field work) may be applied to the concentration.

## Teaching Credentials

Psychology students interested in obtaining a single subject teaching credential are directed to the social sciences waiver in the "Social Sciences" section of this catalog. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements to be completed in obtaining a single subject credential.

## Learning and Severely Handicapped: <br> Special Education Credential

Students planning careers in the field of teaching exceptional children should consult with the credential adviser in the School of Education regarding program requirements.

## Master of Arts in Psychology

The Master of Arts program in psychology is designed (1) to prepare students for advanced graduate work, or (2) for those students who desire a research oriented program. Admission to the program is competitive.

## Minimum Prerequisites for Admission

1. A Bachelor of Arts degree with a minimum of 16 approved semester units in psychology, including a background in experimental and research skills. These courses must be acceptable to the Psychology Graduate Committee in terms of course content and student performance.
2. A minimum 3.0 GPA in the undergraduate major.
3. Satisfactory performance on the Graduate Record Exam General Test (GRE). Applicants are also required to show satisfactory performance on the Graduate Record Exam Subject Test in Psychology, but may delay this test. Contact the Graduate Coordinator for further information.
4. Choose an area of interest and a faculty member with whom you would like to work. After consultation with the faculty member, submit:
a. a brief description of a sample problem you might choose as a thesis,
b. a letter of support from the faculty member stating that he or she agrees to serve as chair of your Master's committee and will direct the research for your chosen project,
c. a list of all course work needed for completion of your degree.
5. Three letters of recommendation.
6. Approval by the Psychology Department.

## Minimum Prerequisites for Continuation

1. Maintenance of a 3.0 GPA in all courses attempted.
2. Satisfactory progress on the thesis research.
3. Other requirements may be stated in University and departmental guidelines for academic probation and termination. The student is responsible for obtaining current copies of these regulations and complying with the criteria listed.

## Requirements ( $\mathbf{3 0}$ units)

1. Complete the Master of Arts program, as outlined below ( 30 units):
a. Complete the following courses ( 12 units):

> PSYC 5000 Advanced Quantitative Methods, 3 units
> PSYC 5940 Field Work, 6 units
> PSYC 5990 Master's Thesis, $1-3$ units
b. Select the remaining 18 semester hours from the available 4000- and 5000level catalog courses. These courses are to be selected with prior approval of the student's thesis committee (PSYC 5780, 5790,5910, and 5930 are not open to Master of Arts students.)
c. At least $50 \%$ of all M.A. course work must be at the 5000 -level. There are also restrictions as to the amount of course work that can be graded "Credit/NoCredit."
2. Complete Master of Arts research including a public defense of the thesis.

Note: - No more than 9 units of graduate credit can be transferred from work taken while in unclassified status. The 9-unit limit also applies to any graduate work transferred from other institutions.

## Master of Science in Psychology

The primary purpose of the Master of Science Program in Psychology is to develop mastery of a substantial body of knowledge and skills for students planning careers in counseling or clinical psychology (with a Behavior Analysis emphasis). The Behavior Analysis Program emphasizes applied behavior analysis and trains students for positions in a wide range of clinical settings. Students completing the Counseling Program or the Applied Behavior Analysis Program fulfill the academic requirements to sit for the Marriage, Family, and Child Counseling License examination. Admission to the program is competitive. See the Psychology Department's "Graduate Student Handbook" for additional information.

## Minimum Prerequisites for Admission

1. A Bachelor of Arts or Bachelor of Science degree with 16 approved units in Psychology including Introduction to Psychology and a grade of B - or better in an upper division experimental and research skills course. These courses must be acceptable to the Psychology Graduate Committee in terms of course content and student performance. Additional specific prerequisite courses for each concentration are outlined in the Psychology Department's "Graduate Student Handbook."
2. A minimum 3.0 GPA in the undergraduate major.
3. Satisfactory performance on Graduate Record Examination (general and psychology portions).
4. Completion of a set of examinations which may be administered by the Psychology Department to determine those areas in which further preparation is required.
5. Approval by the Psychology Department.
6. Related work or volunteer experience strongly recommended.
7. Individuals who need to complete the minimal prerequisites may apply for postbaccalaureate status. Please refer to the catalog section "Graduate and Postbaccalaureate Application Procedures."

## Minimum Prerequisites for Continuation

1. Maintenance of a 3.0 GPA in all courses attempted.
2. Satisfactory progress toward the degree.
3. A classified graduate student in psychology will be dropped from classified
standing upon receiving more than three units of graduate study graded less than "B-." However, any graduate student may retake a course graded less than "B" for a higher grade, and a classified student must remove such grade deficits (in excess of three units) in the next semester or petition the Graduate Committee for a time extension if it is impossible to make up the deficit. In no case will more than three units graduate study graded less than "B-" be counted towards a Master's Degree.
4. Satisfactory completion of the Psychology Department's writing requirement.
5. Other requirements may be stated in University and Department Guidelines for Academic Probation and Termination. The student is responsible for obtaining current copies of these regulations and complying with the criteria listed.

## Requirements ( $\mathbf{5 0}$ units minimum)

1. Complete the appropriate 50 or more units or their equivalent.
2. Complete the 29 core units listed in the Basic Requirements Section as well as the requirements listed for the concentration to which they have been admitted.
Note: Course requirements may be satisfied by demonstrating proficiency in the subject matter included in a required course. This will normally be done through challenge procedure or acceptable transfer credit.
Note: Field work is strongly encouraged. Contact a faculty adviser to discuss appropriate placements.
Note: Some modification to the below stated requirements may be made to accommodate new California educational requirements for the Marriage Family Child Counselor License.

## Basic Requirements

PSYC 4722 Experimental Analysis of Behavior Lab, 1 unit
PSYC 4790 Behavioral Engineering, 3 units
PSYC. 5000 Advanced Quantitative Methods, 3 units
PSYC 5080 Legal and Ethical Issues, 3 units
PSYC 5130 Advanced Human Development, 3 units
PSYC 5650 Child Clinical Interventions, 3 units
PSYC 5690 Counseling Sexual Problems, 4 units
PSYC 5770 Substance Abuse/Chemical Dependency Counseling, 3 units
PSYC 5810 Group Dynamics Seminar, 3 units
PSYC 5990 Thesis, 3 units
Note: Extra thèsis units may be taken as appropriate. Students must register for thesis units during any semester, including summer, in which they are working under direct faculty supervision.

## Concentrations

Behavior Analysis
PSYC 4550 Practicum in Direct Instruction, 3 units
PSYC 4720 Experimental Analysis of Behavior, 3 units
PSYC 4750 Applied Behavior Analysis for Severely and Learning Handicapped, 3 units
PSYC 5070 Practicum in Child Diagnostics and Intervention, 3 units, or PSYC 5090 Behavioral Assessment, 3 units

PSYC 5640 Advanced Seminar in Behavior Change, 3 units.<br>PSYC 5910 Practicum in Counseling and Diagnostics, 3 units, or<br>PSYC 5930 Practicum in Behavior Modification, 3 units<br>PSYC 5960 Seminar in Applied Psychology, 3 units<br>Counseling Concentration<br>PSYC 4360 Seminar in Clinical and Abnormal Psychology, 3 units<br>PSYC 5030 Psychodiagnostics I, 3 units<br>PSYC 5042 Psychodiagnostics I Laboratory, 1 unit<br>PSYC 5780 Advanced Counseling, 3 units<br>PSYC 5790 Family Counseling Theory and Practice, 3 units<br>PSYC 5800 Marriage and Family Life, 2 units<br>PSYC 5910 Practicum in Counseling and Diagnostics, 3 units .<br>Must be repeated for a total of 6 units.

## Course Descriptions

## Lower Division

PSYC 1000 Sexual Behavior (3 units). The biological, psychological, and cultural origins of sexuality are reviewed within the context of human evolution and development. (Winter, odd years)

PSYC 2000 Honors Introduction to Psychology (4 units). This course offers a more in-depth introduction to the study of human behavior than that offered by basic introductory courses. Fulfills all prerequisites met by PSYC 2010. Laboratory activities and demonstrations accompany each unit of material. Prerequisites: Consent of instructor; advisement by Honors Program. (Fall)

PSYC 2010 Introduction to Psychology (3. units). Scientific study of human behavior. This course or its equivalent is a prerequisite to all upper-division courses in psychology. (CAN PSY 2) (Fall, Spring)
PSYC 2020 Introduction to Psychological Methods (3 units). Basic techniques and procedures for making systematic observations in a wide variety of psychological situations, both laboratory and field. Psychological methods demonstrated through topics of current research and application, and through demonstration-lab projects. Prerequisite: PSYC 2010 or equivalent. (Fall, Spring)

PSYC 2030 Psychology of Adjustment (3 units). A review of issues in personal and social adjustment to prepare students for a lifelong understanding of themselves as integrated persons. Topics include a study of personal development through the life cycle, psychological and physical aspects of stress, personal coping skills and stress management, interpersonal communication, family relationships, effective integration of work and leisure.

PSYC2950 Selected Topics in Psychology (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of psychology. Topics may vary each term. Different topics may be taken for credit. Prerequisites: Consent of instructor and PSYC 2010 or equivalent.

## Upper Division

PSYC 3000 Experimental Methods and Design (4 units). Provides a working knowledge of fundamental scientific methods in psychology, stressing the integration of laboratory methods, measurement theory, and inferential statistical techniquês, including introduction to analysis of variance. This course is a prerequisite to the laboratory courses required of psychology majors. Prerequisites: PSYC 2020 and MATH 1600 or consent of instructor. (Fall, Spring)

PSYC 3010 Child Abuse and Neglect (l unit). (Same as CDEV 3010) Child maltreatment will be examined from a variety of perspectives, including those of victims, perpetrators, mental health professionals, child care workers and teachers, the legal system and public policy makers. Issues addressed will include definitions, causes, consequences, assessment, reporting, treatment and prevention of child abuse and neglect. Course content will cover all areas required by the State of California under AB 141.

PSYC 3080 Comparative Animal Behavior Laboratory (1 unit). Laboratory experiments and field observation will focus upon the ways in which different species deal with the basic biological problem of foraging and feeding, defense, and reproduction. Prerequisite: Prior or concurrent enrollment in PSYC 3090 (Spring, even years)

PSYC 3090 Comparative Animal Behavior (3 units). A comparative study of behavior̀ systems in animals and humans. Stress is upon the social and developmental aspects of behavior. Prerequisite: BIOL 1010 or ZOOL 1050. Concurrent enrollment in PSYC 3080 not required. (Spring)

PSYC 3100 Introduction to Physiological Psychology (3 units). Relationship between behavior and physiological processes, particularly neurophysiological processes. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: BIOL 1010 or ZOOL 1050 (Fall)

PSYC 3102 Introduction to Physiological Psychology Lab (1 unit). Laboratory experience and experiments designed to integrate neuroanatomy, neurophysiology, and physiological psychology. Lab includes activities such as sheep brain dissection, methodology, ethics of research, actual experience with laboratory animals, and scientific writing. Prerequisites: BIOL 1010 or ZOOL 1050 and concurrent or prior enrollment in PSYC 3100 required. (Fall)

PSYC 3120 Human Development Research Laboratory (1 unit). Laboratory experience in the systematic observation of developmental phenomena in human behavior. Prerequisites: PSYC 2020 and concurrent or prior enrollment in PSYC 3140,3240 , or 3340 or consent of instructor. (Fall, Spring)

PSYC 3140 Human Development I: Childhood (3 units). (Same as CDEV 3140) Basic principles of human development as they apply to infancy and childhood. Discussion of current developmental research and applications. Prerequisite: PSYC 2010 or consent of instructor. (Fall, Spring)

368 / Psychology
PSYC3160Introduction to PsychologicalTesting (3 units). Basic, widely applicable principles of psychological testing presented in a nontechnical way, plus descriptions of representative types of psychological tests in common use. Prerequisite: PSYC 2020 or consent of instructor. (Fall, Spring)

PSYC 3200 Psychology of Religion (3 units). The course will focus on subjective and behavioral responses to a variety of religions and other belief systems. Topics will include the origins of religious belief, conversion, mystical states, and the relation of religious commitment to personality development, other social attitudes (e.g., prejudice), morals, and mental health. (Fall, odd years)

PSYC 3240 Human Development II: Adolescence (3 units). (Same as CDEV 3240) Examines basic developmental issues in adolescent development, including physical and psychological effects of puberty, cognitive, social and personality development, and psycho-social problems. Discussion of current developmental research and application. Prerequisites: PSYC 2010 or consent of instructor.

PSYC 3302 Social Psychology Laboratory (1 unit). Laboratory and field studies to demonstrate the variety of methods and content areas in social psychology. Prerequisites: PSYC 3000 and concurrent or prior enrollment in PSYC 3310 required. (Winter, odd years)

PSYC 3310 Introduction to Social Psychology (3 units). Survey of interpersonal relations and behavior from a psychological perspective. An emphasis will be placed on the role of social cognition and attitudes. Topics to be covered include images of self and others; social motives such as affiliation, altruism and aggression; and dyadic and group relationships. Prerequisites: PSYC 2010 and 2020 or consent of instructor. (Fall, Spring)

PSYC 3320 Introduction to Personality ( 3 units). Survey of the most influential approaches to the study and understanding of personality withemphasis on comparison of critical, theoretical issues. Prerequisite: PSYC 2010 or consent of instructor. (Fall, Spring)

PSYC 3340 Human Development III: Adulthood and Aging (3 units). (Same as CDEV 3340) Basic principles of adult development and aging from maturity to death are examined. Biological, psychological, and sociological aspects of development and aging are considered through discussion of relevant theory, research, and application. Prerequisites: PSYC 2010 or consent of instructor.

PSYC 3350 Introduction to the Study of Abnormal Behavior (3 units). Abnormal behavior in humans, stressing symptoms and dynamics of neuroses and psychoses. Prerequisites: PSYC 2020 plus 2 additional courses in psychology. PSYC 3140 and 3320 are recommended. (Fall, Spring)

PSYC 3400 Introduction to Perception (3 units). Basic phenomena in the area of perception. Simple and complex responses to stimuli. Topics include form perception and organization, color, illusions, space perception, motion perception, perceptual development. Basic phenomena are demonstrated and interpretations considered. Prerequisite: PSYC 2020. Concurrent enrollment in PSYC 3410 not required. (Spring, odd years)

PSYC 3410 Perception Laboratory (1 unit). Laboratory experience in phenomena related to perception and cognition. Prerequisites: PSYC 3000 and concurrent or prior enrollment in PSYC 3400 required. (Spring, odd years)
PSYC 3660 Psychology of Women ( 3 units). This course provides a psychological examination of the nature and experiences of women in contemporary society. Topics to be discussed include women and power, the meaning of sexuality, stress and conflict surrounding women's roles, and male-female relationships. (Same as WMST, 3660) (Fall, even years)

PSYC 3700 Introduction to Learning and Motivation (3 units). Basic phenomena of learning and motivation are covered. Various theoretical viewpoints are covered, including cognitive, stimulus-response, and humanistic theories of learning and motivation. Basic phenomena covered include classical and operant conditioning, the roles of reward and punishment in learning, transfer of learning, and retention. Utilization of these concepts in classroom situations and society is demonstrated. Prerequisite: PSYC 2020 or concurrent enrollment. Concurrent enrollment in PSYC 3710 nof required. (Fall, Spring)
PSYC 3710 Learning and Motivation Laboratory (1 unit). Laboratory experiments within the framework of human (e.g., verbal) learning for the purpose of introducing and implementing predominant statistical techniques associated with this area (i..e., analysis of variance, factorial designs, planned comparisons). Prerequisites: PSYC 3000 and concurrent or prior enrollment in PSYC 3700, or consent of instructor. (Spring)

PSYC 3790 Introduction to Counseling Theory ( 3 units). Introduction to major theories of counseling. Demonstrations and review of current literature. Prerequisite: PSYC 3320. (Fall, Spring)

PSYC 4020 History of Psychology (3 units). Trends of thought, development of psychology as a discipline with leaders, schools, and issues. Prerequisites: PSYC 2020 and two upper-division courses in psychology, or consent of instructor. (Spring)

PSYC 4110 Behavior Genetics (3 units). Evaluation of the genotypic contribution to human and animal behavior. Special emphasis on the interaction between genotype and environment during development. Prerequisite: BIOL 1010 or ZOOL 1050. (Spring)

PSYC 4130 Psychological Disorders of Children (3 units). A review of theories and treatment techniques dealing with a broad range of childhood disorders, including autism, childhood schizophrenia, mental subnormality, and psychophysiological problems. A behavioral approach, based on empirical evidence, will be emphasized. Prerequisite: PSYC 3140. (Spring)

PSYC 4150 Learning Disabilities (3 units). Overview of the major categories of learning disabilities including educationally retarded and behavior disorders: Survey of instructional programs and review of supportive data for those programs. Prerequisite: PSYC 3140 or consent of instructor. (Fall, Spring)

370 / Psychology
PSYC4250Drugs and Behavior (3 units). The social, psychological, and physiological effects of all the major therapeutic and recreational drugs will be revicwed. The issues of drug use and abuse will be studied to develop effective strategies for prevention and rehabilitation of drug dependency. (Fall)

PSYC 4350 Chemical Dependency Counseling (3 units). Counseling methods effective for intervention and treatment of harmful alcohol/drug use are studied, including individual differences in diagnosis, recovery, and relapse. Methods to enhance counseling skills and occupational success will be practiced. Prerequisites: PSYC 4250. (Winter, even years)

PSYC 4360 Seminar in Clinical and Abnormal Psychology (3 units). Survey of theory and research in clinical and abnormal psychology, with emphasis on diagnosis and treatment systems. Prerequisites: PSYC 3140 or 3320,3350 , and consent of instructor. (Spring)

PSYC 4380 Professional Issues and Practice (3 units). Survey of contemporary issues and viewpoints in the practice of psychology. Includes descriptions of the settings in which psychologists and others in the related helping professions do their work, the nature of their skills, and kinds of clientele they serve. Issues include ethical and political ones, public vs. private practice, etc. This course is intended for advanced undergraduates. Prerequisites: Twelve upper-division units in psychology or consent of instructor. (Fall, even years)

PSYC 4400 Cognitive Processes (3 units). An introduction to the study of human information processing and such higher mental processes as thinking, attention, comprehension, imagery, memory, language, and reasoning. Prerequisites: PSYC 2010, 2020, or consent of instructor. (Spring, even years)

PSYC 4520 Principles of Sensory Processes (4 units). The psycho-physical analysis of spatial and temporal properties of the human senses. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: BIOL 1010 or ZOOL 1050. (Spring, odd years)

PSYC 4550 Practicum in Direct Instruction (3 units). Acquisition and application of direct instruction teaching strategies. Students will work in small groups with children who have been identified as functioning below grade level in reading or math. Emphasis is on learning generalized direct instruction skills. Prerequisite: Consent of instructor. (Fall, Spring)

PSYC 4560 Theory of Direct Instruction (3 units). Analysis and evaluation of instructional theories as they apply to the special education aspects of curriculum and teacher-presentation strategies designed to maximize generalization and minimize errors for "high-risk" pupils. Prerequisite: EDSE 4310. (Fall)

PSYC 4720 Experimental Analysis of Behavior (3 units). The study of behavior principles, emphasizing respondent and operant conditioning, and their application in experimental research. Prerequisites: PSYC 2020 or consent of instructor and concurrent enrollment in PSYC 4722. (Fall)

PSYC 4722 Experimental Analysis of Behavior Laboratory (1 unit). Laboratory studies with infra-human species to demonstrate the basic principles of behavior. Prerequisites: PSYC 2020 and 4720 or 4790 . (Fall)

PSYC 4750 Applied Behavior Analysis for Severely and Learning Handicapped ( 3 units). Application of learning principles to educational and behavioral problems of individuals, enabling the student to design and implement programs for special education pốpulations. Gives the student skills in program management and evaluation. (Spring)

PSYC 4770 Introduction to Counseling Techniques (3 units). Training in basic counseling skills. Prerequisites: PSYC 3790, senior standing, and consent of instructor. (Fall, Spring)

PSYC 4790 Behavioral Engineering ( 3 units). The course consists of the basic principles and terminology of behavior analysis applied to a variety of human settings. Behavior change, program design, and evaluation will be discussed. Examples will be drawn from parent training, child management, self-management, clinical psychology, and everyday social interactions. Prerequisite: PSYC 2010 or equivalent. (Spring)

PSYC 4800 Origins of Human Consciousness ( 3 units). The origins of human consciousness are traced through both the biological and cultural histories of humanity. Prerequisites: Upper-division standing and consent of instructor. (Spring, odd years)

PSYC 4810 Social Psychology of Personal Relationships (3 units). Social psychological analysis of close relationships such as friendships, marriages, and gay and lesbian relationships. Processes such as attachment, conflict, and commitment will be examined. Satisfies upper division writing proficiency requirement. Prerequisite: PSYC 3310 or consent of instructor. (Spring, odd years)

PSYC 4820 Group Dynamics and Interpersonal Behavior (3 units). Review of the factors that shape and influence interpersonal behavior in small groups. Interventions for improving group leadership and decision making will be examined. Satisfies upper division writing proficiency requirement. Prerequisite: PSYC 3310 or consent of instructor.

PSYC 4821 Group Dynamics Workshop (1 unit). An experiential introduction to group dynamics through a series of simulations. The objectives are 1) to increase awareness of group process, 2) to understand social psychological factors in group dynamics, and 3) to increase effectiveness in small groups. May be repeated for a total of 2 units. Prerequisite: Consent of instructor. (Fall, Spring)

PSYC 4900 Advanced General Psychology (3 units). Review of the major content areas of psychology. Synthesis of concepts, facts, and methods studied in specialized upper-division courses. Prerequisites: At least two 4000 -level psychology courses and senior standing or consent of instructor. (Fall)

PSYC4910 Cooperative Education (2-4units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units. See catalog headings, "Requirements for the Bachelor of Arts Degree in Child Development" or "Requirements for the Bachelor of Arts Degree,

Psychology" for details regarding application to the respective major. Prerequisites: Sophomore standing and consent of departmental coordinator.

PSYC4920 Topics in Child Development(Topics to be specified in Class Schedule)(15 units). Development of a specific area in child development. Topics will vary each term; different topics may be taken for credit. Prerequisite: Consent of instructor. (Winter)

PSYC 4930 Psychology Colloquium (1 unit). Review of research in areas of psychology of current interest. Topics will include both applied and basic research. May be repeated for a total of 6 units, 2 of which can be applied to the major. (Fall, Spring)

PSYC 4940 Field Work in Psychology (1-2 units). Work of a psychological nature performed in schools, agencies, and institutions under joint supervision of the department and agency where assigned. May be repeated for credit. See catalog headings "Requirements for the Bachelor of ArtsDegree in Child Development" or"Requirements for the Bachelor of Arts Degree, Psychology" for details regarding application to the respective major. Prerequisites: PSYC 2020 and consent of instructor. (Fall, Spring)

PSYC4950 Selected Topics in Psychology (Topics to be specified in Class Schedule) (1-5 units). Development of a specific area in psychology. Topics will vary depending on instructor. Different topics may be taken for a total of 6 units. Prerequisite: Consent of instructor.

PSYC 4980 Individual Study (1-4 units). For students capable of independent work and desirous of undertaking specialized study. May be repeated for a total of 6 units. Prerequisite: Prior consent of instructor. (Fall, Spring)

PSYC 4990 Senior Honors Thesis (3 units). The Senior Honors Thesis is an independent research project in psychology and is limited to qualified majors in their senior year. It is supervised by a committee of at least two faculty and is expected to be of publishable quality. Can be taken for a maximum of 6 units total, 3 of which may count toward the major. Prerequisites: Major in psychology, senior standing, invitation of instructor. (Fall, Spring)

## Graduate

PSYC 5000 Advanced Quantitative Methods (3 units). Advanced psychological statistical methods and interpretation, and research design, stressing complex analysis of variance and multivariate methods. Prerequisites: PSYC 3000 and 4000 or consent of instructor, and graduate standing. (Spring)

PSYC 5030 Psychodiagnostics I (3 units). Strategies of diagnostic evaluation with emphasis upon instruments for evaluation of intelligence, aptitudes, personality, and interests of adolescents and adults. Prerequisites: PSYC 3160, classified graduate standing, consent of instructor, and concurrent enrollment in PSYC 5042. (Fall)

PSYC 5042 Psychodiagnostics I Laboratory (1 unit). Supervised work with the application of diagnostic strategies to representative cases. Prerequisite: Concurrent enrollment in PSYC 5030. (Fall)

PSYC 5050 Psychodiagnostics $I I$ (3 units). Strategies of diagnostic evaluation with emphasis upon instruments for evaluation of intelligence, achievement, learning abilities, and emotional adjustment of preschool and school age children. Prerequisites: PSYC 3160, classified graduate standing, consent of instructor, and concurrent enrollment in PSYC 5060.

PSYC 5060 Psychodiagnostics II Laboratory (1 unit). Supervised work with the application of diagnostic strategies to representative cases. Prerequisite: Concurrent enrollment in PSYC 5050.

PSYC 5070 Practicum in Childhood Diagnostics and Intervention (3 units). A minimum of 6 diagnostic reports, including remedial recommendations, will be completed. At least 3 of the cases will be followed completely through intervention. Students will receive one hour per week of individual supervision. Work will be done in local agencies such as the Child Development Center. Prerequisites: PSYC 5050 and 5060 or PSYC 5090 and consent of instructor.

PSYC 5080 Legal and Ethical Issues in Psychology and Counseling (3 units). This course attempts to engage the student in the struggle with legal and ethical issues that most affect the practice of professional psychology. Prerequisites: PSYC 4770 and graduate standing. (Spring)

PSYC 5090 Behavioral Assessment (3 units). The general principles of behavioral assessment will be the primary subject matter with traditional psychological assessment procedures introduced for comparison purposes. Areas such as observation methods, reliability, and single-subject evaluation designs will be studied in detail. Applications of such evaluation techniques as they apply to intervention strategies will be examined. Theories and applications of commonly used psychological tests (such as the MMPI, WAIS and Rorschach) will be discussed and their relevance compared to behavioral measures. Prerequisites: Graduate standing and PSYC 4790. (Spring, even years)

PSYC 5130 Advanced Human Development ( 3 units). Empirical research on theoretical constructs of human development, Prerequisites: PSYC3140 or equivalent, four upper-division courses in psychology, and graduate standing. (Fall)

PSYC 5640 Advanced Seminar in Behavior Change (3 units). Complex topics related to human learning and psychopathology will be the primary subject matter. Such areas as thinking, creativity, problem solving, phylogeny and ontogeny of behavior will be examined from a behavioral perspective. This perspective will be compared to the personality theory framework which produced the currentDSMIIR diagnostic system. The etiology, diagnosis, treatment, and prognosis of various psychological disorders will be studied using the DSM IIIR as a guide and current behavioral theory as it applies. Prerequisites: PSYC 4720 and 4722 ; PSYC 4750 and 4790 recommended. (Spring, odd years)

PSYC 5650 Child Clinical Interventions (3 units). This course covers child clinical issues including therapy approaches and assessment for behavioral and emotional disorders; child physical, sexual and emotional abuse; and mandated child abuse reporting laws. Prerequisite: PSYC 5130.

## 374 / Psychology

PSYC 5690 Counseling Sexual Problems (4 units). This course will review, in addition to the discipline of sex therapy, the more general practice of sexuality counseling, including sex education, values clarification; reassessment of attitudes, relationship issues, self image, sexual identity, and sex-role development. Sexuality issues, requiring professional counseling, include: Divorce, adolescent sexuality, aging, disabilities, family planning, abortion, sexual assault victims, incest, alcohol and chemical dependency, gay and lesbian identifies, chronic illness, and sexually transmitted diseases. These issues will be integrated into the course coverage of interviewing, assessment, and treatment approaches. Prerequisites: Second year master of science classified graduate standing. (Fall)

PSYC5770 Substance Abuse and Chemical Dependency Counseling (3 units). This course will review diagnostic and assessment practices, goal setting, treatment, planning, and will include role-playing techniques. A systematic approach to treatment will be emphasized along with various theoretical approaches. Prerequisite: Classified Graduate standing.

PSYC 5780 Advanced Counseling ( 3 units). Counseling practices focused on a method of brief goal-oriented psychotherapy whichincludes: Assessment, establishing mutual goals, treatment interventions, and termination issues. Practice in the techniques of counseling and client file record keeping. Prerequisites: PSYC 4770, and classified graduate standing. PSYC 5030, 5042, or PSYC 5090 and previous or concurrent enrollment in PSYC 5080 are preferred. (Spring)

PSYC 5790 Family Counseling Theory and Practice (3 units). Study of theory and techniques of conjoint family therapy with consideration of such topics as parentchild relationships, human sexuality, and combined families. Prerequisites: PSYC 3790, 4770, and graduate standing. (Spring)

PSYC 5800 Marriage and Family Theory ( 2 units). The family is examined as a social and psychological entity. Theoretical approaches to understanding family structure and interaction are reviewed. Special emphasis is placed upon developing an understanding of the diversity of family forms in contemporary American society and on exploring the relationship of these forms to social, cultural and psychological factors. Prerequisites: Graduate standing and consent of instructor. Undergraduate course in Marriage and Family recommended. (Fall)

PSYC 5810 Group Dynamics Seminar (3 units). A review of the structure and processes of small groups. The meaning of group membership in contemporary society is explored as a means of understanding the psychological impact of group membership. Social psychological theory provides a backdrop for a variety of topics, including group development conflict, power, leadership, and decision making. (Formerly 4820) Prerequisite: PSYC 3310 or consent of instructor. (Fall)

PSYC5830 Seminarin Close Relationships (3 units). An examination of psychological aspects of close relationships through a review of empirical and theoretical literature. Topics to be considered include social exchange processes, interpersonal compatibility, attributions for relationships events, emotional processes, and the dynamics of social influence. The role of close relationships in the construction and maintenance of selfimage will also be discussed. Prerequisite: PSYC 3310 or equivalent.

PSYC 5910 Practicum in Counseling and Diagnostics (3 units). Supervised client contact hours in individual, couples, family, or group counseling depending on agency providing practicum experience. Emphasis on formal assessment, diagnostic testing, client charting, treatment planning and development of student's own theoretical orientation. Students will make regular case presentations, receive inservice training and write up assessment and treatment reports. Prerequisites: PSYC $5030,5080,5780$, second yearclassified graduate standing and approval by Graduate Committee. Prior practical experience strongly recommended. (Fall, Spring)

PSYC 5930 Practicum in Behavior Modification (3 units). The course consists of supervised experience in the assessment and modification of behavior with various types of clients. Activities will include assessment interviews and observations, analysis of controlling variables within the immediate environment of the client, assessment of resources for change, and the implementation and evaluation of behavior change procedures. Students will give oral presentations and evaluation to the faculty supervisor and fellow practicum students on a regular basis during case conferences. The typical client will be from a family counseling agency or will be a developmentally delayed child or young adult living in the family residence or group home or be à patient in a psychiatric facility. Prerequisites: PSYC 4720 or 4790 and consent of instructor. (Fall)

PSYC 5940 Field Work (1-4 units). Work of a psychological nature performed in schools, agencies, and institutions under joint supervision of the University and agency where assigned. May be repeated for a total of 6 units. Prerequisites: Graduate standing and consent of instructor. (Fall, Spring)

PSYC 5950 Selected Topics in Psychology (1-5 units). Development of a specific area in psychology. Topics will vary depending on instructor. Different topics may be taken for a total of six units. Prerequisite: Graduate standing.

PSYC 5960 Seminar in Applied Psychology (3 units). This course is devoted to the study of strategic therapies as applied to both individuals and families. It is designed to help the student benefit from supervision in clinical settings which utilize strategic approaches. Prerequisite: Consent of instructor. (Winter, even years)

PSYC 5980 Individual Study (1-4 units). For qualified postbaccalaureate students in need of advanced and specialized study. Different topics may be taken for a total of 6 units. Exception to the 6 unit limit may be granted by the Graduate Committee. Prerequisite: Consent of instructor. (Fall, Spring)

PSYC 5990 Master's Thesis (1-3 units). Preparation of a thesis in area of specialty for partial fulfillment of requirements. Prerequisites: Admission to classified graduate standing and consent of instructor. (Fall, Spring)


## Russian and East European Studies Degree Minor

Office: $\quad$ Classroom Building 101,(209)667-3181<br>Coordinator: H. Dieter Renning (Economics)<br>Advisers: Samuel A. Oppenheim (History), H. Dieter Renning (Economics), Michael J. Schmandt (Geography), Gary C. Shaw (Politics and Public Administration)

Russian-East European Studies is an interdisciplinary minor available to those who seek a coordinated and in-depth knowledge of that area. This minor is both for those who wish this knowledge for its own sake and for those who would like to employ it subsequently in either the public or private sector. Students wishing to use the minor for future employment purposes are encouraged to enroll in language courses of that area.

## Minor in Russian-East European Studies

## Requirements for the Minor ( $\mathbf{2 0}$ units minimum)

1. Complete University requirements for a Bachelor of Arts degree (51 units minimum).
2. Complete the requirements for a major.
3. Complete the minor of not less than 20 units.

## The Minor

1. Select 12 to 16 units from the following list, to include at least one course from each of three different disciplines:

ECON 4420 The Economy of Russia, 3 units
GEOG 3570 Geography of Russia and East Europe, 3 units
HIST 4420 Russia to 1917, 3 units
HIST 4430 Twentieth-Century Russia, 3 units
PSCI 3055 Marx on the Human Condition, 3 units
PSCI 3450 Comparative Politics: Eastern Europe, 3 units
Note: At its discretion, the Russian-East European Studies Committee may designate additional courses-Winter Term or regular terms-that might apply toward this list. These could be courses from the above disciplines or from other disciplines.
2. Complete the minor as follows:
a. Select four units in the form of two 2-unit courses in Individual Study (ECON 4980, ENGL 4980, GEOG 4980, HIST 4980, PSCI 4980, or other appropriate disciplines) which delve more deeply into one or more aspects of previous course work taken in the minor; and/or
b. Select four units of MDIS 4980, Russian-East European Studies Research Paper, in which the student will write an interdisciplinary research paper. The student will write the paper under the supervision of appropriate instructors from at least two academic disciplines.


## Social Sciences

Office: $\quad$ Classroom Bldg 132, (209) 667-3388
Coordinator: John T. Wold

The Bachelor of Arts, Social Sciences is an interdepartmental degree program consisting of courses in the following disciplines: Anthropology, Communication Studies, Economics, Ethnic Studies, Geography, History, Political Science, Psychology, and Sociology. Students select courses from any three of the above disciplines. The program offers a wide variety of courses dealing with human interaction in past and present society and acquaints students with contemporary social problems, their causes, and their potential solutions. Additionally, a course in the methods of scientific investigation in the social sciences provides students with valuable analytical skills.

## Bachelor of Arts, Social Sciences

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the Interdepartmental Studies major, as approved by the adviser. Of these, no more than 8 units of CR-graded course work in courses graded exclusively CR/NC may apply.
3. Completion of a minor is not required.

Note: Immediately upon entering the interdisciplinary studies major program, students should select the three disciplines that will form their major.

## The Major ( 38 units minimum)

1. Complete the following courses ( 5 units):

SSCI 3000 Library Resources for the Social Sciences, 2 units
SSCI 4960 Social Sciences Interdisciplinary Seminar, 3 units, or
SSCI 4961 Teaching Social Studies, 3 units
2. Complete one course in introductory methodology ( 3 units minimum):

COMM 3900 Communication Research Methods, 4 units
HIST 3000 Introductory Seminar in History, 3 units
PSCI 2000 Introduction to Political Science, 3 units
PSYC 2020 Introduction to Psychological Methods, 3 units
SOCL 3030 Research Methods, 4 units
SSCI 3010 Introduction to Social Science Methodology, 3 units

## 378 / Social Sciences

3. Select three of the disciplines listed below, completing the prerequisite courses for each. Then complete a minimum of 12 upper-division units in one of the three disciplines and a minimum of 9 upper-division units in each of the two other disciplines, as approved by the adviser.

## Anthropology

a. Prerequisite: ANTH 2060 Introduction to Cultural Anthropology, 3 units
b. Select any upper-division courses, with the adviser's consent. Note additional prerequisites to certain courses. Options available are:

- General anthropology
- Ethnography
- Ethnology
- Prehistoric archaeology
- Physical anthropology
- Linguistics
- Special studies


## Communication Studies

a. Prerequisite: Complete one of the following:

COMM 2011 Approaches to Human Communications, 3 units COMM 2200 Introduction to Mass Media, 3 units
b. Select any nine to twelve units from the following areas:

- Processes and Contexts
- Applications and Communication Competence


## Economics

a. Prerequisite:

ECON 2500 Principles of Economics I, 3 units, or
ECON 2510 Principles of Economics II, 3 units
b. Upper-division courses: select nine to twelve units from each of three or four of the following fields:

- Banking, Investment, and Economics
- International Trade and Alternative Economic Systems
- Public Sector Economics
- Labor Economics
- Economic History


## Ethnic Studies

a. Prerequisite: Complete an introductory 2000-level ethnic studies course, 3 units
b. Select any nine to twelve units from the following, with adviser's consent:

- Category II
- Category III
- Category IV
- Category V


## Geography

a. Prerequisite: Complete one of the following:

GEOG 2010 Introduction to the Natural Environment, 3 units GEOG 2020 Introduction to Cultural Geography, 3 units GEOG 2420 Third World Regions, 3 units
b. Select nine to twelve upper-division units from the following:

- Topical human geography GEOG 3010,3020,3300,4070,4210,4350,4650,4800,4840
- Regional geography GEOG 3340,3350,3510,3550,3570,3590,3650,4210,4610
- Methodology geography GEOG 3700,4700,4710,4730,4840
Note: Studentsmust take at leastone course from topical humangeography and one course from regional geography. Only one unit of the selfguided field trip courses, GEOG 3930, 3950, or 3960 may be applied to the Social Sciences Major.


## History

a. Prerequisite: Complete a one-year sequence of lower-division history in World civilization, Western civilization, non-Western civilization, or U.S. history.
b. Select nine to twelve units. Courses shall be selected so that students will have; at least one upper division course in each of the following fields:

- European history
- United States history
- Non-Western history

Political Science
a. Prerequisite:

PSCI 1201 American Government, 3 units
b. Complete nine to twelve units as follows:
i. American politics: 2 courses
ii. Additional one or two courses to be selected from the following:

- Political theory and methodology
- Comparative politics
- International relations


## Psychology

a. Prerequisites:
i. PSYC 2010 Introduction to Psychology, 3 units, and
ii. PSYC 2020 Introduction to Psychological Methods, 3 units; or SOCL 3030 Research Methods, 4 units, or
SSCI 3010 Introduction to Social Science Methodology, 3 units
b. Complete nine to twelve units from each of three or four of the following areas:

- Fundamentals of Psychology
- Biological Bases of Psychology
- Principles of Human Behavior
- Foundations of Applied Psychology


## Sociology

a. Prerequisites:
i. SOCL 1010 Introduction to Sociology, 3 units, and
ii. SOCL 3030 Research Methods, 4 units, or

PSYC 2020 Introduction to Psychological Methods, 3 units, or
COMM 3900 Communication Research Methods, 4 units, or
SSCI 3010 Introduction to Social Science Methodology, 3 units
b. Select any nine to twelve units from the following, with adviser's consent:

- Human services
- Criminal justice
- General sociology


## International Studies Concentration

## Director: Steve Hughes

The International Studies program provides a framework of study for students interested in the interrelations of nations and peoples. Because these interrelations are complex and operate at different levels (economic, political, military, cultural, etc.), a student must be selective regarding the areas to be investigated. Thus the focus of a student's course work in this concentration may be on a particular area (Europe, Africa, the Middle East, Latin America, etc.), or on international problems (economic, political, diplomatic, etc.), on international organizations and their functions, or aspects of intercultural communications, etc. To identify the most appropriate pattern of courses, the student will prepare his or her program in close consultation with the Program Director. The Director should also be consulted regarding career opportunities.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following two courses ( 5 units):

SSCI 3000 Library Resources for the Social Sciences, 2 units
SSCI 4960 Social Sciences Interdisciplinary Seminar, 3 units
3. Complete one lower-division course from each of the sections below ( 12 units):
a. Multidisciplinary Studies

GEOG 2420 Third World Regions, 3 units
b. Economics

ECON 2500 Principles of Economics I, 3 units, or
ECON 2510 Principles of Economics II, 3 units

## c. Political Science <br> PSCI 2030 Global Politics, 3 units

## d. History

HIST 1010 World Civilizations I, 3 units, or
HIST 1020 World Civilizations II, 3 units
4. Complete the International Studies concentration of 30 units as approved by the adviser. Of these, no more than 8 units of CR-graded course work in courses graded exclusively CR/NC may apply.
5. Completion of a minor is not required.

## The Concentration ( 30 units)

Select a minimum of 12 units in one of the following disciplines and a minimum of 9 units in each of two others, as approved by the adviser:
Note: $\quad$ Some of these disciplines require additional lower-division introductory course work not already specified in Section A above. Students will select courses from the three preferred disciplines.

## Anthropology

ANTH 3000 Anthropology and Modern Social Issues, 3 units
ANTH 3101 Cultures of Asia and the Pacific, 3 units
ANTH 3320 Native Peoples of Latin America, 3 units
ANTH 3900 Women: A Cross-Cultural View, 3 units
ANTH 4140 Urban Anthropology, 3 units
ANTH 4150 Comparative Religion, 4 units
ANTH 4170 Economic Anthropology, 3 units
ANTH 4211 The World In Change, 3 units
ANTH 4221 Folk Literature and Arts, 3 units
ANTH 4980 Individual Study, 1-4 units
Economics
ECON 4000 Intermediate Theory (Macroeconomics), 3 units
ECON 4010 Economic Thought, 3 units
ECON 4050 Comparative Economic Systems, 3 units
ECON 4200 Intermediate Theory (Microeconomics), 3 units
ECON 4401 Third World Economics, 3 units
ECON 4415 International Economics, 3 units
ECON 4420 The Economy of Russia, 3 units
ECON 4455 The U.S. and World Trade, 3 units
ECON 4980 Individual Study, 1-4 units

## Geography

GEOG 3010 Cultural Geography, 3 units
GEOG 3020 Human Ecology, 3 units
GEOG 3300 Geography of Economic Activities, 3 units
GEOG 3550 Geography of Europe, 3 units
GEOG 3570 Geography of Russia and East Europe, 3 units
GEOG 3590 Geography of Asia, 4 units
GEOG 4070 Agricultural Geography, 4 units
GEOG 4210 Geographic Problems in the Developing World, 3 units GEOG 4980 Individual Study, 1-4 units

| History |  |
| :---: | :---: |
| HIST 3000 | Introductory Seminar in History, 3 units |
| HIST 3090 | Contemporary World History, 3 units |
| HIST 3230 | Nineteenth Century Europe, 3 units |
| HIST 3240 | Twentieth Century Europe, 3 units |
| HIST 3510 | Latin America in Colonial Times, 3 units |
| HIST 3520 | Latin American States Since Independence, 3 units |
| HIST 3800 | East Asia in Traditional Times, 3 units |
| HIST 3810 | East Asia in the Modern World, 3 units |
| HIST 3860 | Africa Before 1885, 3 units |
| HIST 3880 | Contemporary Africa, 1945 to the Present, 3 units |
| HIST 3891 | The Oriental Mind, 3 units |
| HIST 4041 | Colonialism and the Modern State in Africa and Asia, 3 units |
| HIST 4210 units | European Intellectual History: Renaissance to the Present, 3 |
| HIST 4340 | Modern Germany, 3 units |
| HIST 4360 | British Culture, 1603 to the Present, 3 units |
| HIST 4420 | Russia to 1917, 3 units |
| HIST 4430 | Twentieth-Century Russia, 3 units |
| HIST 4600 | American Diplomatic History, 3 units |
| HIST 4800 | Modern China, 3 units |
| HIST 4840 | Modern Japan, 3 units |
| HIST 4850 | China and the United States, 3 units |
| HIST 4960 | Directed Reading Seminar in History, 4 units |
| HIST 4980 | Individual Study, 1-4 units |
| Political Science |  |
| MDIS 4400 | The Politics of the Environment, 3 units |
| PSCI 3410 | Comparative Politics: Latin America, 4 units |
| PSCI 3430 | Comparative Politics: Middle East, 3 units |
| PSCI 3450 | Comparative Politics: Eastern Europe, 3 units ${ }^{\text {' }}$ |
| PSCI 3470 | Comparative Politics: Asia, 3 units |
| PSCI 3600 | International Relations, 4 units |
| PSCI 4500 | The Politics of World Hunger, 4 units |
| PSCI 4630 | International Politics of Industrial Societies, 3 units |
| PSCI 4640 | Foreign Policy Issues, 3 units |
| PSCI 4654 | Politics of the Arab-Israeli Conflict, 4 units |
| PSCI 4680 | U.S.-Latin American Relations, 4 units |
| PSCI 4980 | Individual Study, 1-4 units |
| Sociology |  |
| SOCL 3200 | Social Changes, 3 units |
| SOCL 4400 | Political Sociology, 3 units |
| SOCL 4520 | Personality and Society, 3 units |

SOCL 4800 Formal Organizations in Modern Society, 3 units
SOCL 4980 Individual Study, 1-4 units
Note: On entering the International Studies concentration, students should workwith the Director to develop a tentative programfor the remainder of their undergraduate course work. Students should work out a trial study list prior to each advising appointment. In such a broad major, close cooperation between adviser and advisee is necessary to avoid mistakes.

## Urban and Community Studies Concentration

## Director: Kenneth Entin

The Urban and Community Studies Concentration is an undergraduate course of study for students who wish to investigate major problems which result from the growing complexity of our urban environment. Environmental, behavioral, and administrative aspects of urban areas are considered, along with useful techniques for studying urban problems.

Students who pursue this interdisciplinary program obtain a background for positions in a variety of governmental or voluntary agencies, as well as preparation for graduate training in such professional programs as public administration, urban or regional planning, social welfare, etc.

Internships for students in this concentration are available through the Departments of Politics and Public Administration, Sociology, and Anthropology/Geography. Students in the Urban and Community Studies concentration who wish to be considered for participation should contact these departments for additional information.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the concentration (12-13 units):
a. SOCL 1010 Introduction to Sociology, 3 units
b. PSCI 1201 American Government, 3 units
c. ECON 2500 Principles of Economics I, 3 units
d. Complete one of the following research methods courses:

CIS 2000 Introduction to Business Computer Systems, 3 units
CS 1000 Introduction to Computers, 3 units
SOCL 3030 Research Methods, 4 units
SSCI 3010 Introduction to Social Science Methodology, 3 units
3. The following courses are recommended but not required:

GEOG 3700 Cartography, 3 units
MATH 1600 Statistics, 4 units
SOCL 4030 Research Analysis, 4 units
4. Complete the Urban and Community Studies concentration as outlined below.
5. Completion of a minor is not required.

## The Concentration ( $\mathbf{3 5}$ units minimum)

Complete the Urban and Community Studies Concentration as outlined below:

1. Urban'Environment, 9-10 units .

ANTH 4140 Urban Anthropology, 3 units
ECON 4600 Urban Economics, 3 units
GEOG 4350 Urban Geography, 4 units
2. Urban Behavior, 3 units SOCL 3200 Social Changes, 3 units
3. Urban Administration and Politics, 6-7 units

PSCI 3300 Introduction to Public Administration, 3 units
PSCI 4325 Land Use Planning, 3 units
PSCI 4330 Urban Politics, 4 units
4. Junior/Senior Research Topic-Complete four units in the form of two 2-unit courses in Individual Study (chosen from ANTH 4980, ECON 4980, ETHS 4980, GEOG 4980, HIST 4980, PSCI 4980, SOCL 4980) completing an interdisciplinary research paper or research project under the supervision of appropriate instructors from the two selected disciplines. The research topic must focus on an aspect of urbanism or community life in California. Students must have at least junior standing and at least 12 upper-division units in the concentration before registering for this program requirement. Both two-unit courses must be taken in the same semester.
5. SSCI 3000 Library Resources for the Social Sciences, 2 units
6. Complete the remainder of the required 35 units from the list below, or from courses not used in fulfilling the Urban Environment or Urban Behavior requirements above. Additional work beyond the minimum requirements for the concentration is highly recommended.

ECON 4540 Public Finance \& Fiscal Policy, 3 units
ETHS 4200 The Minority Experience, 3 units
GEOG 3020 Human Ecology, 3 units
GEOG 3510 Geography of North America, 4 units
GEOG 3700 Cartography, 3 units
GEOG 4940 Internship in Geography, 1-6 units*
HIST 3640 Contemporary America, 3 units
HIST 4680 The American Mind, 3 units
PSCI 3230 Political Parties and Interest Groups, 4 units
PSCI 3330 California Politics, 3 units
PSCI 4300 Organization Theory, 4 units
PSCI 4315 Public Policy Making, 3 units
PSCI 4600 Statistical Analysis for Politics, 4 units
PSCI 4940 Public Administration Internship, 3.units*
SOCL 3150 The Family, 3 units
SOCL 3200 Social Changes, 3 units

[^17]SOCL 4030 Research Analysis, 4 units
SOCL 4790 Social Welfäre Services, 3 units
Note: The Director of the Urban and Community Studies concentration may from time to time designate certain WinterTermorothercourses as applicable to the concentration. See the Director for further information.

## Teaching Credential

Students who 1) plan to apply for admission to the single subject credential program at CSU Stanislaus, 2) plan to qualify to teach in the Social Sciences, and 3) do not intend to take the N.T.E. Area Examination for the Social Sciences should complete the CSUS subject-matter program in Social Sciences. The requirements for the program differ from the requirements for the Bachelor of Arts degree in the Social Sciences. Upon completion of the subject-matter program, the program coordinator will certify completion to the coordinator of the credential program.

Students who plan to complete the subject-matter program in Social Science should consult the coordinator of. Social Sciences.

## Course Descriptions

## SSCI 2970 Selected Topics During Winter Term (4 units).

SSCI 3000 Library Resources for the Social Sciences ( 2 units). A survey of the various library resources necessary for research in the social sciences, e.g. abstracts, indexes, bibliographies, dictionaries, encyclopedias, handbooks, government documents, newspapers, and periodicals; together with footnote and bibliographical citation techniques. (Fall, Spring)

SSCI 3010 Introduction to Social Science Methodology (3 units). A general introduction to the different types of methodologies used by the various social science disciplines. An important part of the course will be to read and critique representative works of social science research in the student's areas of interest.

SSCI 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of department coordinator.

SSCI 4960 Social Sciences Interdisciplinary Seminar (3 units). Discussions and papers based on concepts, theories, information, and techniques from several social science disciplines. Prerequisites: Completion of SSCI 3000 and seven other upperdivision courses in the major. (Fall, Spring)

SSCI 4961 Teaching Social Studies (3 units). This course is designed for students who intend to become junior or senior high school teachers. Students will learn a variety of exciting strategies and techniques for teaching history, government and politics. Prerequisite: Senior standing. (Spring)


# Social Work Program 

Office: Classroom Bldg. 136, (209) 667-3091
Chair: Ellen Dunbar
Faculty: Ellen Dunbar, Charles Floyd, Pamela Marques

## Master of Social Work Program

A Master of Social Work (MSW) prepares professional social workers to meet the growing human service needs of the university's service area. The curriculum emphasizes social work practice in the public social services, health, mental health, corrections, and schools. Graduates are prepared to practice, with sensitivity and competence, with economically and culturally diverse populations. Students graduate with advanced analytic and practice skills sufficient for self-critical, accountable, and ultimately autonomous practice.

This program is a sixty (60) unit, four-semester curriculum organized around two concentrations. A three year, six-semester curriculum is also offered. The first courses provide the professional foundation. In the third semester of study, students must choose a concentration: 1) social work with children or 2 ) social work with adults. Four semesters of supervised field practicum in a social agency is part of the core curriculum.

The field of Social Work is very broad, incorporating many approaches to addressing psycho-social ills in many health, mental health, and social welfare agency settings. The MSW is thus one of the most versatile master's degrees among the human service professions.

MSW's provide counseling services to individuals, groups, couples and families, or work as supervisors or administrators of human service programs and agencies. Social Workers also work as program developers, community organizers, planners, evaluators, or policy makers.

The MSW degree satisfies the academic preparation requirements for the state regulated social work license (LCSW).

Specific questions regarding the MSW program or curriculum should be directed to the program department chair or staff. The program is in the candidacy stage for accreditation from the Council on Social Work Education.

## Electives

Social Work students may select from the following electives to complete their 60 required units. Electives must relate to the student's concentration. Additional electives will be developed and will be listed in future catalogs.

CJ 4230 Juvenile Justice, 4 units
CJ 4915 Sex Crimes and Gender Issues in Criminal Justice, 3 units

## Coursé Descriptions

SW 5005 Human Behavior and Social Environment I (3 units). Individual growth and development from infancy through adolescence incorporating developmental psychological theory and ecological perspectives to the family and individual life cycles within a cultural context. Prerequisite: Admission to MSW Program.

SW 5010 Human Behavior and Social Environment II (3 units). Individual growth and development from early adulthood through old age incorporating developmental psychological theory and ecological perspectives to the family and individual life cycles within a cultural context. Prerequisites: Admission to MSW Program and completion of SW 5005.

SW 5011 Psycho-Social Assessment (3 units). This course helps students become knowledgeable of psycho-social assessment methods and symptoms of mental disorders for the purpose of assessing client functioning and planning appropriate social work interventions. The focus is on understanding how to use current classification systems of mental disorders as a social work practitioner. Prerequisite: Admission to the MSW Program.

SW 5012 Social Work Treatment and Case Management of the Mentally Disabled ( 3 units). Advanced course in Social Work practice integrates theory of behavior and treatment of specific mental disorders as translated into plans for treatment, rehabilitation, or case management. Prerequisites: Admission to MSW Program and completion of SW 5011.

SW 5020 Social Work Research Methodology (3 units). This course will introduce students to the social work research process within the context of social work practice. Prerequisites: Graduate standing and admission to MSW Program.

SW 5030 Foundations of Social Work Practice, Policy, and Services I (4 units). First course in social work practice, policy, and services sequence to prepare students to understand the philosophy, values, and ethics of the profession and apply the problem-solving method to work with individuals, families, and small groups. Prerequisites: Graduate standing and admission to MSW program.

SW 5031 Foundations of Social Work Practice, Policy, and Services II (4 units). Second foundation course in social work practice, policy, and services sequence to prepare students to understand and apply a problem-solving approach to social work practice with organizations, communities, and policy-making bodies. Prerequisites: Graduate standing and admission to MSW program.
SW 5035 Social Work Practice, Policy, and Services for Children I (4 units). Advanced course in social work practice, policy, and services including ethics, values, and methods of practice. Focus on practice methodology with individuals, families, and small groups. Designed to prepare for practice in child welfare, schools, juvenile justice and with children in health and mental health settings. Prerequisites: Admission in MSW program and completion of SW 5030 and 5031.

SW 5036 Social Work Practice, Policy, and Services with Adults I (4 units). Advanced course in social work practice, policy, and services including ethics, values, and methods of practice. Focus on practice methodology with indiyiduals, families, and small groups. Designed to prepare for practice with adult populations in health, mental health, aging, and corrections settings. Prerequisites: Admission in MSW program and SW 5030 and 5031.

SW 5037 Social Work, Law, and the Courts ( 3 units). Advanced course in social work practice to prepare social workers for work that interfaces with the legal system including family and children's court, guardianship, and corrections. Prerequisite: Admission in MSW program.

SW 5038 Social Work Practice, Policy, and Services for Children II (4 units). Advanced course in social work practice, policy, and services including ethics, values, and methods of practice. Focus on practice methodology in agency administration, community planning, and program development. Designed to prepare for practice in child welfare, schools, juvenile justice, and with children in health and mental settings. Prerequisites: Admission to MSW Program and SW 5035.

SW 5039 Social Work Practice and Policy, Adults II (4 units). Advanced course in social work practice, policy, and services, including ethics, values, and methods of practice. Focus on practice methodology in agency administration, supervision, community planning, and program development. Designed to prepare for practice in mental health, health, aging, and corrections settings. Prerequisites: Admission to MSW Program and SW 5036.

SW 5040 Field Instruction I (3 units). Supervised field instruction with individual groups, families, formal organizations, and communities. Practical application of social work practice theories. Must be repeated for a total of 6 units. Prerequisite: Admission to MSW Program.

SW 5041 Field Instruction II (3 units). Advanced field instructed practice experience with individual groups, families, formal organizations, and communities. Practical application for social work practice theories. Must be repeated for a total of 6 units. Prerequisites: Admission to MSW Program and SW 5040.

SW 5050 Research Data Analysis (3 units). This course is a study of single subject design and descriptive and inferential statistics with a focus on those methods most frequently used in social work research and practice. Prerequisite: Admission to MSW Program and completion of SW 5020.

SW 5950 Selected Topics in Social Work (Topics to be specified in the class schedule) (1-5 units). Development of a selected topic in social work. Topics vary each term, thus different topics may be taken for credit. Prerequisites: Classified graduate standing and consent of instructor.

SW 5960 Graduate Project (2 units). A graduate project or master's thesis is a requirement for the Master's degree in Social Work and represents the capstone of the master's program. Under the direction of a project adviser and a faculty committee, the student carries out a substantive endeavor that represents originality and independent thinking and which contributes to the advancement of knowledge or practice in social work. May be repeated for a total of 4 units. Prerequisites: SW 5020 and 5050 and eligible to advance to candidacy.

SW 5990 Research Thesis (2 units). A master's thesis or graduate project is a requirement for the Master's degree in Social Work and represents the capstone of the master's program. Under the direction of a thesis/research adviser and a faculty committee, the student carries out a substantive research endeavor which contributes to the advancement of knowledge or practice in social welfare. May be repeated for a total of 4 units. Prerequisites: Completion of SW 5020 and 5050 and eligible to advance to candidacy.


## Sociology

Office: Classroom Building 213, (209) 667-3408
Chair: Cecil A. Rhodes
Faculty: Donald W. Bowers, Chau-Pu Chiang, Clyde V. Collard, Walter E. Doraz, Rhoda E. MacDonald, George D. Muedeking, Paul W. O'Brien, Cecil A. Rhodes, Stephen J. Schoenthaler, Frank J. Tripi

The Department of Sociology/Criminal Justice offers the Bachelor of Arts degrees in Sociology and Criminal Justice with an optional course concentration in Human Services for sociology majors and concentrations in Law Enforcement and Corrections for criminal justice majors. (See the "Criminal Justice" section of this catalog for criminal justice degree program requirements and course descriptions.) In addition, liberal studies and social science majors may select a sociology concentration as a core area of study. The department also participates in and administers the interdisciplinary minor in Gerontology.

The study of sociology and/or criminal justice provides students with a rewarding academic experience as well as a variety of career possibilities. Recent graduates of the department have applied their training to enter prestigious graduate schools or to obtain entry level management and administrative positions with such varied organizations as probation departments; correctional institutions; federal, state, and local law enforcement agencies; local welfare and mental health departments, the criminal courts, and social service agencies.

## Bachelor of Arts, Sociology

Sociology majors receive a strong grounding in traditional and contemporary social theory, methods of conducting social research, and techniques of analyzing social data. Students can select elective courses from the subject area offerings in the sociology curriculum. These areas include, for example, social institutions such as the family, religion, and medicine, and social processes such as social change, social deviance, personality and society, and drug use.

The Human Services concentration applies sociological theory and methods to human services issues, providing a conceptual framework for students considering careers in human service areas and for those planning to enter graduate social work programs. The concentration also allows students to examine institutions such as the family with reference to issues such as current social welfare programs and alcoholism.

## Requirements

1. Complete University requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following courses ( 3 units minimum):

SOCL 1010 Introduction to Sociology, 3 units
Note: MATH 1600 Statistics, 4 units, is recommended.
3. Complete the major of not less than 37 upper-division units in sociology, of which no more than eight units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major. Maintain an average grade of "C-" or better in the selected major.
4. Completion of a minor is not required.

## The Major in Sociology (37 units minimum)

1. Complete the following courses (16 units):

SOCL 3000 Classical Theory, 4 units
SOCL 3030 Research Methods, 4 units
SOCL 3400 Contemporary Theory, 4 units
SOCL 4030 Research Analysis, 4 units
2. Select one of the following options ( $21-22$ units):
a. General Major Option (22 units)
i. Complete SOCL 4960 Senior Seminar, 4 units
ii. Select 18 units of upper-division sociology electives as approved by major adviser.
b. Human Services Concentration (21 units)
i. Complete the following required courses for the concentration, (12 units):
SOCL 4790 Social Welfare Services, 3 units
SOCL 4800 Formal Organizations and Industrial Society, 3 units
SOCL 4940 Sociological Internship, 6 units
ii. Select one course from the following group ( 3 units):

SOCL 3150 The Family, 3 units
SOCL 3160 Sociology of Youth, 3 units
SOCL 3170 Sociology of Sex Roles, 3 units
iii. Select at least two courses from the following group (6 units):

SOCL 4170 Victimology, 3 units
SOCL 4700 Medical Sociology, 3 units
SOCL 4710 Sociology of Aging, 3 units
SOCL 4720 Sociology of Death, 3 units
SOCL 4730 Alcohol and Alcoholism, 3 units
SOCL 4740 Sociology of Mental Health, 3 units SOCL 4750 Sociology of Drug Use, 3 units
Criminal Justice Major (See "Criminal Justice" section in this catalog).

## The Minor in Sociology

1. Complete the following ( 20 units):

SOCL 1010 Introduction to Sociology, 3 units
SOCL 3000 Classical Theory, 4 units
SOCL 3030 Research Methods, 4 units,
2. Select nine units of upper-division electives approved by the adviser.

## Liberal Studies Concentration

## Requirements ( 20 units)

Liberal Studies majors with a concentration in sociology must complete 20 units of sociology courses including 15 units of upper-division courses; three of these courses must be selected from the following: SOCL 3150, The Family; SOCL 3240, Social Deviance; SOCL 4730, Alcohol and Alcoholism; SOCL 4750, Sociologý of Drug Use; SOCL 4920, Nutrition and Behavior; SOCL 4800, Formal Organizations and Modern Society, and SOCL 4010, Race and Ethnic Relations.

## Teaching Credentials

Majors in sociology interested in a social sciences waiver for a single subject credential should review the social sciences waiver described in the "Social Sciences" section of this catalog. Please refer to the "School of Education, Teacher Education" section of the catalog for a description of other requirements to be completed for the single subject credential.

## Course Descriptions <br> Lower Division

SOCL 1010 Introduction to Sociology ( 3 units). Basic concepts and perspectives in sociological analysis. Prerequisite to other sociology courses. (CAN SOC 2) (Fall, Spring)

SOCL 2000 Intergenerational Experiences and Life Course Developments (2 units). Provide students with the background for understanding life span development of the "self" and "others" as integrated social, psychological, and physiological beings. Specifically, focuses on cross-generational experiences encompassing postadolescence, young adulthood, middle age, and the latter part of the life cycle. Attention will be given to special demographics, socialization patterns, role changes, interaction patterns, stereotypes, environmental influences, and critical life events. (Fall, Spring)
SOCL 2010 Sociology of Sexual Behavior ( 3 units). This course examines a variety of approaches to understanding sexual behavior. Typical patterns of sexual interactions will be contrasted with deviant sex styles. The course will present a wide range of conflicting viewpoints on some of the most controversial issues today including abortion, sex education, and AIDS. (Same as WMST 2010) Prerequisite: SOCL 1010. (Fall)

## Upper Division

SOCL 3000 Classical Theory ( 4 units). The emergence of sociology from social philosophy and the historical development of sociological thought. Prerequisite: SOCL 1010 or consent of instructor. (Fall)

SOCL 3030 Research Methods (4 units). Introduction to research design and methodology in sociology: theory, implications of theoretical framework, hypothesis
formation, conceptualization and measurement of sociological variables, research process, research designs, methods of data collection, sampling procedures, and written report. Satisfies upper division writing proficiency requirement. Prerequisite: SOCL 1010 or equivalent. (Fall)

SOCL 3120 Criminology ( 3 units). Analysis of the types and incidence of crime in America in contrast with other cultures. Comparison of the various sociological, psychological and biological causes of crime. (Formerly 4121) Prerequisite: SOCL 1010 or consent of instructor. (Fall)

SOCL 3130 Juvenile Delinquency ( 3 units). Covers the historical development of the juvenile justice system including courts, delinquency treatment, and social policies toward delinquency. Analysis of types and incidence of delinquency, as well as the major sociological forces which are linked to delinquency, i.e., family problems, poverty, racism, unemployment, school failure, juvenile gangs, and health problems. (Formerly 4122) Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 3150 The Family ( 3 units). Social structure and changing functions of the modern family. Relationship of family to other social institutions. Family roles and interaction. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3160 Sociology of Youth ( 3 units). Sociological analysis of the development of self and the socialization of the child and youth in sex and age roles. Prerequisite: SOCL 1010.

SOCL 3170 Sociology of Sex Roles (3 units). Primarily analyzes the differences in women's and men's roles in the U.S. today. Major issues addressed include sex role socialization, the media's portrayal of sex roles, differences in gender roles in the workplace, and interpersonal dynamics involved in friendships between members of the opposite sex. The course will also trace historical and contemporary developments in women's and men's liberation movements. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 3180 Sociology of Film ( 3 units). This course will look at the complex interaction of films produced in society and how films influence our society. Current day topics and issues will be explored through American and foreign media productions. Objective of this course is to give students a critical understanding of the influence of films in all aspects of American life. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3200 Social Change ( 3 units). Sociology and social change, types and problems of change, factors in rate and direction of change, classic and modern theoretical analysis of social change. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3240 Social Deviance ( 3 units). The study of social behaviors which differ from the norm or expected behavior. Focus is on the reaction of segments of society to these behaviors; i.e., the process by which some behavior is ignored, other behavior generates social sanctions, and certain behaviors are criminal. Review of the social benefits and function of deviance, as well as the conflict between those social forces whodisagree on the proper response to deviant behavior. (Formerly 4240) Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3250 Social Issues in Cross-Cultural Perspective ( 3 units). Focus on major issues relevant to at least two cultures chosen for in-depth study. The main issues. addressed will include poverty, pollution, and educational equality. Other topics that students may choose to study involve children's socialization patterns, health or sexual practices, and the use and impact of the mass mediain at least two cultures. The course will feature field experiences to give students experimental knowledge. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3310 Social Stratification (3 units). Origins, characteristics, and functions of social castes and classes; emphasis on recent research and theoretical developments. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3400 Contemporary Theory (4 units). Major contributions to systematic sociological theory. Critical analysis of selected works from Comte, Pareto, Weber, Durkheim, Sorokin, Parsons, and other classical and contemporary sociologists. Prerequisite: SOCL 3000 or consent of instructor. (Spring)

SOCL 3430 Population, Resources, and the American Future (3 units). Is population a problem in contemporary America? An examination of the effects of rapid population growth and its relationship to the rapid depletion of renewable and nonrenewable resources both now and in the future. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3530 Self and Social Behavior (4 units). This course examines the social underpinnings which contribute to the development of the self. The course is a seminar and an activity in which students keep a journal, engage in self observations and reflections, and make observations of others (especially significant others). As a seminar, students will be expected to exchange and examine ideas about the self from a theoretical as well as an experiential framework. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3600 Sex Roles and Power ( 4 units). This course will examine the relationships between men and women, and the uses of specific sex-role behavior as a manipulation device in the "Battle of the Sexes". Comparative and descriptive films will be used to demonstrate sexual conflict and cooperation. Pre-film and post-film lectures and discussions will evaluate the illustrative material. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3630 Tenderloin Lifestyles (4 units). This course allows students to observe and apply directly the concepts of social deviance by staying for a week in San Francisco's Tenderloin, or vice, area. Class sessions will consist of a review of these concepts and preparation for the field study. (Winter)

SOCL 3900 Sociological Colloquium (1-2 units). Depending on the instructor, the colloquium will focus on specific areas of sociological concern, including an analysis of deviance, stratification, race, sex roles, population, religion, etc. May be repeated for a maximum of 4 units. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4010 Race and Ethnic Relations ( 3 units). Sociological analysis of minority group relations; attention to specific racial, ethnic, and religious minorities. Prerequisites: SOCL 1010 or consent of instructor.

SOCL 4020 Sociology of Small Group Dynamics (3 units). Structure and processes of small human groups, theory, research methods, and empirical findings. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4030 Research Analysis (4 units). Social measurement, data analysis and interpretation, formulation of research designs, and application of research techniques. Includes understanding and performing basic research. Prerequisite: SOCL 3030. (Spring)

SOCL 4170 Victimology ( 3 units). Analysis of historical and contemporary theories and research on victims, victim compensation programs, spouse and child abuse programs, and community responses to crime. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 4180 Organized and White Collar Crime (3 units). Analysis of the historical and current bases of organized crime and white collar crime; the extent and types, social and economic costs; the relationship between the social class structure and both white collar and organized crime; and the enforcement of laws pertaining to these illegal activities. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 4190 Treatment of the Offender ( 3 units). Examination of counseling theories such as behavior modification, contingency contracting, transactual analysis, psychoanalysis, labeling theory, and humanistic psychology as they apply to community-based and institutional programs. Also reviews the content and structure of specific techniques which have been successful in reducing crime such as family intervention; drug, nutrition, and alcohol counseling; and job skill programs. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 4200 Pornography and Human Sexuality (3 units). What is pornography? What does pornography tell us about modern societies, the family, and the individual? Is it harmful? Is it necessary? How can it be controlled? What would a society without pornography be like? Selected readings and literary rendering will be the source of ideas, answers, and other questions. Prerequisite: SOCL 1010 or consent of instructor. (Fall, Spring)

SOCL 4400 Political Sociology (3 units). Sociological bases of political attitudes and behavior. Theory and research dealing with political socialization, voting behavior, legitimacy, and authority. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4520 Personality and Society ( 3 units). Relations between personality, social structure, and culture. Primary emphasis on roles, socialization, aggression, affiliation, leadership, and norms. Prerequisite: SOCL 1010 or consent of instructor. (Fall, Spring)

SOCL 4700 Medical Sociology ( 3 units). The social causes and consequences of illness in contemporary American society will be explored along with traditional and unique approaches to treating the sick. In addition, factors that prohibit equal access to medical care facilities will be examined. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4710 Sociology of Aging ( 3 units). Examination of the dynamics and processes of aging; social and psychological aspects of aging, including attitudes toward the aged. Sociological, social-psychological, and biological theories of the aging process will be explored; social programs for the elderly will be examined. Prerequisite: SOCL 1010 or consent of instructor. (Fall)

SOCL 4720 Sociology of Death (3 units). Social and institutional factors involved in death, death-related behaviors, attitudes toward death and institutional influences on the death process. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 4730 Alcohol and Alcoholism (3 units). An overview of alcoholism and alcohol abuse as a social, economic, and individual problem. Review of exploratory models, symptomatic behavioral indicators, and methods of intervention. Prerequisite: SOCL 1010 or consent of instructor. (Fall)

SOCL 4740 Sociology of Mental Health (3 units). Students will identify communitybased programs for treatment and prevention of mental illness. They will develop knowledge andunderstanding of the importance of sociological variables in identifying mental health. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL4750 Sociology of Drug Use ( 3 units). This course will familiarize the student with the major sociological theories about drug use and the research investigating the theories' claims. Also, discussion of research on issues in the field of drugs such as the social control efforts and drugs, the effects on both legal and illegal drugs, and the typical users of the various drugs. Prerequisite: SOCL 1010 or consent of instructor. (Fall)

SOCL 4790 Social Welfare Services ( 3 units). Historical development of welfare services; analysis of the structure, policies, and issues of public and private welfare services. Prerequisite: SOCL 1010 or consent of instructor. (Fall, Spring)

SOCL 4800 Formal Organizations in Modern Society (3 units). Analysis of modern bureaucratic organizations and their place in American society. Corporate deviance, organizational change, and contemporary bureaucratic influences on American society will be stressed. Past and present theories of bureaucratic organizations will be examined. Prerequisite: SOCL 1010 or equivalent or consent of instructor. (Fall, Spring)

SOCL 4810 Urban Sociology ( 3 units). The urban concept: origin and development of urban areas; effects of urbanization, social institutions, and social relations; research methods applied to urban life and form. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4910 Cooperative Education (2-4 units). Provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and department Co-op coordinator. May be repeated for a total of 8 units depending upon the department policy. Prerequisites: Sophomore standing; consent of departmental coordinator. (Fall, Winter, Spring)

SOCL 4920 Nutrition and Criminal Behavior (4 units). Examines the theories and evidence which show a relationship between diet and behavior. Various diet therapies will be discussed in terms of whether or not they work and why. The laboratory will
include analysis of the student's eating patterns to determine actual nutrient consumption. Prerequisite: SOCL 1010 or consent of instructor. (Spring)

SOCL 4940 Sociological Internship (3-6 units). Supervised experience relevant to specific aspects of sociology. Intensive field placement in an appropriate agency or organization. Individual meetings and written reports. Each student will be placed in an agency for 10 hours ( 3 units) to 20 hours ( 6 units) per week. Prerequisites: SOCL 4800 and consent of instructor. (Fall, Spring)

SOCL 4950 Selected Topics in Sociology (Topics to be specified in Class Schedule) ( $1-5$ units). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

SOCL 4960 Senior Seminar (4 units). Research, review, and discussion of the contemporary issues facing sociology. Each student prepares an individual report. Prerequisite: Sociology major, senior status, or consent of instructor. (Spring)

SOCL 4980 Individual Study (1-4 units). For students capable of independent work at an advanced level. May be repeated up to 6 units. Prerequisite: Consent of instructor. (Fall, Winter, Spring)

## Postbaccalaureate

SOCL 5000 Seminar in Criminology ( 3 units). Advanced study of crime causation and criminal classification; specialized group and individual treatment approaches. Prerequisite: Graduate standing. (Fall, Spring)

SOCL 5940 Field Work ( $1-4$ units). Students will be placed in an agency or organization to perform work of a sociological nature. This course is designed to give graduate students a meaningful experience in an actual work situation. Interns will work under joint supervision of the University and agency. A journal or project, readings, and attendance at weekly meetings are required. May be repeated up to 6 units (exceptions granted by request to the Dean of Graduate Studies). Prerequisites: Graduate standing and consent of instructor. (Fall, Winter, Spring)

SOCL 5950 Selected Topics in Sociology (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected topic in sociology. Topics vary each term, thus different topics may be taken for credit. Prerequisites: Graduate standing and consent of instructor. (Fall, Winter, Spring)

SOCL 5960 Graduate Project (3-6 units). Alternative to a thesis. In some cases a graduate project may be more relevant to the student's field than the graduate thesis. Prerequisites: Departmental approval and consent of graduate adviser. (Fall, Winter, Spring)

SOCL 5980 Individual Study (1-4 units). For students capable of independent study in sociology. Topics and supervising instructors may vary. May be repeated for a total of six units. Available for postbaccalaureate credit only. Prerequisite: B.A. in sociology or other social science. (Fall, Winter, Spring)

SOCL 5990 Thesis (3-6 units). Thesis research. Prerequisites: Graduate standing and consent of instructor. (Fall, Winter, Spring)


# Women's Studies 

Minor/Concentration within the Liberal Studies Major

Office: Classroom Building 240B, (209) 667-3347
Chair: Richard L. Luevano
Faculty: Gisela Dardon, Judith J. Hendricks, Richard
L. Luevano, Susan Middleton-Keirn

The women's studies minor examines women's roles in modern society. The core courses focus directly on the experiences, concerns, and accomplishments of women. Electives may be selected from a variety of courses which examine sex roles within the context of other topics. These courses provide supporting background and assist the student in integrating the interdisciplinary minor with career goals.

This program is designed: (1) to provide support and assistance to students who wish to specialize in women's issues and (2) to provide a coherent academic program in women's studies which is well integrated with other disciplines and departments.

## The Minor

## Requirements ( 18 units)

1. Complete the required core courses WMST 3000, Women's Studies Colloquium, 3 units and WMST 2020, Introduction to Women's Studies, 3 units.
2. Select nine units of other core courses listed below:

WMST $2500 \quad$ Women's Development and Lifestyle Choices, 3 units
WMST $3550 \quad$ Society and Gender, 3 units
WMST/HIST 3680 Women in American History, 3 units
WMST/ANTH 3900 Women: A Cross Cultural View, 3 units
WMST/ETHS 4020 The African American Woman: Soul Sister, 4 units
WMST/PSCI 4305 Changing Sex Roles in Organizations, 3 units WMST/ENGL 4510 Women Authors, 3 units
3. Select 3 units of electives as listed below. Courses listed in the core but not used as part of the nine-unit requirement may also be selected as electives. Many additional courses may be approved for elective credit by the Women's Studies Chair if taken in conjunction with one unit of Independent Study. The additional unit of study must be directed towards exploring the implications of the course material for understanding sex roles and women's issues.

WMST/SOCL 2010 Sociology of Sexual Behavior, 3 units
WMST/COMM 3100 Advanced Interpersonal Communication, 3 units
WMST/PSYC 3660 Psychology of Women, 3 units
WMST/PSCI 3700 Ethnic and Gender Politics, 4 units
WMST/PHED 3750 Women in Sports, 3 units
WMST/ETHS 4000 Mexican American Family, 3 units
WMST/ETHS 4010 The African American Family, 3 units
WMST $4303 \quad$ Women's Spirituality: Application, 1 unit
WMST 4304 Women's Spirituality: A Thealogical View, 3 units

WMST 4311
WMST/ETHS 4350
WMSTETHS 4350
WMST/ETHS 4510

Note: Other applicable courses are offered from time to time. These substitutions will be approved by the Chair of the Ethnic and Women's Studies Department.

## Liberal Studies Concentration

## Requirements ( 21 units minimum)

1. Complete the following required Core Courses ( 12 units):

WMST 2020 Introduction to Women's Studies, 3 units
WMST $3000 \quad$ Women's Studies Colloquium, 3 units
WMST/PSYC 3660 Psychology of Women, 3 units
WMST/ENGL 4510 Women Authors, 3 units
2. Select a minimum of 9 units of elective courses from the list below:

WMST/COMM 3100 Advanced Interpersonal Communication, 3 units
WMST/HIST 3680 Women in American History, 3 units
WMST/ANTH 3900 Women: A Cross Cultural View, 3 units
WMST/ETHS 4020 The African American Woman: Soul Sister, 4 units
WMST/PSCI 4305 Changing Sex Roles in Organizations, 3 units
WMST $4311 \quad$ Women in American Law, 3 units
WMST 4980 Individual Study, 1-4 units
Note: Other applicable courses are offered from time to time, especially during Winter Term. Contact the Chair of Women's Studies for information.

## Course Descriptions

## Lower Division

WMST 2010 Sociology of Sexual Behavior (3 units). The course examines a variety of approaches to understanding sexual behavior. Typical patterns of sexual interactions will be contrasted with deviant sex styles. The course will present a wide range of conflicting viewpoints on some of the most controversial issues today including abọtion, sex education, and AIDS. (Same as SOCL 2010) Prerequisite: SOCL 1010.

WMST 2020 Introduction to Women's Studies (3 units). An introduction to the political, literary and critical history of feminist thinking and women's rights. The course will seek to put the concerns and contributions of the women's movementfrom the nineteenth century through the twentieth-into a perspective that has value and meaning for today's student of women's studies. (Fall)

WMST 2500 Women's Development and Lifestyle Choices ( 3 units). The course examines female development and experiences, psychology, and current choices. The latter would include comparative analysis of development from a woman's perspective. Special attention will be given to the feminine experience in decision making, career advancement, and balancing the various components of one's life. (Fall)

## Upper Division

WMST 3000 Women's Studies Colloquium (3 units). An in-depth examination of current issues contemporary women face. Students will hear selected topics presented by our guest lecturers who have firsthand knowledge of the issues being addressed. Textbook readings and selected journal articles provide a framework for discussions. (Formerly MDIS 4000) (Spring)

WMST 3100 Advanced Interpersonal Communication (3 units). Structure and communication processes in two-person relationships. A review of the history, current theories and research findings in such areas as interpersonal attraction, mate selection, compatibility, power, love, sex roles, conflict, and divorce. Alternative forms of close relationships are analyzed, including friendship, cohabitation, and homosexual relations. (Same as COMM 3100) Prerequisite: Junior standing or consent of the instructor. (Fall, Spring)

WMST 3444 Gender Issues in the Middle East (4 units). This course offers a study of women and sexuality in the Middle East region with special emphasis on the Arab world. It deals with the issues of gender conflict and the changing roles of women in society. The course deals extensively with the subject of the impact of Islam on the lives of women and men. The subject of feminism in the Middle East will also be covered.

WMST 3550 Society and Gender ( 3 units). This course is designed to analyze the social construction of gender. We will explore the various social institutions and practices that encourage the existing conceptions of masculinity and femininity. Early childhood socialization, practices of parenting, the educational institution, family structures, economic and work structures, the legal institution, violence against women, and intimate relationship practices will be analyzed in terms of their contribution to the social construction of gender. (Spring)
WMST 3660 Psychology of Women (3 units). This course provides a psychological examination of the nature and experiences of women in contemporary society. Topics to be discussed include women and power, the meaning of sexuality, stress and conflict surrounding women's roles, and male-female relationships. (Same as PSYC 3660) (Fall, even years)

WMST 3680 Women in American History ( 3 units). American history with reference to female experiences, value systems, and ethnic diversity from the Colonial period to the present. Includes discussion of various theoretical approaches. (Same as HIST 3680) Prerequisite: Sophomore standing or consent of instructor.

WMST 3700 Ethnic and Gender Politics (4 units). This course will focus on the politics of ethnicity and gender. It will begin with a consideration of the Europatriarchal ideology underlying social relations in capitalist societies, investigate the impact on the relations on peoples experiencing colonization (Native Americans, Afro-Americans, Mexican-Americans, Asian-Americans, other "third world" peoples, and women everywhere) and discrimination because of sexual preferences, and conclude with critical perspectives arising out of contemporary liberation movements. This course satisfies the upper division writing proficiency requirement. (Same as PSCI 3700)

WMST 3750 Women in Sport ( 3 units). Introduction to the female's role within the American sport experience. Historical and socio-cultural perspectives which have influenced the involvement of women in a traditionally male sports world will be emphasized. (Same as PHED 3750)

WMST 3900.Women: A Cross-Cultural Perspective (3 units). Comparative study of traditional and changing roles of women in a wide range of contemporary cultures. (Same as ANTH 3900). Satisfies upper division writing proficiency requirement. Prerequisite: ANTH 2060 or consent of instructor.

WMST 3950 International Non-European Women Authors ( 3 units). (Same as ENGL 3950) Readings in women authors from the non-European world, i.e., from Africa, India, the Near East, the Orient, Latin America, the Caribbean. Prerequisite: ENGL 3100 or consent of instructor.

WMST 4000 The Mexican American Family (3 units). Basic sociological structure and functions of the family as a social institution. Application of role theory to the Chicano family as a unit of interacting personalities. Courtship, marriage, and childrearing practices, etc. The relationship of the Chicano family with other institutional factors of the society. Stress is placed on the changing sex roles for the Chicano family members. (Same as ETHS 4000) Prerequisite: ETHS 2100. (Fall)

WMST 4010 The African American Family (3 units). A social psychological approach to studying the African American family as a basic social unit. A variety of perspectives are used to describe and explain how family members function in terms of courtship, marriage, child rearing practices, etc. The family's relationship with other institutions in the wider society also is considered. (Same as ETHS 4010) (Fall, Spring)

WMST 4020 The African American Woman: Soul Sister (4 units). A review of popular notions about the identity of the African American woman in the United States. Stereotypes will be contrasted with examples of her position, role, and status in past and present society. Explanations or systematic accounts regarding the African American woman's behavior will be offered from a social psychological perspective. (Same as ETHS 4020) (Winter)

WMST 4303 Women's Spirituality: Application (1 unit). This course involves student application of the conceptual material presented in WMST 4304 to a creative project of the student's own research and design. The project is to be presented to the class. To be taken with WMST 4304.

WMST 4304 Women's Spirituality: A Thealogical View (3 units). This course examines theology, the thematic treatment of women, and reconstructs major themes from a woman-created approach. It contrasts contemporary trends in women's spirituality with the liturgical tradition. (Activity and discussion format)

WMST 4305 Changing Sex Roles in Organizations (3 units). This course deals with changes in the work environment resulting from the influx and upward mobility of women into professional positions. It will address the dynamics of the change for both men and women. Specific topics include changing demographics, cultural taboos, problems and the legal climate. (Same as PSCI 4305) (Summer)

WMST 4311 Women in American Law (3 units). This course is designed to examine American law, focusing upon significant, recent, and current cases and opinion which act to discriminate between the rights, duties, and obligations of men and women on the basis of gender.

WMST 4350 Multiculturalism: From Bias to Reality (3 units). An examination of progressive change from the conventional majoritarian bias to self-awareness, selfidentity and self-esteem, i.e. the changing consciousness of systematically disadvantaged groups in the United States. Utilizing the theoretical framework of Anthony Wallace, the self-articulation of African-Americans, Chicanos, LatinAmericans, Asian-Americans and women are reviewed. Integrating concepts are used to identify the operative dynamic of exclusion and to articulate an ideal of multiculturalism and diversity. Prerequisite: Upper-division standing. (Same as ETHS 4350)

WMST 4510 Women Authors ( 3 units). Readings in prose and poetry by women authors selected to highlight the tradition of female writings: significant themes, techniques, circumstances and authors from the seventeenth century to the twentieth. At the instructor's discretion, course may be limited to one national literature, British or Ámerican, or encompass world authors.

WMST 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing; consent of departmental coordinator and Co-op Education Office.

WMST 4950 Selected Topics in Women's Studies (Topics to be specified in the Schedule of Classes) ( $\mathbf{1 - 5}$ units). Development of a particular branch of women's studies. Topics will vary each term. Different topics may be taken for credit.

WMST 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

WMST 5980 Individual Study (1-4 units). For postbaccalaureate students in Women's Studies who seek advanced and specialized study. Prerequisite: Consent of instructor and approval of graduate adviser.

# School of Business Administration 

\author{
Office .Library Building 115, (209) 667-3287 <br> Dean Gordon L. Patzer <br> \section*{Departments \& Chairs:} <br> 

The School of Business Administration offers the following degrees:

- Bachelor of Science in Business Administration
- Bachelor of Science in Computer Information Systems
- Master of Business Administration
- Master of Science in Business Administration, Management

Courses in the Bachelor of Science programs are offered both during the day and in the evening. In addition to course offerings on the campus in Turlock, the School regularly schiedules upper-division and graduaté courses in the evening at Stockton.

The Mission of the School of Business Administration is to serve the educational needs of our students by providing quality educational programs in Business Administration with special emphasis on leadership and an appreciation for diversity. To this end, we hold excellence in teaching to be of paramount value. We believe that a responsive teaching and learning environment is enriched by freedom of expression, šcholarly work, and interaction with the business' community. The students served are drawn primarily from the six-county service region of the University.

In fulfilling our mission, we provide each student with an opportunity to acquire:

- A quality education in the functional areas of business, communication, computers, and information systems within an ethical framework and a global perspective.
- A solid foundation in general education to broaden perspective and enhance the quality of personal and professional well being through life-long learning.
- The ability to lead and to function as a team player in an increasingly diverse work place.
- The ability to attain results through leadership by focusing on goal setting, quality and productivity, effective communication, and the ability to work cooperatively with other people within a framework of social responsibility and concern for the individual.
- An appreciation for demographic diversity and issues associated with differences and the ability to interact effectively with persons from diverse backgrounds.
In addition to providing academic programs, the School fulfills its mission through the offering of outreach services by the Center for Management Development and Research. The Center provides training, consulting services, and research to the business community and governmental agencies within the San Joaquin Valley. The principal activities at the Center are: (1) to create, promote, and conduct seminars, workshops, conferences, and special events of interest to the business community and
the governmental agencies; (2) to provide consulting and research services by utilizing faculty resources; and (3) to conduct industry research projects and to disseminate the results which would benefit the major industries in the community.

Another important educational outreach service is the Small Business Institute (SBI), a Small Business Administration program, which provides management assistance. Student teams, under faculty guidance, study a business organization which has requested assistance from the Small Business Administration. The team prepares a comprehensive report including recommendations, which is provided to the business. Students perform this service while earning course credit.

## The Bachelor of Science, Business Administration

The Bachelor of Science, Business Administration provides basic preparation for careers in business administration. Additionally, the program provides students with: (1) a broad, liberal education; (2) a basic understanding of the operation of a business enterprise; (3) an understanding of the environment in which business exists and of which it is a part; (4) proficiency in analyzing, evaluating, and synthesizing managerial decisions; and (5) a degree of specialized training in a selected area.

Business administration has three principal components: (1) prerequisites to the degree; (2) the business administration core; and (3) the concentration.

The prerequisites, which overlap the general education program, provide the foundation upon which the degree is later constructed. Students should schedule these courses during their freshman and sophomore years.

The business administration core is a closely coordinated sequence of courses which introduces students to the broad field of business administration, develops knowledge of the basic organizational and economic concepts which underlie the operation of all business enterprises, and develops effective ways of thinking about complex situations encountered in business administration. Except for the integrating course in business policy, which must be taken as the last course in the business administration core, students should schedule most courses in the core during their junior year.

The area of concentration provides the opportunity for specialized study in a selected area of interest. Concentrations currently available are under the degree requirements listed below.

## Requirements

1. Complete University general education requirements for the Bachelor of Science degree ( 51 units minimum).
2. Complete the degree requirements, including:
a) the prerequisites with a letter grade of "C-" or better;
b) the business administration core with a letter grade of "C-" or better; and
c) the course work in an area of concentration.
3. Satisfy the School's requirement for proficiency in English (see below).
4. At least $50 \%$ of the business units required for the degree should be earned at CSUS Stanislaus. This requirement exceeds the university-wide requirement described elsewhere in this catalog.
Note: Students planning to get a degree in business administration should emphasize general education during the first two years, thus laying a foundation upon which the program can be built. In addition, the specified prerequisites to the degree should be completed.

## Course Prerequisites

Most courses within the School of -Business Administration have specific subject-matter prerequisites for enrollment. Students must complete all specified prerequisites (or their equivalents) in order to qualify for enrollment in these courses. Students who have not successfully completed the specified prerequisites for a course, but who can offer convincing evidence of having acquired the necessary background by other means, may petition the professor in charge of the course for permission to enroll. At the discretion of the School, a qualifying examination may be required.

## The Major (48 units)

1. Complete the English Proficiency Requirement, 3 units

ENGL 3007 Business and Technical Communication, 3 units
2. Complete the following prerequisites ( 24 units) with a letter grade of "C-" or better in each course.

ECON 2500, 2510 Principles of Economics I, II, 6 units
MATH 1500 Finite Mathematics, 3 units
MATH 1610 Statistics for Decision Making, 3 units
ACC 2110 Financial Accounting, 3 units
ACC 2130 Managerial Accounting, 3 units
BLW 2060 Law, Environment and Ethics, 3 units
CIS 3780 Microcomputers in MIS, 3 units
3. Complete 21 units of course work in the business administration core with a letter grade of "C-" or better in each course.

FIN 3220 Business Finance, 3 units
MGT 3310 Management Theory and Practice, 3 units
MGT 3400 Seminar in International Business, 3 units
MKT 3410 Basic Marketing, 3 units
OM 3010 Operations Management, 3 units
OM 3020 Quantitative Analysis for Business Decisions, 3 units
MGT 4900 Business Policy, 3 units

## The Concentrations

The departments of the School provide the following concentrations:

- Accounting
- Finance
- General Business
- Management
- Marketing
- Operations Management

Requirements for these concentrations are defined in each of the following sections.

## General Business Concentration

The General Business option is intended for those students wishing to take course work in several functional areas of business. To this end, the student must choose course work in a minimum of three different functional areas of business administration and computer information systems. The resulting broad overview of business should enable graduates to gain entry into a variety of lower-level management positions in a broad range of businesses.

## Requirements

1. Complete University requirements for a Bachelor of Science degree ( 51 units minimum).
2. Complete the prerequisites to the business administration degree.
3. Complete the business administration core.
4. Complete the concentration.

The Concentration ( 15 units)
Complete 15 units of upper-division (3000- and 4000- numbered courses) course work in a minimum of three of the six functional areas of Accounting, Finance, Management, Marketing, Computer Information Systems, and Operations Management within the School of Business Administration. These courses may npt include the General Education courses ACC 3005, Personal Financial Planning and FIN 3210, Investment Management.
Note: All courses in the General Business Concentration must be completed with a letter grade of "C-" or better.

## Minor in Business Administration

## Requirements ( $\mathbf{3 3}$ units)

1. Complete the following prerequisites ( 21 units):

ECON 2500, 2510 Principles of Economics I, II, 6 units
MATH 1500 Finite Mathematics, 3 units
MATH 1610 Statistics for Decision Making, 3 units
ACC 2110 Financial Accounting, 3 units
ACC 2130 Managerial Accounting, 3 units
CIS $3780 \quad$ Microcomputers in MIS, 3 units
2. Complete the following required courses ( 12 units):

FIN 3220 Business Finance, 3 units
MGT 3310 Management, Theory and Practice, 3 units
MKT 3410 Basic Marketing, 3 units
OM 3020 Quantitative Analysis for Business Decisions, 3 units
Note: Students with a minor in the School of Business Administration should take no more than $25 \%$ of their total units in the School.

## Master of Business Administration

The Master of Business Administration program provides study in advanced concepts of business, industry, and government operations. This program is designed for the active manager or technical supervisor as well as the recent graduate who is interested in advanced study in the field of business. The program includes accounting, finance, operations management, marketing, economics, management, and computer information systems.

## Admission to the Program

Qualified applicants holding a bachelor's degree from an accredited college or university can be admitted to the program. Each applicant must submit the following to the Admissions and Records Office:

1. A fully completed application form (Part B of the Standard California State University application).
2. Two copies of official transcripts from each college attended.

Each applicant must also submit the following to the Director of Graduate Programs, School of Business Administration:

1. Three letters of recommendation from faculty and other sources.
2. The Graduate Management Admission Test (GMAT) score, which should be sent directly from the testing service. (The Graduate Record Examination [GRE] is not an acceptable substitute for the GMAT.) The director of graduate programs, School of Business Administration, will consider indicators of high promise of success in post-graduate business study from the following, listed in priority order:
a. Candidate performance on the GMAT. All candidates must sit for the GMAT prior to being admitted to the program, and must achieve a score of 450 or higher in that examination.
b. Candidate's overall or upper-division grade point average prior to admission to the program, based on the following criteria:
$i$ a total of at least 1000 points based on the formula (200 times the overall GPA plus the GMAT total score), or
ii. a total of at least 1050 points based on the formula (200 times the upper-division GPA plus the GMAT total score).
c. Experience as demonstrated by a record of appropriate employment at increasing levels of responsibility.
3. Applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and have a minimum total score of 550, with part scores of at least 54, reported directly from the testing service.
4. Evidence of competency in finite mathematics.

Note: Acceptance by the University for graduate study does not imply acceptance by the School of Business Administration. Only those students who meet the above criteria will be considered for admission to the program.

## Requirements ( 33 units minimum)

The Master of Business Administration is awarded upon satisfactory completion of 33 units of core and graduate elective courses. Before beginning the core courses, students must have completed the foundation courses listed below or their equivalents. In order to be exempted from any or all of the foundation courses, equivalent undergraduate courses must have been completed with a grade of C - or better within seven years prior to admission to the program. Exemptions from the foundation courses also can be obtained by passing the corresponding qualifying examination.

## Foundation (0-30 units)

ACC 5070 Principles of Accounting, 3 units
BLW 5090 Business Law, Environment and Ethics, 3 units
CIS 5060 Computers in Business, 3 units
ECON 5050 Business and the Economic Environment, 3 units
FIN 5020 Management of Financial Resources, 3 units
MGT 5050 The Administrative Process, 3 units
MKT 5090 Marketing Fundamentals, 3 units
OM 5020 Business Decision Techniques, 3 units
OM 5040 Quantitative Business Methods, 3 units
OM 5060 Seminar in Operations Management, 3 units

## Master of Business Administration Core (21 units) <br> ACC 5110 Management Accounting, 3 units <br> CIS 5620 Computer Information Systems, 3 units <br> FIN 5210 Managerial Finance, 3 units <br> MGT 5310 Business Organization, Theory and Behavior, 3 units <br> MGT 5350 Management of International Business, 3 units <br> MGT 5480 Business Policy, 3 units* <br> MKT 5410 Marketing Management, 3 units

## Electives (12 units)

Three approved elective courses, 9 units
Graduate Project, 3 units
Master of Business Administration Core and elective units must be earned within seven years immediately preceding the completion of requirements for the degree. A 3.0 grade point average must be maintained in all graduate work.

Enrollment in MBA core and electiveclasses is limited to students with classified MBA standing at this university. Exceptions to this policy require written approval of the director of the MBA program.

## Writing Proficiency Requirement

Master of Business Administration students may satisfy the writing proficiency requirement by meeting the required level of proficiency in either of the following courses: MGT 5310, Business Organization, Theory and Behavior or MKT 5410, Marketing Management.

## Master of Science in Business Administration, Management**

The Master of Science degree in Business Administration is designed to provide advanced specialization in the area of business management for students who have undergraduate degrees.

## Admission to the Program

See section under Admission to the Program for the Master of Business Administration program.

## Requirements ( $\mathbf{3 0}$ units minimum)

The Master of Science in Business Administration is awarded upon satisfactory completion of 30 units of Core and Graduate elective courses. Before beginning the Core courses, students are required to have taken the courses listed in the foundation or their equivalents. In order to be exempted from any or all of the foundation courses, the bachelor's degree must have been completed within seven years prior to admission to the program. The applicable courses must have been completed with a grade of $B$ or better. Exemptions from the foundation courses can also be obtained by passing the corresponding qualifying examination.

[^18]
## Foundation Requirements (0-27 units)

See section under Foundation Requirements for the Master of Business Administration program.

## Master of Science Core Requirements (30 units)

MGT 5100 Organizational and Administrative Theory, 3 units
MGT 5310 Business Organization, Theory and Behavior, 3 units
MGT 5350 Management of International Business, 3 units
MGT 5480 Business Policy, 3 units
Five courses from the following ( 15 units):
CIS $5620 \quad$ Computer Information Systems, 3 units
MGT 5610 Human Resources, 3 units
MGT 5620 Collective Bargaining, 3 units
MGT 5940 Internship, 3 units
MGT 5950 Selected Topics in Management, 3 units
MGT 5980 Individual Study, 1-4 units
OM 5510 Advanced Quantitative Business Methods, 3 units
OM 5630 Management of Quality, 3 units
One required option course from the following (3 units):
MGT 5960 Graduate Project, 3 units
MGT 5990 Graduate Thesis, 3 units
Master of Science core and elective units must be earned within seven years immediately preceding the completion of the requirements for the degree. A 3.0 grade point average must be maintained in all graduate work.

Enrollment in MBA core and elective classes is limited to the students with Classified MBA standing at this University. Exceptions to this policy require written approval of the director of the MBA program.

## Writing Proficiency Requirement

Master of Science students must satisfy the writing proficiency requirements by meeting the required level of proficiency in the following course: MGT 5310, Business Organization, Theory, and Behavior.


## Accounting

Office: Library Building 145E, (209) 667-3671<br>Chair: Don E. Garner<br>Faculty: - Annhenrie Campbell, Don E. Garner, David O. Jenkins, David H. Lindsay, Robert Van Regenmorter

## Accounting Concentration

Accounting is a systematic way of analyzing and describing the activities of a business or other economic entity primarily in monetary terms. Its purpose is to provide useful information to managers, owners, investors, creditors, regulatory agencies, and others concerned about such information. Accounting involves analyzing and recording transactions and other events, combining recorded data in useful ways, and reporting results to those concerned. It also involves the art of analyzing and interpreting financial statements and other information provided by the accounting process.

Computers are ubiquitous in accounting since few organizations use manual record keeping systems. Graduates will be prepared to function effectively in a competitive, professional environment where they must be adept with computers, software, and the people who create and maintain that software.

Possible careers in accounting include:
Public Accounting-tax planning and compliance; management advisory services; auditing; and personal financial planning.

Management Accounting-controllership; cost accounting; and internal auditing.

Governmental Accounting-federal and state income tax agencies; boards of equalization; and audit agencies.

## Stockton Center

The Bachelor of Science in Business Administration degree program with an accounting concentration is available at the CSUS Stockton Center and at the Turlock campus. Students may complete all requirements at either location.

## Requirements

1. Complete University requirements for the Bachelor of Science degree ( 51 units minimum).
2. Complete the prerequisites to the business administration major.
3. Complete the business administration core.
4. Complete the concentration.

## The Concentration ( $\mathbf{2 4}$ units)

1. Required courses, each of which must be completed with a grade of " $\mathrm{C}-$ " or better:

ACC 3110 Intermediate Accounting I, 4 units
ACC 3120 Intermediate Account II, 4 units
ACC 3140 Cost Accounting, 4 units
2. Complete at least three elective courses from the following ( 12 units):

ACC 4110 Advanced Accounting, 4 units
ACC 4120 Auditing, 4 units
ACC 4140 Income Tax Accounting, 4 units
ACC 4160 Computers in Accounting, 4 units
Note: All courses in the Accounting concentration must be completed with a "C-" or.better average.

## Uniform Certified Public Accountant Examination

Students preparing for the CPA Examination sfíould take ACC 4110, 4120,4140, and BLW 3060.

## Certified Management Accountant Examination

Students preparing for the CMA Examination should take ACC 4120, 4140, and 4160.

## Course Descriptions

## Lower-Division

ACC 2110 Financial Accounting (3 units). Introduction to financial statements of business entities. Underlying principles and proçedures. Measurement of periodic income and financial position. Prerequisite: Sophomore standing. (CAN BUS 2) (Fall, Spring)

ACC 2130 Managerial Accounting (3 units). The analysis, use, interpretation, and synthesis of accounting and financial data for and by management for planning, control, and decision making purposes. Prerequisites: ACC 2110. (CAN BUS 4) (Fall, Spring)

ACC 2950 Selected Topics in Accounting (Topics to be specified in Class Schedule) ( $1-4$ units). Development of a selected topic in accounting. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

ACC 3005 Personal Financial Planning (3 units). A study of basic personal financial planning principles in order to provide the students with a framework for making sensible decisions in the management of their personal financial resources. The course covers material important for making rational consumption and investment decisions. The importance of tax, retirement, and estate planning practices and principles in wealth accumulation and transfers is emphasized. Not acceptable for concentration requirements. Prerequisite: Junior standing. (Fall, Winter, Spring)

ACC 3110 Intermediate Accounting I (4 units). Accounting for financial position and results of operations, cash, receivables, inventories, property, plant and equipment, other non-current assets, and current liabilities. Prerequisite: ACC 2110 or 5070. (Fall, Spring)

ACC 3120 Intermediate Accounting II (4 units). Accounting for bonds, other noncurrent liabilities, investments, stockholders' equity, earnings per share, pensions, leases, accounting changes, error correction, changes in financial position, price level changes, and other financial statement analyses. Prerequisite: ACC 3110 or consent of instructor. (Fall, Spring)

ACC 3140 Cost Accounting (4 units). Theory and practice of cost accounting, including costing manufactured products, planning and control of operations, budgeting, standards, and relevant quantitative techniques. Prerequisites: ACC 2130 or 5110 ; MATH 1500, 1610. (Fall, Spring)
ACC 4110 Advanced Accounting (4 units). Accounting for business combinations, investments in subsidiaries, consolidated financial statements, foreign operations, industry segments, financially distressed companies, partnerships, governmental units, and other non-profit entities. Prerequisite: ACC 3120 or consent of instructor. (Fall, Spring)

ACC4120Auditing (4 units). Standards and procedures broadly applied toexamination of financial statements, including a consideration of the field of public accounting, professional ethics, internal controls, preparation of working papers, and audit reports. Prerequisite: ACC 3120. (Fall, Spring)
ACC 4140 Income Tax Accounting (4 units). Rules and procedures for determining federal income tax liability of individuals and businesses, including corporations and partnerships; underlying rationale; advance planning to minimize tax impact. Prerequisite: ACC 2110. (Fall, Spring)

ACC 4160 Computers in Accounting (4 units). A study of the uses of computers in accounting. Topics include the software available to perform financial and managerial tasks, accounting system design, and the internal control problems associated with computerized systems. The course will include extensive individual work using personal computers and accounting software. Prerequisites: ACC 2130, 3110 or consent of instructor. (Spring)
ACC 4910 Cooperative Education in Accounting (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment in Accounting. Students are placed in private or public sector positions under the supervision of the employer and departmental Co -op coordinator. May be repeated for a total of 8 units depending upon departmental approval. Prerequisites: Sophomore standing and consent of departmental coordinator prior to registration.

ACC 4940 Internship ( $\mathbf{3}$ units). Supervised field experience in a selected area of accounting. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

## ACC 4950 Selected Topics in Accounting (Topics to be specified in Class Schedule)

 (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.ACC 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

## Graduate

ACC 5070 Principles of Accounting ( 3 units). The principles, concepts, and conventions employed in measuring business transactions and analyzing, interpreting, and reporting results to management and other users of financial information.

ACC 5110 Management Accounting ( 3 units). The application of managerial accounting techniques and procedures to the solution of managerial problems in all functional areas of business. Prerequisite: ACC 5070.

ACC 5145 Business and Investment Tax Planning (3 units). A study of the tax factors related to business and investment decisions. The emphasis is on the role of tax planning in maximizing after-tax return. Prerequisite: ACC 5110 or equivalent.

ACC 5940 Internship ( 3 units). Supervised field experience in a selected area of accounting. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

ACC 5950 Selected Topics in Accounting (Topics to be specified in Class Schedule) (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

ACC 5960 Graduate Project (3 units). A terminal graduate project to be taken by students who have completed their course requirements. The project proposal must be approved by the project adviser(s). Prerequisite: Students must have completed all course requirements.

ACC 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

ACC5990 Graduate Thesis (3units). This enrollmentinvolves individual consultation in the preparation of a master's thesis. May be repeated for a total of 6 units. Prerequisite: Completion of course work.

## Business Law: Lower Division

BLW 2060 Law, Environment and Ethics (3 units). Law applicable to businesses; legal, ethical, political, and social environments in which businesses operate; sources of law; legal reasoning and procedure; law of contracts, agency. (Fall, Spring)

## Business Law: Upper Division

BLW 3060 Advanced Business Law (3 units). Laws relating to sales, commercial paper, secured transactions, debtor-creditor rights, bankruptcy, agency, employment, partnerships, corporations, real and personal property including protection of interests. Prerequisite: BLW 2060 or 5090. (Fall)

## Business Law: Graduate

BLW 5090 Business Law, Environment and Ethics (3 units). Examination of problems and issues involving the interaction and adaptation of business and its legal, political, ethical, and social environment. The course is developed around a series of current problems chosen to raise some major issues.

BLW 5190 International Legal Environment of Business ( 3 units). The impact of different legal environments on international business operations; civil versus common law, international taxation issues; legal safeguards for intellectual property rights; legal restrictions governing the transfer of funds, foreign investment laws, antitrust laws. Prerequisites: All MBA Foundation courses.


## Finance

Office: Library Building 145E, (209) 667-3671
Chair: Don E. Garner
Faculty: U.RaoCherukuri,DanielR. Vellenga, Andrew
Wagner

## Finance Concentration

Business finance is the three-fold function of determining funds requirements, evaluating and selecting alternate sources of funds, and managing available funds in order to achieve specified objectives.

Professional careers in finance are to be found in the financial administration of industrial, commercial, utility, and government enterprises as well as in financial institutions such as commercial banks, savings and loan associations, insurance companies, investment companies, stock brokerage houses, and investment banks.

## Requirements

1. Complete University requirements for the Bachelor of Science degree ( 51 units minimum).
2. Complete the prerequisites to the business administration degree.
3. Complete the business administration core.
4. Complete the concentration.

## The Concentration ( 12 units)

1. Complete a total of 12 units from the following:

FIN 4210 Security Analysis and Portfolio Management, 4 units
FIN 4240 Financial Markets and Institutions, 4 units
FIN 4310 Real Estate Finance and Investment, 4 units
FIN 4330 International Finance, 4 units
FIN 4820 Seminar in Financial Management, 4 units
FIN 4850/4851 Computer Applications in Finance, 3 units, 1 unit lab
Note: All courses in the Finance concentration must be completed with a letter grade of "C-" or better.

## Upper Division

FIN 3210 Investment Management (3 units). The purpose of this course is to introduce the student to both the traditional and the modern theories of investment in a manner that is easy to understand and enjoyable to study. Not acceptable for concentration requirements. Prerequisite: MATH 1600 or 1610. (Fall)

FIN 3220 Business Finance ( 3 units). Risk and rates of return, valuation of securities, financial statement analysis, financial planning, determination of funds requirements, capital structure and cost of capital, analysis of investment opportunities. Prerequisites: ACC 2130 or 3140; MATH 1610. (Fall, Winter, Spring)

## 416/Finance

F1N 4210 Security Analysis and Portfolio Management (4 units). A basic treatment of the problems of security analysis (with special attention to determination of security values and investment timing) and of portfolio selection and management withemphasis on the investment problems of the individual investor. Prerequisite: FIN 3220. (Spring)

FIN 4240 Financial Markets and Institutions (4 units). Analysis of financial markets and various types of financial institutions both bank and non-bank; emphasis on supply of funds, and differentiating functions and practices; interrelationships of financial intermediation and business firms. Prerequisite: FIN 3220 or ECON 3320. (Spring)
FIN 4310 Real Estate Finance and Investment (4 units). An analysis of the risks, practices, and problems involved in financing and investing in real property. Prerequisite: FIN 3220. (Fall)
FIN 4330 International Finance ( 4 units). This course examines the functioning of the international monetary system and the international financial arrangements as well as the financial problems of firms operating internationally. This course will include the collection, measurement, and analysis of international financial data using computer applications. Prerequisite: FIN 3220. (Fall)

FIN 4820 Seminar in Financial Management (4 units). This course is designed to focus on the analysis of financial policies and problems of non-financial firms. An extension of FIN 3220, it is intended to develop elements of the theory of business finance, to introduce the case study and/or simulation methods within the financial management context, and to access computer files (library programs and data banks) in financial analysis and decision making; heavy use of Lotus 1-2-3 in solving cases and problems in financial management. Prerequisites: FIN 3220 and OM 3020. (Fall)
FIN 4850 Computer Applications in Finance (4 units). This course deals with the study of the uses of computers in financial management. Software packages such as Lotus and IFPS+ are used to solve problems and cases in finance. Concurrent enrollment in FIN 4851 lab required. Prerequisites: CIS 3780 and FIN 3220 . (Spring)

FIN 4910 Cooperative Education in Finance (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment in finance. Students are placed in private or public sector positions under the supervision of the employer and department Co-op coordinator. May be repeated for a total of 8 units depending upon departmental approval. Prerequisites: Sophomore standing and consent of departmental coordinator prior to registration.

FIN 4940 Internship ( 3 units). Supervised field experience in a selected area of finance. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

FIN 4950 Selected Topics in Finance (Topics to be specified in Class Schedule) (14 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

FIN 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

## Graduate

FIN 5020 Management of Financial Resources (3 units). This course is intended to lay theoretical foundations of financial policy. Cases and problems provide application of theory to financial decisions involving cash flow management, capital structure, ${ }^{7}$ cost of capital, capital budgeting, dividend policy, etc., of enterprises operating for profit. Accessing of computer files' (library programs and data banks) in financial analysis and decision making is introduced. Prerequisites: ACC 5070, OM 5020 or equivalents. (Fall, Spring)

FIN 5210 Managerial Finance ( 3 units). This course focuses attention on financial management of business enterprises and its relation to other functional areas of management and to general business policy. Extensive use of case problems and/or simulation exercises provides applications of theory to financial decisions involving cash flow management, capital structure planning, capital costs, capital budgeting, dividend policy, and valuation of enterprises operating for profit. Prerequisites: FIN 5020, ECON 5050 and ACC 5110 or equivalents. (Fall, Spring)

FIN 5220 Security Analysis and Portfolio Management (3 units). An advanced treatment of the analysis of securities and the theoretical and applied issues of portfolio management. Prerequisite: FIN 5020 or equivalent.

FIN 5240 Management of Financial Institutions (3 units). A detailed examination of the management of financial institutions. Topics: Financial statements of financial institutions, investment management, loan management, liability and deposit management, capital management. Prerequisite: FIN 5020 or equivalent.

FIN 5310 Real Estate Finance and Investment (3 units). An advanced treatment of financial analysis as applied to investment in real estate. Emphasis will be on appraisal theory, risk and return measurement. Prerequisite: FIN 5020 or equivalent.

FIN 5330 International Financial Management (3 units). An analysis of 1) the international monetary and financial system, 2) the financial management issues of corporations operating internationally. Prerequisite: FIN 5020 or equivalent.

FIN 5340 Financial Markets ( 3 units). An analysis of the functioning and role of the financial markets. Topics: wholesale financial markets and retail financial markets, role of the institutions, supply-demand model of interestrates, flow of funds analysis. Prerequisite: FIN 5020 or equivalent.

FIN 5940 Internship ( 3 units). Supervised field experience in a selected area of finance. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

FIN 5950 Selected Topics in Finance (Topics to be specified in Class Schedule) (14 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## 418 / Finance

FIN 5960 Graduate Project (3 units). A terminal graduate project to be taken by students who have completed their course requirements. The project proposal must be approved by the project adviser(s). Prerequisite: Students must have completed all course requirements.

FIN 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

FIN 5990 Graduate Thesis ( 3 units). This enrollment involves consultation in the preparation of a master's thesis. May be repeated for a total of 6 units. Prerequisite: Completion of course work.


Management<br>Office: Library 179, (209) 667-3507<br>Chair: Nael A. Aly<br>Faculty: Nael A. Aly, Thomas P. Barrett, Randall B.<br>Brown, MarjorieChan, Tahi J. Gnepa, Edward<br>H. Hernandez, Peter P. Li

Faculty
Emeritus: Andrew J. Papageorge

## Requirements for the Concentration in Management

1. Complete University requirements for the Bachelor of Science degree ( 51 units minimum).
2. Complete the prerequisites to the business administration degree.
3. Complete the business administration core.
4. Complete the concentration.

## Management Concentration

The management concentration curriculum offers a variety of courses to prepare students for all types of managerial positions and perspectives. It provides an overview of management theory and practice which assumes a degree of universality and transferability with respect to management skills. Combined with the core courses and elective choices, it enables the student to obtain both a managerial perspective and a functional background suitable for entry level management positions in a variety of organizations.

## Requirements ( 12 units)

1. Complete the following courses (6 units):

MGT 4000 Organization \& Environment, 3 units
MGT 4360 Organizational Behavior, 3 units
2. Complete two of the following ( 6 units):

MGT 4340 Executive Leadership, 3 units
MGT 4540 Entrepreneurship \& Venture Initiation, 3 units
MGT 4560 Seminar in Small Business Management, 3 units
MGT 4610 Seminar in Human Resource Management, 3 units ECON 4331 Managerial Economics, 3 units
Note: All courses in the management concentration must be completed with a letter grade of "C-" or better.

## Upper Division

MGT3310Management Theory and Practice (3 units). Introduction to the concepts, issues, and practices of contemporary management. Theory, research, and real world contributions to management are all presented. Emphasis is on the basic functions of management and introduction to behavioral theories, research, and practices. Prerequisite: Junior standing. (Fall, Spring)

MGT 3400 Seminar in International Business ( 3 units). A comprehensive course covering the international environmental forces and their influence in all of the functional areas of the international firm-finance, management, marketing, personnel, production, the multinational's ethical responsibility to the host countries, balance of payments, foreign exchange risk hedging strategies, and international accounting. (Formerly 3020) Prerequisite: MGT 3310 (Fall, Spring)

MGT 4000 Organization and Environment (3 units). Examination of the complex relationships among environment, technology, and organizational design, structure, and performance. Attempts to provide an understanding of the organizational characteristics which enable firms to deal effectively with different environments. Prerequisite: Junior standing or consent of instructor. (Fall, Spring)

MGT 4340 Executive Leadership ( 3 units). A definitive study in the function of leadership in the management of business government and not-for-profit organizations, focusing on top management. Prerequisite: Senior standing.

MGT 4360 Organizational Behavior (3 units). The study of individual and group behavior in organizations. Identification and application of behavioral science research methods and theories for the practicing manager. Motivation, interpersonal relations and communications, leadership, and managing change are some of the topics to be covered. Prerequisite: MGT 3310 or consent of instructor. (Fall, Spring)

MGT 4540 Entrepreneurship and Venture Initiation (3 units). Study of selected problems involved in starting and operating new business ventures. Prerequisites: Senior standing. (Fall)

MGT 4560 Seminar in Small Business Management (3 units). Analysis of problems and issues frequently encountered in the management of a small business. Emphasizes the relevant differences in approach between small and large companies, particularly the challenge of managing with very limited resources. Extensive use of the technique of case problem analysis. Prerequisites: Senior standing and consent of instructor. (Spring)

MGT 4610 Seminar in Human Resource Management (3 units). Formulation and administration of policies designed to obtain and to maintain the human resources of the organization. Manpower planning, personnel selection and development, performance appraisal, compensation, evaluation of the personnel program. Prerequisite: MGT 3310 or consent of instructor. (Fall, Spring)

MGT 4620 Seminar in Labor Management Relations (3 units). Perspectives on the internal relationship between management and unionized employees. Prerequisite: MGT 4610. '(Every other year)

MGT 4900 Business Policy (3 units). Consideration of the business enterprise as a total system in a total environment. Analysis and evaluation of the problems, opportunities, and ethical responsibilities which face the chief executive of a business firm. Emphasis will be on the formulation and implementation of various strategies. Extensive use of the technique of case problem analysis: Prerequisites: Completion of all other courses in the business administration core, CIS 3780, and satisfaction of CSU Stanislaus writing competency requirement. (Fall, Spring, Summer)

MGT 4910 Cooperative Education in Management (2-4 units). This course provides ant opportunity to acquire relevant, practical experience in supervised paid employmentin management. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental approval. Prerequisite: Sophomore standing; consent of departmental coordinator prior to registration.
MGT 4940 Internship ( 3 units). Supervised field experience in a selected area of management. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

MGT 4950 Selected Topics in Management (Topics to be specified in Class Schedule) ( $1-4$ units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MGT 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

## Graduate

MGT 5050 The Administrative Process (3 units). The nature of administration, its role, responsibilities, and functions; special attention will be paid to the student's ability to function within the administrative process using written and oral communication skills.

MGT 5100 Organizational and Administrative Theory (3 units). Examination of development and currentemphasis in organization theory from scientific management to existentialism. Focuses on the use of theory. (Same as PADM 5100)

MGT 5200 Seminar in Organizational Behavior (3 units). Study of human behavior in complex organizations. An emphasis on behavioral science theories and research methods and their contributions to selected topics such as: motivation, innovation, managing change, interpersonal conflict and communications, power, leadership, and job-related stress. Prerequisite: MGT 5050 or equivalent.

MGT 5310 Business Organization, Theory, and Behavior ( 3 units). Advanced study of complex business organizations. Analysis of organization systems and managerial actions in terms of their influence on patterns of behavior. Prerequisite: MGT 5050 or consent of instructor.

MGT 5350 Management of International Business (3 units). This seminar focuses on selected specific problems involved in the management of a company which operates in more than one country. Emphasis may vary from term to term in accordance with the interests of the students involved.

MGT 5480 Business Policy ( 3 units). The formulation, implementation, and administration of corporate strategy. Study, through the technique of case problem analysis, of the pattern of goals and objectives as well as the ethical constraints which define a firm, and of the means of the execution of strategy in a specific situation. Prerequisite: Completion of all other Master of Business Administration core courses.

MGT 5540 New Business Ventures ( 3 units). Study of selected problems involved in starting and operating new business ventures. Prerequisites: MGT 5050, FIN 5020.

MGT 5610 Human Resources (3 units). Advanced study in selected areas within the human resources field. Among subjects to be included are: human relations and organizational development, current labor legislation on the federal and state level, Theory Z application, innovations in manpower planning and development, and possible solution to unemployment.

MGT 5620 Collective Bargaining ( 3 units). Advanced study of collective bargaining under the National Labor Relations Act and amendments. Students will participate in full-scale "mock" negotiations. Specific attention to be given to preparations, strategies, conflict resolution, and construction of language.

MGT 5940 Internship ( 3 units). Supervised field experience in a selected area of management. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: ${ }^{\prime}$ Consent of internship coordinator prior to registration.

MGT 5950 Selected Topics in Management (Topics to be specified in Class Schedule) (1-4 units ). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MGT 5960 Graduate Project (3 units). A terminal graduate project to be taken by students who have completed their course requirements. The project proposal must be approved by the project adviser(s). Prerequisite: Students must have completed all course requirements.

MGT 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

MGT 5990 Graduate Thesis (3 units). This enrollment involves consultation in the preparation of a master's thesis. May be repeated for a total of 6 units. Prerequisite: Completion of course work.


Marketing
Office: Library 179, (209) 667-3507
Chair: Nael A. Aly
Faculty: Thomas P.Barrett, Kaylene C. Williams, Tahi J. Gnepa, Gordon Patzer

## Marketing Concentration

Marketing focuses on the relationship between the firm and the markets it serves. It includes'measuring and interpreting market forces; cultivating market opportunities; developing products and/or services to match market opportunities; designing and managing market channels and physical distribution activities; pricing; advertising; sales.promotion and public relations; and personal selling and sales management.

Professional careers in marketing are to be found in the marketing departments of industrial firms and merchandising firms. In addition, there is demand for marketing professionals in specialized organizations such as advertising agencies, marketing research agencies, and other service firms.

## Requirements

1. Complete University requirements for a Bachelor of Science degree ( 51 units minimum).
2. Complete the prerequisites to the business administration degree.
3. Complete the business administration core.
4. Complete the concentration.

## The Concentration ( 12 units)

1. Complete the following courses ( 9 units):

MKT 4400 Seminar in Consumer Behavior, 3 units
MKT 4420 Marketing Research, 3 units
MKT 4490 Seminar in Marketing Strategy, 3 units
2. Complete one of the following as approved by the major adviser ( 3 units):

MKT 4410 Seminar in Promotion Management, 3 units
MKT 4430 Seminar in Sales Management, 3 units
MKT 4431 Personal Selling, 3 units
MKT 4440 Industrial Marketing, 3 units
MKT 4450 Retailing, 3 units
MKT 4460 Advertising, 3 units
MKT 4470 International Marketing, 3 units
Note: All courses in the marketing concentration must be completed with a letter grade of "C-" or better.

## Upper Division

MKT 3410 Basic Marketing (3 units). Marketing process with emphasis on the management point of view. Consideration is given to the role played by marketing in the economy, dynamics of consumer motivation and behavior, and problems including ethical considerations confronted by the business firm in establishing an overall marketing program. Prerequisites: ACC 2110, 2130; ECON 2510.

MKT 3420 Purchasing ( 3 units). A basic course in purchasing management. Principal topics considered are purchasing organization, systems and forms, functional analysis and standardization, quality, inventory and budgets, cost/price analysis, negotiation, make-or-buy, purchasing research and contracts, and legal considerations. Prerequisite: MKT 3410.

MKT4400 Seminar in Consumer Behavior.(3 units). The consumer in the marketing process. Emphasis on the manner in which consumers approach decision making situations and the manner in which predisposition, group influence, and time affect the decision making process. Prerequisite: MKT 3410. (Spring)

MKT 4410 Seminar in Promotion Management (3 units). Basic concepts and analytical tools of marketing communication from a managerial perspective. Emphasis on the design of promotional strategy including planning for advertising, personal selling, reseller support, publicity and sales promotion. Prerequisite: MKT 3410.

MKT 4420 Marketing Research (3 units). Focus on the management of marketing information as a part of the decision making process. Emphasis on application of research concepts, methods of analysis, and knowledge of the behavioral and quantitative disciplines in establishing an overall marketing program. (Field trips) Prerequisites: MKT 3410 and POM 3000. (Fall)

MKT 4430 Seminar in Sales Management ( 3 units). Planning, direction, and control of sales personnel and sales promotion activities. Sales management is approached as an integral element of the overall marketing program of a firm. Prerequisite: MKT 3410.

MKT 4431 Personal Selling ( 3 units). The role of personal selling in the marketing of consumer and industrial products and services. Analysis of sales opportunities and techniques. Includes lectures, discussion, demonstrations, and practice in sales presentation. Prerequisite: MKT 3410.

MKT 4440 Industrial Marketing (3 units). Analysis of the managerial activities in marketing of industrial goods. Coverage of market information, market planning, distribution methods, pricing strategies, and promotional problems in industrial marketing. Prerequisite: MKT 3410.

MKT 4450 Retailing ( 3 units). Development of trends, organization, and geographic structure of retailing. Emphasis on management of location, layout, planning and budgeting, and control principles and policies of store operation; pricing, personnel, and customer services management. (Field trips) Prerequisite: MKT 3410.

MKT 4460 Advertising (3 units). Basics of developing advertising applications for products, services, and ideas being marketed. Emphasis on developing advertising objectives, strategy, and measuring performance. Copy and media decisions as well as advertising research are included. Prerequisite: MKT 3410.

MKT*4470 International Marketing (3 units): Examination of the international marketing environment including special consideration of economic, political, and social systems and their effects on marketing decision-making. Prerequisite: MKT 3410.

MKT 4490 Seminar in Marketing Strategy (3 units). Analysis of management decisions arising from the marketing tasks of the firm. Role of the marketing executive in use of research, the elements of marketing strategy; product, channels of distribution, promotion, price to arrive at policy decisions. Prerequisites: MKT 3410 and two other marketing courses or consent of instructor.

MKT 4940 Internship (3 units). Supervised field experience in a selected area of marketing. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.
MKT 4950 Selected Topics in Marketing (Topics to be specified in Class Schedule) ( $1-4$ units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.
MKT 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and approval of departmentchair prior to registration.

## Graduate

MKT 5090 Marketing Fundamentals (3 units). Analysis of management decisions arising from the marketing tasks of the firm. Role of the marketing executive in use of research. The elements of marketing strategy; product, channels of distribution, promotion, price, policy decisions.

MKT 5410 Marketing Management (3 units). Emphasis on managerial decision making, problem solving to formulate and administer effective marketing activities. Marketing as a total system designed to plan, price, distribute, and promote goods and services to users. Major emphasis on case method covering buyer behavior, product, channel of distribution, pricing, and promotion. Prerequisites: MKT 5090 and consent of instructor.

MKT 5430 International Marketing (3 units). Examination of the international marketing environment including special consideration of economic, political, and social systems and their effect on marketing decision making. Management of the export function, and Federal and State support of export activities are stressed. Simulation and cases. Prerequisite: MKT 5410

MKT 5440 Physical Distribution (3 units). Selected topics from the management of physical distribution systems and other logistical problems such as inventory control, warehouse location, etc. Prerequisite: MKT 5410.

## 426 / Marketing

MKT 5450 Marketing Research (3 units). Selected topics from market research design and methodology. Special in-depth emphasis of research aspects as related to market decision making, alternative data collection, and current developments in analysis techniques. Prerequisite: MKT 5410.

MKT 5940 Internship (3 units). Supervised field experience in a selected area of marketing. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

MKT 5950 Selected Topics in Marketing (Topics to be specified in Class Schedule) (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MKT 5960 Graduate Project ( 3 units). A terminal graduate project to be taken by students who have completed their course requirements. The project proposal must be approved by the project adviser(s). Prerequisite: Students must have completed all course requirements.

MKT 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

MKT 5990 Graduate Thesis ( 3 units). This enrollment involves consultation in the preparation of a master's thesis. May be repeated for a total of 6 units. Prerequisite:
Completion of course work.


# Operations Management 

Office: Library 179, (209) 667-3507
Chair: Nael A. Aly
Faculty: Nael A. Aly, Al S. Khade, Gene Murti

## Operations Management Concentration

Operations Management (OM) is concerned with managing operations in manufacturing and service organizations. It involves the management of manpower, materials, facilities, and equipment for the efficient conversion of resources into quality products and services as well as their distribution.

OM managers apply their expertise and knowledge in the design, analysis, and planning of production systems. They utilize management science techniques and modern strategies to continuously improve the company's productivity and quality of its products and services.

Majoring in Operations Management provides exciting, rewarding, and challenging career opportunities in a wide variety of organizations. The renewed emphasis on OM has reflected in an increase in starting salaries for OM graduates. Typical career positions in Operations Management are Production Manager, Quality Manager, Operations Manager, Inventory/Materials Manager, Purchasing Manager, Facility Manager, Logistics and Distribution Manager, Productivity and Efficiency Analyst, all leading to Plant Manager and Chief Operations Manager.

## Requirements

1. Complete University requirements for the Bachelor of Science degree (51 units minimum).
2. Complete the prerequisites to the business administration degree.
3. Complete the business administration core.
4. Complete the concentration.

## The Concentration ( 12 units)

1. Complete the following courses ( 6 units):

OM 4570 Quality Management, 3 units
OM 4590 World Class Operations Strategies, 3 units
2. Complete two of the following courses as approved by the major adviser (6 units):
OM 4520 Productivity Management, 3 units
OM 4530 Materials and Inventory Management, 3 units
OM 4550 Advanced Quantitative Analysis Techniques, 3 units
OM 4890 Business Forecasting and Planning, 3 units

428 / Operations Management
3. Complete one of the following courses as approved by the major adviser (3 units):
COMM 3120 Management Communications, 3 units
MGT 4360 Organizational Behavior, 3 units
MKT 4400 Seminar in Consumer Behavior, 3 units
CIS $4770 \quad$ Systems Analysis and Design, 3 units
Note: All courses in the Operations Management concentration must be completed with a letter grade of " $\mathrm{C}-$ " or better.

## Upper Division

OM 3010 Operations Management (3 units). (Replaces OM 3510.) Management of production and operations in manufacturing and service enterprises, including product design, process selection, location and layout of the facility, control of quality and productivity, and production planning. Emphasis is on modern operations management techniques. (Field trips). Prerequisites: MATH 1610, and MGT 3310 and Junior standing. (Fall, Spring)
OM 3020 Management Science ( 3 units). (Replaces POM 3000 .) Use of management science techniques to analyze and solve business problems; topics include linear programming, decision analysis, network models, project management, forecasting, inventory and queuing analysis. Computer applications in management science will also be included. (Lecture, 2 hours; computer lab, 2 hours). Prerequisites: Computer literacy (such as CIS 2000); MATH 1500, 1610; and junior standing. (Fall, Spring, Summer)

OM 4520 Productivity Management (3 units). Techniques and approaches to measure and improve overall productivity in manufacturing and service enterprises. Problem solving techniques, work simplification, work design and measurement, human factors in productivity, measurement, and office automation. Prerequisite: OM 3010. (Spring)

OM 4530 Materials and Inventory Management (3 units). The design and operation of integrated production and inventory control systems. Detailed and aggregate scheduling of operations under deterministic and probabilistic demand conditions. Prerequisite: OM 3010. (Fall)

OM 4550 Advanced Quantitative Analysis Techniques ( $\mathbf{3}$ units). Analysis by quantitative techniques for managerial planning and decision making. Mathematical programming; advanced linear, integer, quadratic, and dynamic programming. Stochastic models; Markov processes, probabilistic inventory models. Bayesian approach to decision-making processes. Prerequisite: OM 3020. (Spring)

OM 4570 Quality Management (3 units). How to establish and administer a total company-wide quality control program. Emphasis is placed on Quality Assurance, Continuous Quality Improvement, problem solving techniques, and Statistical Process Control. Prerequisites: MATH 1610 and OM 3010. (Fall)

OM 4590 World Class Operations Strategies (3 units). Application of quantitative and management disciplines to development of World Class Operations strategies in the manufacturing as well as service industries. The instruction will emphasize the case method, plant tours, and an applied term project. New innovations and issues in World Class Operations will be included. Prerequisites: OM 3010. (Spring)

OM 4890 Business Forecasting and Planning (3 units). Developing strategic plans with emphasis on product-market relationships and business forecasting techniques. Goal setting, objective specification, environmental definition and assessment, analysis and evaluation of the competitive situation, formulation of plans. Prerequisite: OM 3020. (Fall)

OM 4910 Cooperative Education in Production, Operations \& Management
(2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment in production, operations andmanagement. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental approval. Prerequisites: Sophomore standing and consent of departmental coordinator prior to registration. (Fall, Spring)

OM 4940 Internship ( 3 units). Supervised field experience in a selected area of production and operations management. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

OM 4950 Selected Topics in Operations Management (Topics to be specified in Class Schedule) (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

OM 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and approval of departmentchair priortoregistration.

## Graduate

OM 5020 Business Decision Techniques ( 3 units). Topics include fundamentals of probability sampling, statistical estimation, test of hypotheses, analysis of variance and multivariate analysis. Emphasis is placed on the use of these techniques for business decision making. Prerequisite: Classified graduate standing or consent of instructor.

OM 5040 Quantitative Business Methods ( 3 units). Quantitative analysis in support of managerial decision making, the modeling process, linear programming, simulation, decision theory, statistical inference. Prerequisites: OM 5020 and a demonstrated knowledge of linear algebra.

OM 5060 Seminar in Operations Management (3 units). Topics: Product design, process selection, location and layout analysis, productivity and quality management, materials management with emphasis on modern management techniques for manufacturing and service enterprises. (Formerly OM 5560).

430/Operations Management
OM5510Advanced Quantitative Business Methods (3 units). Advanced quantitative techniques for managerial planning and decision making, the modeling process; linear, integer, quadratic, and dynamic programming; system stimulation. Application of statistical methods to problems in business administration. Prerequisite: OM 5040 or equivalent.

OM 5590 Advanced Topics in Operations Management (3 units). Applied course emphasizing the analysis, development, and execution of strategies affecting the production side of an enterprise. The case method approach will be followed. Modern production issues such as Just-In-Time production, computer integrated manufacturing, and factory and office of the future will be discussed. Prerequisite: OM 5060 or equivalent.

OM 5630 Management of Quality ( 3 units). Study of the management of product quality. Design and controlling quality programs. Emphasis will be on Total Quality Management including Statistical Process Control. Applications in service and manufacturing. Prerequisites: OM 5020 or equivalent.

OM 5940 Internship ( 3 units). Supervised field experience in a selected area of production and operations management. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

OM 5950 Selected Topics in Operations Management (Topics to be specified in Class Schedule) (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

OM 5960 Graduate Project ( 3 units). A terminal graduate project to be taken by students who have completed their course requirements. The project proposal must be approved by the project adviser(s). Prerequisite: Students must have completed all course requirements.

OM 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

OM 5990 Graduate Thesis (3 units). This enrollment involves consultation in the preparation of a master's thesis. May be repeated for a total of 6 units. Prerequisite: Completion of course work.

# Computer Information Systems 



Office: Library Building 115, (209) 667-3568
Chair: Eleftherios (Al) Tsacle
Faculty: Pi-ShengDeng, Zbigniew Gackowski, Ronald W. Lodewyck, Eleftherios (Al) Tsacle

The Department of Computer Information Systems offers the degree Bachelor of Science, Computer Information Systems.

## Bachelor of Science, Computer Information Systems

This degree program provides a basic preparation for careers in computer information systems involving the management of information resources-computer data and voice communication-to support business operations and corporate strategy.

Degree objectives include (1) a broad based liberal education; (2) a basic understanding of business functions and organizations; (3) a basic understanding of computer information system functions; (4) proficiency in analyzing, evaluating and developing computer information systems to support decision making; and (5) specialization in developing computer information systems either for mainframe, or for microcomputer and/or small business computer oriented environments.

Computer information systems core courses introduce the student to business functions, organizations, computer information systems concepts and practice. The core develops effective skills to analyze, design, implement, and evaluate computer information systems to support decision making and transaction processing.

Students majoring in computer information systems must choose one of two concentrations that focus either on the development and management of large structured mainframe systems or on small semi-structured and unstructured microcomputer systems. The Systems Analysis and Design Concentration prepares students for such careers as business systems analyst, data base administrator, information systems manager, and business programmer. These careers would typically occur in DP/MIS mainframe-oriented environments. The Decision Support Systems Management Concentration prepares students for such careers as small business analyst, information center specialist, decision support systems analyst, and end-user computing and information centermanager. These careers would typically occur in information centers, enduser functional departments and in small business computing microcomputer environments.

## Requirements

1. Complete University requirements for the Bachelor of Science degree ( 51 units minimum).
2. Complete the following prerequisites to the major:

ACC 2110 Financial Accounting, 3 units
ACC 2130 Managerial Accounting, 3 units

BLW 2060 Law, Environment and Ethics, 3 units
CIS 2010 COBOL Programming and Information Systems, 3 units*
ECON 2500 Principles of Economics I, 3 units
ECON 2510 Principles of Economics II, 3 units
MATH 1500 Finite Mathematics, 3 units
MATH 1610 Statistics for Decision Making, 3 units
3. Complete the major and one of the two concentrations below with a " $\mathrm{C}-$ " or better.
4. Complete the English Proficiency Requirement, 3 units ENGL 3007 Business and Technical Communication, 3 units
5. Completion of a minor is not required.
6. At least $50 \%$ of the business units required for the degree should be earned at CSU Stanislaus. This requirement exceeds the university-wide requirement described elsewhere in this catalog.
Note: Prospective computer information systems majors should emphasize General Education during the first two years, thus laying a foundation upon which the program can be built.

## The Major (30 units)

Complete the following core courses ( 30 units):
CIS 3780 Management Information Systems and Microcomputers, 3 units
CIS 4720 Data Base Management Systems, 3 units
CIS 4770 Systems Analysis and Design, 3 units
FIN 3220 Business Finance, 3 units
MGT 3310 Management Theory and Practice, 3 units
MGT 3400 Seminar in International Business, 3 units
MGT 4900 Business Policy, 3 units
MKT 3410 Basic Marketing, 3 units
OM 3020 Quantitative Analysis for Business Decisions, 3 units
OM 3010 Production and Operations Administration, 3 units

## The Concentrations ( $\mathbf{1 5}$ units)

Complete one of the following concentrations ( 15 units):

1. Systems Analysis and Design

CIS 3011 Advanced COBOL Programming, 3 units
CIS 4780 Computer Information Systems Design, 3 units
CIS 4790 Applied Software Development Project, 3 units
Complete two of the following:
CIS 3730 Structured Programming, 3 units CIS 3760 Computer Graphics, 3 units CIS 4710 Information Systems Management, 3 units CIS 4740 Advanced Data Base Management Systems, 3 units CIS 4750 Decision Support Systems, 3 units CIS 4800 Business Data Communications, 3 units

## 2. Decision Support Systems Management

CIS 4710 Information Systems Management, 3 units
CIS 4750 Decision Support Systems, 3 units
CIS 4760 Decision Support Development Project, 3 units

[^19]Complete two of the following:
CIS 3011 Advanced COBOL Programming, 3 units
CIS 3730 Structured Programming, 3. units
CIS 3760 Computer Graphics, 3 units
CIS 4740 Advanced Data Base Management Systems, 3 units
CIS 4780 Computer Information Systems Design, 3 units
CIS 4800 Business Data Communications, 3 units
OM 4520 Productivity Management, 3 units

## Minor in Computer Information Systems

## Requirements (24 units)

1. Complete the following prerequisites to the minor ( 18 units):

ACC'2110 Financial Accounting, 3 units
CIS 2010 COBOL Programming and Information Systems, 3 units
CIS 3780 Management Information Systems and Microcomputers, 3 units
ECON 2510 Principles of Economics II, 3 units
MATH 1610 Statistics for Decision Making, 3 units
MGT 3310 Management Theory and Practice, 3 units
2. Complete two of the following courses ( 6 units):

CIS 3011 Advanced COBOL Programming, 3 units
CIS 3730 Structured Programming, 3 units
CIS 4710 Information Systems Management, 3 units
CIS 4720 Database Management Systems, 3 units
CIS 4750 Decision Support Systems, 3 units
CIS 4770 Systems Analysis and Design, 3 units
CIS 4800 Business Data Communications, 3 units

## Lower Division

CIS 2000 Introduction to Business Computer Systems (3 units). An introduction to the use of computers in business. Concepts, components, and operation of computer systems. Hardware, software, procedures, systems and their integration into business applications. BASIC programming. Introduction to microcomputers. Prerequisites: Sophomore standing. (Fall, Spring)

CIS 2010 COBOL Programming and Business Information Systems (3 units). The application of the COBOL programming language to business information systems. Report preparation and validation techniques. Mass-storage file management. Course is designed for the person who has an understanding of data processing fundamentals and an introduction to programming. Prerequisite: Computer literacy (such as CIS 2000).(CAN CSCI 8)

CIS 2950 Selected Topics in Business Computer Information Systems (Topics to be specified in Class Schedule) (1-4 units). Development of a selected topic in CIS. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

CIS 3011 Advanced COBOL Programming (3 units). A continuation of CIS 2010. This course will place emphasis on advanced programming methods and techniques in COBOL. Students will become knowledgeable in file creation, data retrieval, report formatting, data sorting, table structures, advanced debugging tools, in conjunction with features of COBOL Reportwriter software. Field trips may be required for on-site exposure. Prerequisite: CIS 2010.

CIS 3730 Structured Programming ( 3 units). Solving business problems using structured programming techniques. The student will be introduced to top-down design, modular program techniques, and the rules of structured program design. Programming will be done in C or ADA utilizing all the coding components for data manipulation, data sorting and report writing using structured methodology. Prerequisite: Computer literacy (such as CIS 2000).

CIS 3760 Computer Graphics ( 3 units). An introduction to interactive computer graphics with emphasis on business and management applications. Topics will include the graphic representation of data, coordinate systems, graphic primitives, transformations, display structures, types of display, and data acquisition devices. Prerequisites: Computer literacy (such as CIS 2000) and CIS 2010.

CIS 3780 Management Information Systems and Microcomputers (3 units). A focus on management considerations of information technology, specifically microcomputers, in the business environment. Students will prepare projects involving hands-on learning of decision support, data base, financial accounting, marketing, operations, software in microcomputers. Prerequisite: Computer literacy (such as CIS 2000). (Fall, Spring)

CIS 4710 Information Systems Management (3 units). An examination of the strategic impact of information technology on the contemporary business environment. Management of the information resources in the modern business environment, with emphasis on planning, organizing, and controlling the services provided by the Computer Information Systems function for the users. Managing of end-user computing and information centers. Case studies. Prerequisite: CIS 4770. (Fall)

CIS 4720 Data Base Management Systems (3 units). The design and implementation of computer-based data bases utilizing a commercial data base management system from the business systems analyst's point of view. Provides background for the intelligent selection and use of data base management systems. Topics include discussion of types of available systems, functions of data base administration, conceptual data base design, data independence integrity, privacy, and query. The student will design and implement a data base utilizing a data base management system. Prerequisites: CIS 2010 or one semester of another programming language. (Spring)

CIS 4740 Advanced Data Base Management Systems (3 units). A continuation of CIS 4720. Students will spend most of their time completing DBMS projects using commercial database systems. Emphasis will be placed on the ability to design and execute a real world DBMS for real firms using mainframe and micro packages. Prerequisite: CIS 4720.

CIS 4750 Decision Support Systems ( 3 units) $\boldsymbol{q}^{\text {T The }}$ design and implementation of computer-based decision support systems using commercial DSS generators software, like LOTUS 1-2-3, IFPS, FOCUS. Emphasis is given to both model and dataoriented decision support systems, including the usage of influence diagrams and entity-relationship diagrams. Expert systems are also introduced through a hands-on learning of expert systems software. Prerequisites: Computer literacy (such as CIS 2000) and OM 3000 . (Spring)

CIS 4760 Decision Support Development Project (3 units). Application of decision support development concepts, principles and practices to a real world comprehensive systems development project. Student teams will work for a regional firm to analyze, design, document and implement realistic DSS of moderate complexity. Use of appropriate project management methods (scheduling and control) in the solution of a real problem. This is an integration intended as the capstone of the major. Prerequisite: CIS 4750.

CIS 4770 Systems Analysis and Design (3 units). The analysis and design of computer-based information systems and major computer application projects. The systems development life cycle is studied. The tools and techniques of system studies, problem definition, feasibility study, systems design, and implementation. Case studies. Prerequisites: CIS 2010, 3780, and ACC 2110. (Fall, Spring)

CIS 4780 Computer Information Systems Design (3 units). The conceptual background and structure of computer-based information systems which support decision making at all levels of management. Includes the planning, design, implementation, administration, and control of management information systems. Topics include computer-based systems, information structure, systems concepts, systems analysis and evaluations, management and technological considerations of information systems in the process of fulfilling information requirements of all functional äreas of organization management. Prerequisites: CIS 3011, 4720, and 4770. (Fall)

CIS 4790 Applied Software Development Project (3 units). Application of computer programming and system development concepts, principles and practices to a real world comprehensive systems development project. Student teams will work for a regional firm to analyze, design, document and implement realistic systems of moderàte complexity. Use of appropriate project management methods (scheduling and control) in the solution of a real problem. This is an integrative experience intended as the capstone of the major. Prerequisite: CIS 4780.

CIS 4800 Business Data Communications ( 3 units). Data communications in a business environment: Media and hardware; data link protocols; networking, including Local Area Networks; distributed databases; technical and managerial issues; preparing and implementing a communications plan. Hands-on projects, field trips, and case studies. Prerequisite: Computer literacy (such as CIS 2000).

CIS 4910 Cooperative Education in Computer Information Systems (2-4 units). This course provides an opportunity to acquire relevant employment in computer information systems. Students are placed in private or public sector positions under the supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental approval. Prerequisites: Sophomore standing and consent of departmental coordinator prior to registration. (Fall, Spring)

CIS4940 Internship (3 units). Supervised field experiencein aselected area of computer information systems. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

CIS 4950 Selected Topics in Computer Information Systems (Topics to be specified in Class Schedule) (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

CIS 4980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

## Graduate

CIS 5060 Computers in Business ( 3 units). An introduction to computer hardware and software, problem definition, and flowcharting. Introduction to microcomputerbased modeling and analysis, plus BASIC programming.

CIS 5620 Computer Information Systems ( 3 units). An overview of the concepts and structure of computer-based information systems which support decision making at all levels of management. Topics include the definition and role of CIS; the uses of CIS; various organizational information systems; computer hardware, software; data base systems and the principles of CIS development and management. Prerequisites: OM 5040, CIS 5060, ACC 5070, or equivalents.

CLS 5650 Program, Data, and File Structures (3 units). Advanced programming techniques and structured programming concepts using COBOL. Examines the logical and physical structures of both programs and data. Covers data organization and accessing, and sequential and index-sequential file access techniques. Prerequisite: CIS 5620 or equivalent.

CIS 5710 Decision Support Systems ( 3 units). An overview of the concepts and structure of decision support systems and expert systems. Design of knowledgebased interaćtive systems to assistmanagement decision-making. Emphasizes rationale for design, interface characteristics', and data structures necessary for managers. Uses DSS/expert system software such as GURU, Lotus 1-2-3, Excel, IFPS, FOCUS, and Paradox to provide practice in developing end-user systems. Prerequisite: CIS 5620 or equivalent.

CIS 5750Data Base Management Systems (3 units). The design and implementation of data bases utilizing a data base management system. Acquaints students with the concepts of Information Resource Management, including information as an organization resource, database design, database administration, data dictionaries, query systems, and data security. Students will dẹsign and implement a database informatión system using a database management software package.

CIS 5940 Internship ( 3 units). Supervised field experiencein a selected area of computer information systems. Formal written report(s) will be required. The course may be repeated for a total of 6 units. Prerequisite: Consent of internship coordinator prior to registration.

CIS 5950 Selected Topics in Business Computer Information Systems (Topics to be specifiẹd in Class Schedule) (1-4 units). Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

CIS 5960 Graduate Project ( 3 units). A terminal graduate project to be taken by students who have completed their course requirements. The project proposal must be approved by the project adviser(s). Prerequisite: Students must have completed all course requirements prior to registration.

CIS 5980 Individual Study (1-4 units). For students capable of independent work and in need of advanced and specialized study. Maybe repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of department chair prior to registration.

CIS 5990 Graduate Thesis (3 units). This enrollment involves consultation in the preparation of a master's thesis. May be repeated for a total of 6 units. Prerequisite: Completion of course work.

## School of Education

\author{

Office Classroom Building 103, (209) 667-3145 <br> Dean Irma Guzman Wagner <br> Departments and Chairs: <br> Advanced Studies in Education............................Roy Yasui <br> Physical Education and Health ............................William M. Morris <br> Teacher Education ................................................Doni K. Kobus <br> Program Coordinators: <br> Administrative Services Credentials .................... Curtis L. Guaglianone <br> Crosscultural, Language and Academic <br> Development(CLAD) Certificate Program ...Joan Wink <br> Learning and Severely Handicapped Credentials <br> Jane Howard and Karen Sniezek <br> Multiple Subjects Credential CLAD ....................Sharon Brockman and Reyes Quezada <br> | Multiple Subjects Credential Bilingual CLAD (BCLAD) $\qquad$ | Leodoro Hernandez |
| :---: | :---: |
| Pupil Personnel Services Credential | Nina Ribak-Rosenthal |
| Reading Specialist Credential | Janet Towell |
| Single Subject Credential | Jane E. Diekman |
| Vocational Education ......... | Lilia Baballe | <br> Credentials Analyst ...................................................Lilia Baballe <br> \section*{Degrees Offered:} <br> - Bachelor of Arts in Physical Education <br> - Bachelor of Arts in Vocational Education <br> - Master of Arts in Education with an emphasis in one of the following areas: Administration and Supervision Reading <br> Elementary Education School Counseling <br> Multilingual Education <br> Physical Education <br> Secondary Education <br> Special Education

}

## Purpose

The School of Education has, as one of its major missions, the education of classroom teachers and physical educators. In addition, the School prepares students for careers in teaching-related professions as administrators, counselors, reading specialists, and special educators. These programs are designed to provide a strong knowledge of academic disciplines, an understanding of the behavioral and social sciences as applied to the field of education, the application of current research and technology to improve instruction, and a proficiency in the technical skills necessary to become an outstanding professional.

The School offers both preliminary and advanced credential programs that are approved by the Commission on Teacher Credentialing. At the graduate level, the Master of Arts in Education is designed for educators who wish advanced study in curriculum and instruction, administration, or counseling. It is also possible to pursue an advanced credential in conjunction with a master's degree. The School also provides professional preparation for students in physical education and health.

The programs of the School of Education have achieved distinction through accreditation at the national level by the National Council for Accreditation of Teacher Education (NCATE), at the regional level by the Western Association of Schools and Colleges (WASC), and at the state level by the California Commission on Teacher Credentialing (CTC).

Because the credential programs of the School of Education are designed for the preparation of school teachers, counselors, and administrators, it is necessary to ensure that students are able to meet both the academic and field work requirements and competencies.

## Disabled Students Policy

Disabled students, who may need to have academic adjustments, will be evaluated on a case-by-case basis. Appropriate academic adjustments will be agreed upon by the Director of Disabled Student Services, related program professionals, and the student prior to course work and placement in field work. Academic adjustments refer to adaptations for a professionally verified disabled student as related to supportive services. Such adjustment does not refer to a variance of academic and technical standards requisite for the issuance of a credential.

Students are responsible for initiating the process. A copy of the Policy and Procedures for Disabled Students of the School of Education is available from your program coordinator or the departmental office.


## Credential Programs

Office: Classroom Bldg 122A, (209) 667-3534

Credential Analyst: Lilia Baballe

The Dean of the School of Education has administrative responsibility for the University's credential programs. Support for credential programs administration is provided by the Credentials Office and the Chairs of the Department of Advanced Studies in Education and the Department of Teacher Education. The Commission on Teacher Credentialing (CTC) has approved the University's programs leading to the credentials listed below:

|  | Credential <br> 1. <br> Preliminary Administrative <br> Services | Coordinator <br> C. Guaglianone | Department <br> Advanced Studies <br> in Education |
| :--- | :--- | :--- | :--- |
| 2.Professional Administrative <br> Services | C. Guaglianone | Advanced Studies <br> in Education |  |
| 3.Crosscultural Language and <br> Academic Development <br> (CLAD) Certificate Program | J. Wink | Teacher Education |  |

General information regarding credential programs is provided by the Credentials Office and the University catalog. After obtaining general information on program and admission requirements, interested persons may refer specific questions to appropriate program coordinators.

Applicants are urged to pay particular attention to program application deadlines as well as tests such as Praxis Series, MSAT or Subject Assessments/Single Subject Assessments for Teachers and CBEST, and other prerequisites that must be completed prior to admission to a credential program. Advanced credential applicants should contact the program coordinators, as listed above. Legal and administrative changes in California credential requirements may affect certain students regardless of University program/degree rights.

Holders of preliminary teaching credentials, as well as those people seeking a professional clear credential as their first regular California teaching credential, need to complete an approved program of "fifth-year" work for recommendation by CSU Stanislaus to the Commission on Teacher Credentialing. They are directed to make an appointment for professional clear credential/fifth year advising through the Department of Teacher Education (C-125, 667-3357).


# Advanced Studies 

 in EducationOffice: Classroom Building 100A, (209) 667-3364
Chair: Roy Y. Yasui

Faculty: John A. Borba, Joseph W. Corbin*, Diana Mayer Demetrulias*, Jane Diekman*, Granger Dinwiddie, Curtis L. Guaglianone, Leodoro Hernandez*, Connie Kane, Nina Ribak-Rosenthal*, Karen M. Sniezek, Cathy L. Watkins, William G. Webster*, Roy Y. Yasui*
Emeritus Faculty: Charles C. Hanna, R. J. Moriconi*, Haig A. Rushdoony*,Lorna M. Swain

Note: Asterisks indicate faculty with joint appointments in the Department of Teacher Education.

The Department of Advanced Studies in Education offers graduate programs leading to a Master of Arts in Education, with concentrations in administration and supervision, school counseling, and special education. Students interested in graduate degree programs may obtain information from the Department Office or the Graduate Studies Office in the Library Building. (L-151)

Also available are professional programs which prepare candidates for advanced credentials in school administration, school counseling, and the special education areas of learning handicapped and severely handicapped. These professional programs are designed to help students achieve basic competencies essential to effective performance within the range of services authorized. Students interested in these advanced credential programs may obtain information from the Department Office or the Graduate Studies Office (L151).

All advanced credential programs are presently approved by the Commission on Teacher Credentialing in fulfillment of certification regulations. The California State Board of Education and the Commission are empowered to change advanced credential requirements without prior notice. The University will make changes in programs leading to advanced credentials whenever revisions are reported to it in the California Code of Regulations, Title 5, Education or in other official notifications from the State Board or the Commission.

## Graduate Studies in the Department

Prerequisites, procedures, and requirements for the M.A. degree and for advanced credentials are described below. Also included is general information relevant to graduate studies.

| M.A. Area | Advanced Credential | Coordinator | Phone |
| :---: | :---: | :---: | :---: |
| Administration and Supervision | Preliminary Administrative Services, Professional Administrative Services | Curtis L. Guaglianone, (C-118A) | $\begin{aligned} & 667-3520 \prime \\ & 667-3364 \end{aligned}$ |
| School Counseling | Pupil Personnel Services | Nina Ribak-Rosenthal (C-126A) | $\begin{aligned} & 667-3447 / \\ & 667-3364 \end{aligned}$ |
| Special Education | Learning/Severely <br> Handicapped | Karen Sniezek, C100A <br> Jane Howard (C231G) | $\begin{aligned} & 667-3502 \\ & 667-3386 \end{aligned}$ |

## Master of Arts Degree

The Department of Advanced Studies in Education offers a Master of Arts degree in Education with an emphasis in one of these areas:

- Administration and Supervision
- School Counseling
- Special Education


## Prerequisites

To be considered for admission to the M.A. program, the applicant must:

1. Possess a baccalaureate degree.
2. Obtain a total score of at least 100 using the following formula for grade point average (GPA), based on the last 60 units of college/university course work, and the Miller's Analogies Test (MAT score: GPA x 20 + MAT score = total score) For example, a student with a GPA of 3.0 and an MAT score of 40 would qualify for admission with a total score of $100(3.0 \times 20+40=100)$.
3. Possess a valid basic teaching credential if applying for study in the area of Special Education. School counseling emphasis requires appropriate experience with youth.

## Application Procedures

1. Complete the University Admission form and file it with the Admissions Office in the Library Building (L-110).
2. Submit transcripts including at least the last:60 units of college/university degree course work to the Admissions Office.
3. Submit program application and receipt for program application fee to the Department of Advanced Studies in Education Office (C-100A).
4. Submit letters of recommendation as required, which discuss the applicant's potential for graduate-level study, to the Department of Advanced Studies in Education Office (C-100A).
5. Submit MAT score to the appropriate Program Coordinator. (For MATinformation and testing procedures, contact the Testing Office on campus; 667-3157)
6. Submit proof of valid basic teaching credential to the Department of Advanced Studies in Education Office, if area of emphasis is Special Education. Submit a list of experiences with youth if area of emphasis is School Counseling.

## Admission Classifications

The student applying for the M.A. program may be placed in one of two classifications:

1. Postbaccalaureate Standing: Unclassified (Permits one to enroll in classes as specified by M.A. area coordinator). To be admitted to Postbaccalaureate Standing: Unclassified, the applicant must:
a. Complete the University Admission form.
b. Meet CSU Stanislaus admișsion requirements.
2. Graduate Standing: Classified (Admission to the M.A. program is granted). To move to Graduate Standing: Classified, the applicant must:
a. Submit letters of recommendation. (Check with the specific advanced credential program coordinator for the exact number required.)
b. Submit Miller Analogies Test score.
c. Submit proof of valid teaching credential if area of emphasis is Special Education. Submit a list of experiences with youth if area of emphasis is School Counseling.
d. Complete at least six units of M.A. Education course work in residence with at least a 3.0 GPA .
e. Fulfill writing competence by obtaining a score of at least 41 on the writing section of CBEST, a minimum score of 630 on the CLEP, or successful completion of English 3009 or its equivalent.
f. Meet any other additional requirements (e.g., interviews) as specified in each M.A. area
g. Have program file evaluated by the Advanced Credential Programs Committee. (This will be done automatically after submission of documents; notification of admission status from the area coordinator will follow.)
Note: Prior to being admitted to program, international applicants whose native language is not English must demonstrate proficiency in English by completing the Test of English as a Foreign Language (TOEFL) with a score of at least 550 and with part scores of at least 54.

## Requirements

1. Course Work Requirements-No more than nine semester units of course work completed in Postbaccalaureate Standing: Unclassified may be applied to a Master's degree. The total number of units, as well as specific courses required, vary with each area of emphasis of the M.A. in Education. (See the specific area coordinator for requirements.)
2. Grade Requirements-The minimum academic grade point average for earning the M.A. degree is 3.0 . The minimum acceptable grade for courses included in the M.A. program is a "C-." In the School Administration Program, a student earning a grade of " $\mathrm{C}-$ " is considered to be on probation; on earning a second " $\mathrm{C}-$," the candidate will be disqualified.
3. Final Requirements-The M.A. in Education degree requires the successful completion of all course work, approval of a written project or thesis, and passing of an oral examination. At least 15 semester units must be completed as a student in Graduate Standing: Classified. After all requirements have been met, the student will be awarded the M.A. degree.

## Common Course Work Requirements (11 units minịmum)

1. Complete one of the following foundation courses, depending on the specific M.A. area of emphasis ( 3 units):

EDGS 5010 Education in Society, 3 units, or
EDGS 5040 Philosophy of Education, 3 units
2. Complete the following common studies courses, 7 units:

EDGS 5050 Methods of Research in Education, 4 units and
EDGS 5060 Theories of Instruction, 3 units
3. Complete a project/thesis (minimum of one enrollment is required):

Note: The project/thesis courses may be repeated for a total of 4- $\sigma$ units.

## Advanced Credentials

The following advanced credentials may be completed independent of or in conjunction with the Master of Arts degree:

- Learning Handicapped Specialist Credential
- Preliminary Administrative Services Credential (Tier I)
- Professional Administrative Services Credential (Tier II)
- Pupil Personnel Services Credential (School Counseling)
- Severely Handicapped Specialist Credential

Note: Frequently, students obtain an advanced credential and the M.A. degree (especially in Administration and Supervision) since school districts often require both the M.A. and the advanced credential of their specialist employees. When seeking the advanced credential in conjunction with the M.A. degree, the student is subject to the regulations described previously, as well as those which follow. When seeking an advanced credential only, the student is subject to the following regulations:

## Prerequisites

To be considered for admission to an advanced credential program only, the applicant must:

1. Possess a baccalaureate degree.
2. Have earned at least a 2.75 GPA in the last 60 units attempted.
3. Possess a valid teaching credential, except for the Pupil Personnel Services Credential Program for which experience with youth may be deemed appropriate and approved as a substitute for the teaching credential. (Submit a list of experiences to the Pupil Personnel Services Credential Program coordinator to obtain approval.)

## Application Procedures

To apply for admission and become fully admitted to an advanced credential program only, the applicant must:

1. Complete the University Admission form and file it with the Admissions Office in the Library Building (L-110).
2. Submit transcripts of college/university course work, to include at least the last 60 units, to the Admissions Office.
3. Submit program application and receipt for program application fee to the Department of Advanced Studies in Education Office (C-100A).
4. Submit letters of recommendation to the Department of Advanced Studies in Education Office (C-100A). (Check with the specific advanced credential program coordinator for the exact number required.)
5. Submit test scores (e.g., CBEST), as required by the specific advanced credential program, to the Department of Advanced Studies (C-100A).
6. Submit proof of valid teaching credential to the Graduate Studies Office, except for the Pupil Personnel Services Credential Program for which appropriate experience may be substituted. (Submit a list of experiences with youth to the Pupil Personnel Services Credential Program coordinator to obtain approval.)
7. Participate in an interview and/or have the program file evaluated by a credential program committee, depending on the requirements of the specific credential program.

## Admission Classifications

The student applying only for a credential program may be placed in one of two classifications:

1. Postbaccalaureate Standing: Unclassified (Permits one to enroll in classes as specified by M.A. area coordinator.) To be admitted to Postbaccalaureate Standing: Unclassified, the applicant must:
a. Complete the University Admission form.
b. Meet CSU Stanislaus admission requirements.
2. Postbaccalaureate Standing: Classified (Admission to the advanced credential program is granted. Note that the requirements for individual credential programs will vary from the requirements listed below. The applicant should obtain more detailed information from the coordinator of the specific advanced credential program.) To move to Graduate Standing: Classified, the applicant must:
a. Submit transcripts including at least the last 60 units of college/university course work.
b. Submit program application and receipt for program application fee to the Department of Advanced Studies in Education Office (C-100A).
c. Submit letters of recommendation. (The number of letters may vary depending on the advanced credential the student is seeking.)
d. Submit passing CBEST scores and/or other test scores as required.
e. Submit proof of valid teaching credential. Candidates for the Pupil Personnel Services Credential may submit Certificate of Clearance form, fingerprint cards, and a list of experiences with youth.. (See the Credentials Secretary in the Classroom Building, C-122A, for materials.)
f. Complete at least two courses of advanced program course work with at least a 3.0 GPA .
g. Participate in an interview and/or have the program file evaluated by a credential program committee, depending on the specific advanced credential program.

## Requirements

1. Course Work Requirements-No more than nine semester units of course work in Postbaccalaureate Standing: Unclassified may be applied to an advanced credential program. The total number of units, as well as specific courses required, vary with each area of emphasis within the credential area. (See the specific area coordinator for requirements.)
2. Grade Requirements-Students seeking an advanced credential are expected to maintain GPA of 3.0 while in the program. The minimum acceptable grade for a credential course is a "C-." In the School Administration Program, a student on earning a grade of "C-" is considered to be on probation; on earning a second " C -," the candidate will be disqualified.
3. Final Requirements-To obtain the required recommendation for the advanced credential from CSU Stanislaus, the student must:
a. Complete all of the course work required in the advanced credential program.
b. Achieve competency in the knowledge and skill areas of the program.
c. Submit a minimum overall GPA of 3.0 for all course work required for the credential.
d. Submit a completed application form for the credential with a cashier's check or money order, to the Credentials Office (C-122A). (See the Credentials Secretary, shortly after midterm of the final semester in program, for assistance in completing the application process for the credential.)
e. Be recommended for the credential by the Coordinator of the appropriate advanced credential program.

## Class Scheduling

Courses are scheduled in the late afternoon and evening to enable employed individuals to enroll in classes. Most courses in School Administration will begin at 5:00 p.m. A schedule, available upon request from the Coordinator, outlines the days and semesters that each course will be offered.
Note: Earlyregistration is strongly recommended. Limits are placedon class size; consequently, enrollment is not guaranteed.

## Administrative Services Credentials Preliminary and Professional

Coordinator: Curtis L. Guaglianone

## The Preliminary Administrative Services Credential Program

This is a competency-based program designed to prepare students for their initial administrative assignments. In addition to the requirements listed earlier, the applicant to this program must have successfully completed three years of teaching. Upon completion of the Preliminary Credential Program, students will be issued a certificate of eligibility which will allow them to seek employment in an administrative position. When administrative employment is attained, the credential is received, and the holder must meet the requirements for the Professional Administrative Services Credential within five years. (For additional information, the applicant must purchase the Education Administration Handbook at the KIVA or Delta campus bookstores.)

## Requirements ( 24 units)

1. Complete the following courses ( 24 units):

EDAD 5810 Seminar in Curriculum Planning and Supervision, 4 units
EDAD 5820 Educational Leadership and Personnel Management, 4 units
EDAD 5830 Seminar in Principalship and School Management, 4 units
EDAD 5840 Seminar in School Finance and School Law, 4 units
EDAD 5850 Seminar in School Governance, Politics, and Community Relations, 4 units
EDAD 5940 Field Work: Administration/Supervision, 2 units (repeated for a total of 4 units)

## The Professional Administrative Services Credential Program

This is a competency-based program designed, as a natural sequel to the Preliminary Administrative Services Credential Program, to enhance the students' professional skills to succeed in school administrative assignments. In addition to meeting regular standards for admission to graduate study at the University and meeting requirements such as a letter of sponsorship, students must submit proof of a valid Preliminary (or Clear) Administrative Services Credential, and a GPA of at least 3.0 in the last 60 units of college/university course work. The applicant for this program must be able to verify full-time employment in a position requiring the Preliminary Administrative Services Credential and that at least two years of successful experience has occurred in such a position before the credential is issued. This credential is valid for five years and is renewable. (For additional information and program course work advisement, the applicant is asked to contact the program coordinator.)

## Requirements ( 24 units)

1. Complete the following courses (24 units):

EDAD 5890
EDAD 5891/5853
EDAD 5892/5863

EDAD 5893/5873
EDAD 5894/5883

EDAD 5895

Individual Assessment - PASC Program, 1 unit Organizational Theory/Practice and Instructional Leadership, 5 units*
Evaluation of Educational Effectiveness, and Implementing Staff Development, 4 units* School Law, Organizational Politics, and Cultural, and Socio-Economic Diversity, 5 units* Management of Human, Fiscal, and Materials Resources, 5 units* Advanced Study in School Administration, 4 units, or Other advanced course work outside of educational administration, 4 units

* Includes field experience units


## Learning Handicapped Specialist Credential and Severely Handicapped Specialist Credential

Coordinators: Karen Sniezek/Jane Howard
The University is authorized to recommend individuals for a specialist credential in two areas of study in special education: Learning Handicapped and Severely Handicapped. Undergraduates may complete some of the generic course work by enrolling in the Liberal Studies major with a concentration in Exceptional Children and Youth.

Admission to either of the specialist programs requires a basic teaching credential and a GPA of 3.0. A multiple subjects credential is preferred, but single subject credential holders, with appropriate additional course work, may obtain a specialist credential. Applications are available in the Advanced Studies Office in C-100A and must be completed and submitted by specified dates before applicants can be scheduled for an admission interview. Admission to a specialist credential program or consent of program coordinator is required before enrolling in any advanced course work.

The Learning and the Severely Handicapped specializations share generic course work. Therefore, it is possible for students to pursue both credentials concurrently. Students with strong academic records are encouraged to pursue both a specialist credential and an M.A. in Education with an emphasis in the area of special education.

Recommendation for either specialist credential by CSU Stanislaus requires completion of a competency-based sequence of specified course work ( 33 units), as well as satisfactory performance during a comprehensive oral examination. (See the "Special Education Student Handbook" for further description of the programs and policies. The Handbook is available in the KIVA Bookstore.)

Please note that in 1993 the Commission on Teacher Credentialing adopted policies that affected Special Education. To date, program standards for the new credentials have yet to be developed. Existing requirements remain in place during the interim period. Check periodically with the Special Education Program concerning the status of the new credential structure.

## Requirements: Single Credential (33 units) Double Credential ( 42 units)

1. Complete the following generic course work ( 24 units):

EDSE 4310 Introduction to Special Education Programs, 3 units
EDSE 4330 Assessment and Instruction of Language for Exceptional Pupils, 3 units
PSYC 4550 Practicum in Direct Instruction, 3 units
PSYC 4560 Theory of Direct Instruction, 3 units
PSYC 4750 Applied Behavior Analysis for Learning and Severely Handicapped, 3 units
EDSE 5410 Guidance for Exceptional Child and Parent, 3 units
EDSE 5420 Curriculum and Instruction: Learning and Severely Handicapped, 3 units
EDSE 5430 Prescriptive/Individualized Instruction: Learning and Severely Handicapped, 3 units
2. Complete the following advanced course work for the Learning Handicapped

Credential (9 units):
EDSE 5450 Remedial Techniques and Research for Learning Handicapped, 3 units
EDSE 5947 Field Work: Learning Handicapped, 3 units (repeated for a total of six units)
3. Complete the following advanced course work for the Severely Handicapped

Credential (9 units):
EDSE 5440 Teaching the Severely Handicapped, 3 units
EDSE 5948 Field Work: Severely Handicapped, 3 units each, (repeated for a total of six units)

# School Counseling Credential 

Coordinator: Nina Ribak-Rosenthal

This program is designed for teachers and other professionals who possess appropriate preparation and experience. Elementary or secondary certification is recommended, although not required. Counseling field experiences are at the elementary and secondary levels, as well as with agencies. (See the Pupil Personnel Services Credential Program Coordinator for admission information and advisement.)

## Requirements ( 39 units)

1. Complete the following courses ( 36 units): EDCL5530 Testing in Education and Counseling, 3 units EDCL5540 Counseling Exceptional Children and At-Risk Youth, 3 units EDCL5570 Counseling and Guidance in Education, 3 units EDCL5600 Family Counseling and Community Resources, 3 units EDCL5610 Educational and Occupational Information, 3 units EDCL5630 Dealing with Differences in Educational Settings, 3 units EDCL5640 The Counselor, 3 units EDCL5650 School Group Guidance and Counseling Techniques, 3 units EDCL5760 Pupil Personnel Services Seminar, 3 units EDCL5780 Consultation and Supervision in School Counseling, 3 units EDCL5940 Field Work: School Counseling, 2 or more enrollments for a total of 9 units

## Course Descriptions

## Administration: Preliminary Services Credential

Note: Courses with asterisks are open only to those people who are candidates for the Professional Administrative Services Credential.

EDAD 5810 Seminar in Curriculum Planning and Supervision (4 units). Procedures for curriculum development and implementation; movements and trends as related to modern practices; basic principles of human growth and development; community involvement and proper resource utilization in curriculum development; multicultural education; issues in mainstreaming and full inclusions; supervision and evaluation of instruction; techniques of staff development; diagnosis and improvement of instruction; evaluation of pupil achievement; roles of staff, pupils, parents, and community in curriculum development. Prerequisite: Meet admission standards for Preliminary Administrative Services Credential Program.

EDAD 5820 Educational Leadership and Personnel Management (4 units). Concepts of leadership; administrators and group processes; self-evaluation; human relations; professional ethics; decision making processes and techniques; concepts and procedures related to development of school climate for effective learning; shortterm and long-range planning; concepts and principles of personnel management; affirmative action; recruitment, selection, assignment of personnel; dismissal of staff members; principles of supervision and evaluation of certificated and classified staff; personnel relations, including collective bargaining. Prerequisite: Meet admission standards for Preliminary Administrative Services Credential Program.

EDAD 5830 Seminar in Principalship and School Management (4 units). Responsibilities of the principal as related to establishing and maintaining effective schools; organizational relationships in elementary and secondary schools, together with problems and procedures; the principal and school control; teacher personnel, pupil personnel, classified personnel; guidance; community relationships; school management; developing and implementing goals; administration of special education mainstreaming; office management, plant management; computer applications; communications; conflict resolution and management of personal stress. Prerequisite: Meet admission standards for Preliminary Administrative Services Credential Program.

EDAD 5840 Seminar in School Finance and School Law (4 units). Principles and practices of school finance and business administration; financing public schools in America with focus on history, funding sources, types of funding, district and sitelevel budgeting, warehousing, pupil transportation, facilities planning, financial implications of personnel contracts; current legal framework of public schools; permissive and restrictive education codes; student rights; teacher rights; legalities of collective bargaining; legalities related to administration of special education mainstreaming; evolution of case law; pivotal legal points in education; California Education Code. Prerequisite: Meet admission standards for Preliminary Administrative Services Credential Program.

EDAD 5850 Seminar in School Governance, Politics, and Community Relations (4 units). To assist the emerging administrator in development of a realistic perspective on the real world of the public schools; interaction with community forces; political agencies; news media; community power groups; minority groups; teacher organizations; parent groups; school-site councils; school boards and policy; district administrators and policy implementation; emerging social groups and related influences; political dynamics of school faculties; cosmopolitans and locals in school-site politics; structuring and maintaining leadership images. Prerequisite: Meet admission standards for Preliminary Administrative Services Credential Program.

EDAD 5940 Field Work: Administration/Supervision (2 units) + (2 units). Actual work experience in the field. Joint supervision by district and University personnel. Includes biweekly classroom session. May be repeated for a total of 4 units. Prerequisites: Formal admission to Preliminary Administrative Services Credential Program, nearing completion of program course work, and consent of the instructor. (Formerly EDUC 6941 and EDAD 6941)

## Administration: Professional Services Credential

EDAD 5890 Individual Assessment - PASC Program (1 unit). In this course the candidate develops an individualized preparation plan, which prescribes the course work, field experience activities, and other events to be engaged in by the candidate, consistent with the evaluation of the individual based on the use of the Assessment of Progress Instrument. Prerequisite: Completion of Preliminary Administrative Services Credential.*

EDAD $5891 / 5853$ Organizational Theory/Practice and Instructional Leadership ( 5 units). This course focuses on organizational theory and practice in educational settings and the role and functions of instructional leadership therein. (Includes units for field experience activities) Prerequisite: Completion of Preliminary Administrative Services Credential.*

EDAD 5892/5863 Evaluation of Educational Effectiveness and Implementing Staff Development (4 units). This course focuses on evaluation of the total educational enterprise, with attention given to curriculum and instructional effectiveness, student outcomes, and school/district goals in relation to professional/staff development and the special characteristics and needs of adult learners. (Includes units for field experience activities) Prerequisite: Completion of Preliminary Administrative Services Credential.*

EDAD 5893/5873 School Law, Organizational Politics, and Cultural and SocioEconomic Diversity ( 5 units). This course focuses on the legal and political aspects of educational organizations in pluralistic settings at the local, state, and national levels. Attention is given to legal frameworks, political jurisdictions, and varying cultural, ethnic, and socio-economic factors which influence education. (Includes units for field experience activities) Prerequisite: Completion of Preliminary Administrative Services Credential.*

EDAD 5894/5883 Management of Human, Fiscal, and Materials Resources (5 units). This course focuses on the management of interrelated human, fiscal, and materials resources within an educational setting. Attention will be given to funding, budgeting, contractual obligations, and policies and procedures for staff and materials needs and utilization. (Includes units for field experience activities) Prerequisite: Completion of Preliminary Administrative Services Credential.*

EDAD 5895 Advanced Study in School Administration (4 units). This course focuses on areas of study and related competencies-identified by the candidate, coordinator, and school district, county office, or other educational agency personwhich need to be pursued by the candidate, in addition to those selected from EDAD 5891, EDAD 5892, EDAD 5893, and EDAD 5894, consistent with the candidate's individualized preparation program plan. Prerequisite: Consent of program coordinator.

## Counseling: Upper Division

EDCL 4620 Death Education and Counseling (3 units). Instructional and counseling practices and trends in death education. Development of awareness and sensitivity to attitudes about death and dealing with grief responses. Recommended for school personnel and other institutional employees. Prerequisite: Consent of education adviser.

## Counseling: Graduate

EDCL 5530 Testing in Education and Counseling ( 3 units). Measurement and evaluation in education; statistical aspects of testing; selection and interpretation of unbiased tests with emphasis on achievement, aptitude, interest, vocational and educational tests; effects of cultural and ethnic factors on assessment and achievement. Prerequisite: Consent of credential adviser.

EDCL 5540 Counseling Exceptional Children and at-Risk Youth (3 units). (Formerly EDSE 5540). Working with marginally functioning and at-risk youth within the school population. Includes counseling children with physical, intellectual, social and emotional difficulties. Recognition of adolescent and childhood behavior disorders, intervention techniques, community resources and educational adjustments. Prerequisite: EDCL 5640 and/or consent of instructor or adviser.

EDCL5570 Counseling and Guidance in Education (3 units). Roles, functions, and responsibilities of the school counselor, use of group guidance techniques and consultation; working with community groups and human resource development; theory, practice, and trends. Prerequisite: Consent of education adviser.

EDCL 5600 Family Counseling and Community Resources (3 units). Dynamics of relationships of family, community, and school; communitywide services; agencyschool relationships; family visiting, including conferences, interviews, and referrals. Prerequisites: EDCL 5640 and/or consent of education adviser.

EDCL 5610 Educational and Occupational Information (3 units). Sources of occupational information; community and nationwide surveys; job analyses, procedures for relating vocational and self-information. Emphasis on meeting needs for school counselors in the area of career guidance. Prerequisite: Consent of education adviser.

EDCL 5630 Dealing with Differences in Educational Settings (3 units). Recognizing and dealing with racism, sexism, and ageism, also discrimination based on religion, sexual orientation, and learning disabilities. Procedures for helping counselors, administrators, teachers, and their students relate effectively with individuals who differ in various ways. Prerequisite: Admission to a credential program or classroom teaching experience.

EDCL 5640 The Counselor ( 3 units). Focus on the person as counselor, the becoming self of the counselor, personal identity and integrity, and authentic response to role conflict situations. Study and application of counseling theory and techniques within school settings. Prerequisite: Consent of education adviser.
EDCL 5650 School Group Guidance and Counseling Techniques (3 units). Using groups for guidance and counseling in the schools; theory and procedures for implementing groups; issues and problems; role and function of school counselors as group leaders. Includes a group laboratory experience. Prerequisite: Consent of education adviser.

EDCL 5760 Pupil Personnel Services Seminar (3 units). Current practices in pupil personnel services. Organization and administration of pupil personnel services. Legal principles applied to educational problems, confidentialities, and ethics. Open to practicing personnel and those nearing completion of the pupil personnel services credential program. Prerequisite: Admission to the Pupil Personnel Services Credential Program and/or consent of education adviser.

EDCL5780 Consultation and Supervision for School Counselors (3 units) Theory, procedures, and practice in consultation and supervision for school counselors. Emphasis on consultation and change, theory, and organizational development. The role of the school counselor as a consultant to teachers, parents, and administrators and as a supervisor for paraprofessionals and counselor trainees. Prerequisites: At least one semester of EDCL 5940 and/or consent of education adviser.

EDCL 5940 Field Work: School Counseling (1-6 units). Actual work experience in the field for which student is seeking credential. Joint supervision by district and university. Weekly seminars at beginning and advanced levels. Prerequisites: EDCL 5640 and three of the four following courses: EDCL 5570,5600,5630,5650 and consent of credential coordinator.

## Graduate: Master's Core Classes

EDGS 5010 Education in Society ( 3 units). Study of social forces influencing the educational process, the curriculum, and institutional and professional roles in American public education. Analysis of characteristics and problems of ethnic groups in school and society. Recommended for in-service elementary and secondary school teachers. Meets the foundations requirement for the Master of Arts degree in Education. Prerequisites: Post-baccalaureate standing, valid teaching experience or other appropriate experience; ultimately subject to consent of instructor.

EDGS 5040 Philosophy of Education (3 units). A study of modern philosophies of education and their significance for contemporary educational practices. Recommended for in-service elementary and secondary school teachers. Meets the foundations requirement for the Master of Arts degree in Education. Prerequisites: Postbaccalaureate standing, valid teaching experience or other appropriate experience; ultimately subject to consent of instructor.

EDGS 5050 Methods of Research in Education (4 units). Application of methods of research to problems in education. Emphasis on research methodology of the social and behavioral sciences. Introduction to parametric and nonparametric statistics and their application to research problems. Prerequisites: Valid teaching credential and three years of successful teaching or other appropriate experience and fully admitted to an MA Program in Education; ultimately subject to consent of instructor.

EDGS 5060 Theories of Instruction (3 units). Analysis and evaluation of learning and instructional theories as they apply to the classroom and other educational settings. Study of human teaching and learning. Field activity component included. Prerequisites: Valid teaching credential and three years of successful teaching or other appropriate experience and fully admitted to an MA Program in Education; ultimately subject to consent of instructor.

EDGS 5950 Selected Topics in Advanced Studies in Education (Topics to be specified in Class Schedule) (1-5 units) Development of a selected topic in advanced studies in education. Topics vary each term. Prerequisite: Consent of education adviser.

EDGS 5960 Project (1-3 units). This enrollment involves individual consultation with members of the student's project committee. May be repeated for a total of 6 units. Prerequisite: Consent of the M.A. adviser.

EDGS 5980 Individual Study ( $1-4$ units). For graduate classified students in need of advanced and specialized study beyond regularly offered courses and related to the thesis. May be repeated for a total' of 6 units. Prerequisites: Complete the appropriate University and Department forms and, at least two weeks prior to the beginning of the term, obtain the following approvals: student's M.A. committee chair, graduate program coordinator, instructor who will monitor the individual study, Chair of the Department of Advanced Studies in Education, and Dean of the School of Education.

EDGS 5990 Thesis (1-3 units). This enrollment involves individual consultation with members of the student's thesis committee. May be repeated for a total of 6 units. Prerequisite: Consent of M.A. adviser.

## Instructional Technology: Upper Division

EDIT 4710 Educational Courseware: Search and Evaluation (3 units). Students will learn to identify, examine, and evaluate educational software. Different strategies and principles of courseware development will be examined. The cost of courseware development will be examined. The cost of courseware and hardware will be surveyed. Prerequisite: CS 4000 or equivalent.

EDIT 4720 Computer-Assisted Instruction (3 units). This course is designed to teach students to prepare interactive computer-assisted instruction (CAI) lessons for microcomputers. The role and applications of CAI in the educational setting will be examined. Hardware, languages, and economics will also be considered. Prerequisites: CS 4000 and EDIT 4710 or equivalents.

EDIT 4730 Microcomputers, Curriculum, and Instruction (3 units). Examination and development of strategies for integrating microcomputers within the elementary and secondary school, with a focus on the following: educational computer literacy, data-processing and problem solving skills, software evaluation, simple programming and other curricular applications, testing and information storage and retrieval; social, legal, and economic issues and implications of computer technology. (Priority given to students having completed requirements for a preliminary multiple or single subject credential.)
Note: This course meets the educational computer requirement for the Professional Clear Multiple Subjects Credential and the Professional ClearSingle Subject Credential.

## Special Education: Upper Division

EDSE 4130 Special Education Strategies for the Classroom Teacher ( 3 units). Planning to teach the mainstreamed special education student in the regular classroom. Individualized diagnostic and prescriptive teaching, counseling, legal aspects, and instructional principles and practices. (Priority given to students having completed requirements for a preliminary multiple or single subject credential.)
Note: This course meets the "mainstreaming" requirement for the Professional Clear Multiple Subject Credential and the Professional Clear Single Subject Credential. It does not meet requirements for a special education credential.

EDSE 4220 Strategies for Teaching the Gifted (2 units). Focus on teaching the gifted learner in regular classrooms and special programs. Individualized and creative teaching models based upon modern theory and practice. Includes 20 hours of directed observation/participation. Prerequisite: Consent of education adviser.

EDSE 4310 Introduction to Special Education Programs (3 units). Introduction to school programs and practices for special education students. Includes direct observation/participation and initial experiences with problems of assessment, prescription, and individualized programs. Prerequisites: PSYC 3140 and consent of education adviser.

EDSE 4330 Assessment and Instruction of Language for Exceptional Pupils (3 units). Presentation and analysis of language remediation programs and assessment devices for use by the special educator. Addresses a variety of areas including the instruction of non-vocal exceptional pupils, establishment of instructional control, teaching expressive writing skills, and the presentation of critical language concepts. Prerequisite: EDSE 4310 and consent of education adviser.

## Graduate: Special Education

EDSE 5410 Guidance for Exceptional Child and Parent (3 units). Theory and practice of counseling with focus on the exceptional child's personal family, peer group, and classroom adjustment needs. Includes selected field experiences. Prerequisite: EDSE 4310 and consent of education adviser.

EDSE 5420 Curriculum and Instruction: Learning and Severely Handicapped (3 units). Methods and materials for teaching the learning and severely handicapped. Consideration of trends in theory and practice for self-contained classrooms and resource teachers. Prerequisites: PSYC 4560 and consent of education adviser.

EDSE 5430 Prescriptive/Individualized Instruction: Learning and Severely Handicapped ( 3 units). Practice in the assessment and in the development and implementation of individualized learning programs. Includes case studies and critiques of the progress of selected handicapped students. Prerequisite: EDSE 4310 and consent of education adviser.

EDSE 5440 Teaching the Severely Handicapped ( 3 units). Designed to introduce the student to the severely handicapped population with regard to etiology, instructional procedures, and crucial issues in placement and funding. The emphasis will be on practical applications. Prerequisites: Completion of generic special education course work and consent of education adviser.

## EDSE 5450 Remedial Techniques and Research for Learning Handicapped

( 3 units). Examination of current procedures utilized to teach the learning handicapped exceptional pupil. Emphasis is placed on the acquisition of specific remediation techniques in a variety of curriculum areas. Prerequisites: Completion of generic special education course work and consent of education adviser.

EDSE 5947 Field Work: Learning Handicapped (3 units) + (3 units). Actual work experience (teaching) in the field. Supervision by University personnel. Includes placements at elementary and secondary school levels; weekly classroom session. Takèn near the end of program. May be repeated for a total of 6 units. Prerequisites: Admission to the Learning Handicapped Specialist Credential Program and consent of program coordinator. (Formerly EDUC 6947 and EDSE 6947)

EDSE 5948 Field Work: Severely Handicapped (3 units) + (3 units). Actual work experience (teaching) with severely handicapped pupils. Supervision by University personnel. Includes placement with severely emotionally disturbed and/or developmentally delayed individuals; weekly classroom session. Taken near the end of program. May be repeated for a total of 6 units. Prerequisites: Admission to the Severely Handicapped Specialist Credential Program and consent of program coordinator. (Formerly EDUC 6948 and EDSE 6948)


# Physical Education and Health 

Office: Field House 142, (209) 667-3325<br>Chair: William M. Morris<br>Faculty: James C. Bowen, J. Sue Fletcher, Robert R. Harris, Janice Herring, John L. Jones, Kimberly J. Duyst, Ping Luo, LeAnn J. Millar, Martha M. Moren, William M. Morris, Janet Schefkowitz<br>Emeritus Faculty: Richard D. Conant, Zaki I. Habashi, James K. Hanny, Wayne E. Nelson

The Department of Physical Education and Health offers the degree of Bachelor of Arts in Physical Education and a single subject waiver program in Physical Education. A student may also pursue a Physical Education major by electing one of the following concentrations: Athletic Training, Health, or Wellness Management. A minor in Physical Education is also available. The department also offers a concentration in Physical Education for the Bachelors of Arts degree in Liberal Studies.

Students interested in graduate study in Physical Education may earn a Master of Arts in Education with a concentration in Physical Education. See the Department of Teacher Education section of this catalog for admission procedures.

Courses provide a background in physical education for those planning to enter the teaching field, an educational foundation for those planning to undertake graduate work, or a program for preprofessional work in health and health-related fields.

Advice for students:

1. Physical Education majors are encouraged to maintain motor skills and physical fitness by enrolling in one activity skills class and one activity fitness class per semester.
2. Mandatory advising is required of all majors in this degree program. See the department secretary for the name of your assigned adviser.
3. Students interested in obtaining a teaching credential are strongly advised to confer with the Department of Teacher Education program adviser at the beginning of the junior year. An application for admission into the teacher education program is available at the campus bookstore.

## Bachelor of Arts, Physical Education

## Requirements

1. Complete general education requirements for the Bachelor of Arts degree ( 51 units minimum).
2. Complete the following prerequisites to the major ( 11 units):
a. The following courses are required for physical education majors, and also fulfill general education requirements:

BIOL 1010 Principles of Biology (Lec), 3 units, and
BIOL 1020-1029 Special Laboratory Studies, 1 unit, or

ZOOL 1050 Introduction to Zoology, 4 units
PHED 1000 Physical Education Activity, 1 unit
b. Required courses in rèlated fields:

ZOOL 2230 Physiology (Lec), 3 units
ZOOL 2242 Physiology (Lab), 1 unit
ZOOL 2250 Human Anatomy (Lec \& lab), 4 units
3. Complete the major of not less than 38 upper-division units; of these no more than eight units of CR-graded course work in courses graded exclusively CR/NC may apply toward the major.
4. Consult with the major adviser during each advising period concerning requirements, changes in curriculum, waivers, etc.
5. Completion of a minor is not required.

## The Major ( 38 units)

1. Group One-Complete the following coourses (18 units):

PHED 3100 Foundations, History \& Philosophy of Physical Education, 3 units
PHED 4100 Curriculum Organization, Administration, and Instruction of Physical Education, 3 units
PHED 4200 Motor Learning, 3 units
PHED 4300 Measurement \& Evaluation in Physical Education, 3 units
PHED 4400 Kinesiology, 3 units
PHED 4500 Physiology of Exercise, 3 units
2. Group Two-Complete eight units from the following courses:

PHED 2100-2135 Sports Officiating, 1 unit each
PHED 3400 Elementary Physical Education, 3 units
PHED 3600 Intramural Programs, 2 units
PHED 3700 Sport in Society, 3 units
PHED 4800 Adapted Physical Education, 3 units
HLTH 3000 Prevention \& Care of Athletic Injuries, 3 units
HLTH 3200 School Health \& Safety, 2 units
Note: Not more than two units may be chosen from PHED 2100-2135.
3. Group Three-Complete four units from the following courses:

PHED 3200 Theory of Coaching Football, 2 units
PHED 3210 Theory of Coaching Basketball, 2 units
PHED 3220 Theory of Coaching Baseball, 2 units
PHED 3230 Theory of Coaching Track \& Field, 2 units
PHED 3240 Theory of Coaching Volleyball, 2 units
PHED 3250 Theory of Coaching Softball, 2 units
PHED 3260 Theory of Strength and Conditioning, 2 units
4. Group Four-Complete eight units from the following courses:

PHED 3300 Theory \& Analysis of Aquatic Sports, 2 units
PHED 3310 Theory \& Analysis of Combative Activities, 2 units
PHED 3320 Theory \& Analysis of Dance, 2 units
PHED 3330 Theory \& Analysis of Golf \& Archery, 2 units
PHED 3340 Theory \& Analysis of Gymnastics, 2 units
PHED 3350 Theory \& Analysis of Racquet Sports, 2 units
PHED 3360 Theory \& Analysis of Team Sports, 2 units

## Bachelor of Arts, Physical Education, with a Concentration in Athletic Training

## Requirements

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the prerequisites to the major ( 13 units).
a. The following courses are required for physical education majors, and also fulfill general education requirements:

BIOL $1010 \quad$ Principles of Biology, (Lec), 3 units, and
BIOL 1020-1029 Special Laboratory Studies, 1 unit, or
ZOOL 1050 Introduction to Zoology, 4 units
PHED 1010-1990 Physical Education Activity, 1 unit
b. Required courses in related fields:

> ZOOL 2230 Physiology (Lec), 3 units
> ZOOL 2242 Physiology (Lab), 1 unit
> ZOOL 2250 Human Anatomy (Lec \& Lab), 4 units
3. Complete the concentration of not less than 45 upper division units (of these no more than eight units of courses graded exclusively CR/NC may apply toward the concentration).
4. Students interested in obtaining a teaching credential should refer to the catalog section on teaching credentials (Single Subject Waiver Program, Physical Education).
5. Consult with the major adviser during each advising period concerning requirements, changes in curriculum waivers, etc.
6. Completion of a minor is not required.

## The Concentration ( 45 units)

This option prepares the student to seek certification in Athletic Training from the National Athletic Training Association.

1. Complete the following courses ( 18 units):

PHED 3100 Foundations, History, and Philosophy of Physical Education, 3 units
PHED 4100 Curriculum, Organization, Administration and Instruction of Physical Education, 3 units
PHED 4200 Motor Learning, 3 units
PHED 4300 Measurement and Evaluation in Physical Education, 3 units
PHED 4400 Kinesiology, 3 units
PHED 4500 Physiology of Exercise, 3 units
2. Complete eight units from the following courses:

PHED 3400 Elementary Physical Education, 3 units
PHED 3700 Sport in Society, 3 units
PHED 4800 Adapted Physical Education, 3 units
3. Complete the following courses ( 1819 units):

HLTH 2300 Drugs and the Athletic Environment, 1 unit

# HLTH 3000 Prevention and Care of Athletic Injuries, 3 units <br> HLTH 3030 Cardiovascular Health, Fitness and Exercise, 3 units <br> HLTH 3100 Foods and Nutrition, 3 units <br> \{HLTH 3300 Advanced Prevention and Care of Athletic Injuries, 3 units <br> PHED 3800 Sport Psychology, 4 units <br> PHED 4940 Fieldwork or Practicum in Physical Education, 1-2 units 

## Clinical Experience Requireménts

In addition to completing the required academic course work as outlined for the Athletic Training Concentration within"Physical Education and Health, students who wish to pursue Certification by the National Athletic Trainers Association must also complete a 1500 hour Supervised Clinical Experience.

This Clinical Experience is gained by working in the Athletic Training Room setting under the supervision of a Certified Athletic Trainer. The student gains experience in the field of Athletic Training by working in the Athletic Training Room and by serving as the Team Trainer for one or more of the CSUS Intercollegiate Athletic teams.

In addition to working in the Training Room, upper division students may have the opportunity to work outside of the University setting in local high schools or clinics. The student will also have the opportunity to work closely with physicians, physical therapists, and other health care providers in order to gain a variety of experiences as they relate to the field and profession of Athletic Training.

Upon completion of the required course work and the Supervised Clinical Experience, the student will be able to take the National Athletic Trainers Association Certification Exam enabling them to become a Certified Athletic Trainer.**

While the pursuit of a Teaching Credential is not a requirement for the Athletic Training Concentration, it is recommended that the student consider this option. Upon completion of the Athletic Training Concentration and the Clinical Experience, a student who possesses a valid Teaching Credential will have a greater opportunity for employment in the secondary school setting.

## Bachelor of Arts, Physical Education, with a Concentration in Health

## Requirements

1. Complete the requirements for the Bachelor of Arts degree. (Recommend HLTH 1000 in General Education area El.)
2. Complete the prerequisites to the major ( 13 units).
a. The following courses are required for physical education majors and also fulfill General Education requirements:

BIOL 1010 Principles of Biology, 3 units, and
BIOL 1020-1029 Special Laboratory Studies, 1 unit, or
ZOOL 1050 Introduction to Zoology, 4 units
PHED 1010-1990 Physical Education Activity, 1 unit
b. Required courses in related fields:

ZOOL 2230 Physiology, 3 units
ZOOL 2242 Physiology Laboratory, 1 unit
ZOOL 2250 Human Anatomy, 4 units

[^20]3. Complete the concentration of not less than 45 upper division units (of these no more than 8 units of courses graded exclusively CR/NC may apply toward the concentration).
4. Students interested in obtaining a teaching credential should refer to the catalog section on teaching credentials (Single Subject Waiver Program, Physical Education). Note: Those courses marked with an asterisk* below will fulfill the requirement for the Supplemental Authorization in Health Science to the Single Subject or Multiple Subject credentials.
5. Consult with the major adviser during each advising period concerning requirements, changes in curriculum waivers, etc.
6. Completion of a minor is not required.

## The Concentration (45-47 units)

1. Complete the following courses in the Physical Education major ( 27 units):

PHED 3100 Foundations, History and Philosophy of Physical Education, 3 units
PHED 3400 Elementary Physical Education, 3 units
PHED 3700 Sport in Society, 3 units
PHED 4100 Curriculum, Organization, Administration and Instruction of Physical Education, 3 units
PHED 4200 Motor Learning, 3 units
PHED 4300 Measurement and Evaluation in Physical Education, 3 units
PHED 4400 Kinesiology, 3 units
PHED 4500 Physiology of Exercise, 3 units
PHED 4800 Adapted Physical Education, 3 units
2. Complete the following courses ( 14 units):

HLTH 3500* Drugs and the Athletic Environment, 2 units
HLTH 3100* Foods and Nutrition, 3 units
HLTH 3030 Cardiovascular Health, Fitness and Exercise, 3 units
HLTH 4300* Family Health, 3 units
HLTH 4500 Health in a Diverse Society, 3 units
3. Select 2 courses from electives (4-6 units):

HLTH 4200* Elementary School Health and Safety, 3 units
HLTH 4210* Secondary School Health and Safety, 3 units
EDBL 4200 Teaching the Culturally Different, 3 units
PSYC 3660 Psychology of Women, 3 units
PSYC 3010 Child Abuse and Neglect, 3 units
SOCL 3150 The Family, 3 units .
SOCL 4710 Sociology of Aging, 3 units

## Bachelor of Arts, Physical Education, with a Concentration in Wellness Management

## Requirements

1. Complete the requirements for the Bachelor of Arts degree. Recommend HLTH 1000 in General Education area E.1.
2. Complete the prerequisites to the major ( 13 units).
a. The following courses are required for physical education majors, and also fulfill General Education requirements:

BIOL 1010 Principles of Biology, (Lec), 3 units, and
BIOL 1020-1029 Special Laboratory Studies, 1 unit, or
ZOOL 1050 Introduction to Zoology, 4 units
PHED 1000 Physical Education Activity, 1 unit
b. Required courses in related fields

ZOOL 2230 Physiology (Lec), 3 units
ZOOL 2242 Physiology (Lab), 1 unit
ZOOL 2250 Human Anatomy (Lec/Lab), 4 units
3. Complete the concentration of not less than 49 upper-division units (of these no more than eight units of courses graded CR/NC may apply toward the concentration).
4. Students interested in obtaining a teaching credential should refer to the catalog section on teaching credentials (Single Subject Waiver Program, Physical Education).
Note: This concentration does not qualify studentsforadmission to the credential program.
5. Consult with the major adviser during each advising period concerning requirements, changes in curriculum, waivers, etc.
6. Completion of a minor is not required.

## The Concentration (44-46 units)

1. Complete the following courses in the Physical Education major ( 15 units. PHED 3100 Foundations, History, Philosophy of Physical Education, 3 units PHED 4100 Curriculum, Organization, Administration and Instruction of Physical Education, 3 units
PHED 4300 Measurement and Evaluation, 3 units
PHED 4400 Kinesiology, 3 units
PHED 4500 Physiology of Exercise, 3 units
2. Complete two courses for the following ( 6 units).

PHED 3400 Elementary Physical Education, 3 units
PHED 3700 Sport in Society, 3 units
PHED 4200 Motor Learning, 3 units
PHED 4800 Adapted Physical Education, 3 units
HLTH 3000 Prevention and Care of Athletic Injuries, 3 units
3. Complete the following courses for the concentration (17-19 units).

PHED 3260 Theory of Strength and Conditioning, 2 units
HLTH 3100 Foods and Nutrition, 3 units
HLTH 3030 Cardiovascular Health, Fitness and Exercise, 3 units, or
HLTH 4040 The Athlete's Heart, 3 units
HLTH 4600 Health and Fitness Assessment, 3 units
HLTH 4650 Health and Fitness Program Design, 2 units
HLTH 4900 Fieldwork/Practicum, 4-6 units
4. Complete 2 courses from the following related fields ( 6 units).

COMM 3120 Management Communication, 3 units
MGT 3310 Management Theory and Practice, 3 units
PSYC 3340 Human Development III: Adulthood and Aging, 3 units

## Bachelor of Arts, Physical Education, with a Concentration in Recreation (currently inactive)

## Requirements

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the prerequisites to the major (11 units).
a. The following courses are required for physical education majors, and also fulfill general education requirements:

BIOL $1010 \quad$ Principles of Biology, (Lec), 3 units, and
BIOL 1020-1029 Special Laboratory Studies, 1 unit, or
ZOOL 1050 Introduction to Zoology, 4 units
PHED $1000 \quad$ Physical Education Activity, 1 unit
b. Required courses in related fields

PSYC 2010 Introduction to Psychology, 3 units
SOCL 1010 Introduction to Sociology, 3 units
3. Complete the major of not less than 38 upper-division units; of these no more than eight units of winter term CR-graded course work may apply toward the major.
4. Consult with the major adviser during each advising period concerning requirements, changes in curriculum, waivers, etc.
5. Completion of a minor is not required.

Note: $\quad$ This major does not qualify the candidate for admittance to the Credential Program in Physical Education.

## The Major ( $\mathbf{3 8}$ units)

1. Complete the following courses ( 15 units):

## PHED 3100 Foundations, History, and Philosophy of Physical Education, 3 units

PHED 3700 Sport in Society, 3 units
PHED 4100 Curriculum, Organization, Administration, and Instruction of Physical Education, 3 units
PHED 4200 Motor Learning, 3 units
PHED 4300 Measurement and Evaluation in Physical Education, 3 units
2. Complete the following courses ( 10 units):

REC 2100 Introduction to Recreation, 1 unit
REC 3100 Recreation Leadership Analysis, 3 units
REC 3200 Community Recreation, 3 units
REC 3300 Recreation Administration, 3 units
3. Complete 8 units from the following courses:

PHED 2100-2135 Sports Officiating, 1 unit
PHED 3400 Elementary Physical Education, 3 units
PHED 3600 Intramural Programs, 2 units
PHED 4400 Kinesiology, 3 units
PHED 4500 Physiology of Exercise, 3 units
PHED 4800 Adapted Physical Education, 3 units
4. Complete 5 units from the following field work courses:

REC 4900 Field Work:
Pre-School, 1 unit
Youth, 1 unit

Teens, 1 unit
Special Events, 1 unit
Sport Directing, 1 unit
Aquatics, 1 unit
Therapeutic, 2 units
Mentally Handicapped, 1 unit
Physically Handicapped; 1 unit
Administrative Internship, 3 units

## Minor in Physical Education

## Requirements ( 21 units)

1. Complete HLTH 3000, Prevention and Care of Athletic Injuries, 3 units
2. Complete the following course work from the groups listed above ( 18 units):

Courses from Group One of Major Program, 6 units
Courses from Group Two of Major Program, 4 units
Courses from Group Three of Major Program, 4 units
Courses from Group Four of Major Program, 4 units
Note: Of the 21 unit total, 16 units must be upper division.

## Minor in Recreation (currently inactive)

## Requirements (23 units)

1. Complete the following courses ( 10 units):

REC 2100 Introduction to Recreation, 1 unit
REC 3100 Recreation Leadership Analysis, 3 units
REC 3200 Community Recreation, 3 units
REC 3300 Recreation Administration, 3 units
2. Complete 8 units from the following courses:

PHED 2100-2135 Sports Officiating, 1 unit
PHED 3400 Elementary Physical Education, 3 units
PHED 3600 .Intramural Programs, 2 units
PHED 4400 Kinesiology, 3 units
PHED 4500 Physiology of Exercise, 3 units
PHED 4800 Adapted Physical Education, 3 units
4. Complete 5 units from the following field work courses:

REC 4900 Field Work:
Pre-school, 1 unit
Youth, 1 unit
Teens, 1 unit
Special Events, 1 unit
Sports Directing, 1 unit
Aquatics, 1 unit
Therapeutic, 1 unit
Mentally Handicapped, 1 unit
Physically Handicapped, 1 unit
Administrative Internship, 3 units
Note: Of the 23 unit total, 20 units must be upper-division.

## Teaching Credentials

Majors in physical education interested in multiple subjects or single subject credentials are referred to the "School of Education, Teacher Education" section of this catalog for a description of teaching credential programs.

## Single Subject Waiver Program, Physical Education (Teacher Preparation \& Licensing Law of 1970, Ryan Bill)

The Single Subject Waiver Program in Physical Education as described in this catalog expires on September 1, 1999. All students who enter this program before September 1, 1996 will qualify for the single subject waiver in Physical Education provided that they complete this program before September 1, 1999. All other students who wish to qualify to enter a credential program to obtain a single subject teaching credential in Physical Education must complete the requirements of the new Subject Matter Program in Physical Education.

Course requirements to meet the Physical Education Single Subject Waiver Program are presented below. Please refer to the "School of Education, Teacher Education" section of this catalog for a description of other requirements.

Before admission to the credential program, students must be cleared for subjectmatter competence. The Department of Physical Education and Health will certify students for competence in appropriate subject-matter content when they:

1. Graduate from an approved California Single Subject Waiver Program in Physical Education. Any student transferring from another college or university and applying for the credential program must be evaluated by the Department of Physical Education and Health and complete any courses needed to satisfy the Department's Single Subject Waiver Program.
2. Earn a passing score on the National Teachers Examination (Physical Education) if they have not satisfied the Department's Single Subject Waiver requirements.
3. Demonstrate competency in skills of subject areas commonly taught in California public schools. These include: dance, sports and games, aquatics, and gymnastics. Competency in skills may be obtained by passing (grade "C-" or better) 16 or more units at CSU Stanislaus in theory and analysis and theory of coaching classes with the instructor approving the skill level. If the instructor does not approve the skill level, the student must take remedial action to improve deficient skills and then pass a skills test.
4. Appeal Process:
a. There is no appeal for 1 and 2.
b. Students who do not pass a skills test on the second attempt may request a committee of three qualified faculty to administer and score the next test.

## Prerequisites

Complete the following courses (4 units):
BIOL 1010 Principles of Biology, (Lec), 3 units, and
BIOL 1020-1029 Special Laboratory Studies, 1 unit, or
ZOOL 1050 Introduction to Zoology, 4 units

## Required Courses in Related Fields

Complete the following courses in related fields (8 units):
ZOOL 2230 Physiology (Lec), 3 units
ZOOL 2242 Physiology (Lab), 1 unit
ZOOL 2250 Human Anatomy, 4 units

## Core Requirements (46 units)

1. Complete the following course work in core subjects ( 30 units):
a. Dance (2 units)

PHED 3320 Theory \& Analysis of Dance, 2 units
b. Basic Movement ( 15 units)

HLTH 3000 Prevention and Care of Athletic Injuries, 3 units
PHED 3400 Elementary Physical Education, 3 units
PHED 4200 Motor Learning, 3 units
PHED $4400 \quad$ Kinesiology, 3 units
PHED 4800 Adapted Physical Education, 3 units
c. Sports and Games (10 units)

PHED 3310 Theory \& Analysis of Combative Activities, 2 units
PHED 3330 Theory \& Analysis of Golf/Archery, or
PHED 3350 Theory \& Analysis of Racquet Sports, 2 units
PHED 3360 Theory \& Analysis of Téam Sports, 2 units
Two of the following:
PHED 3200 Theory of Coaching Football, 2 units
PHED 3210 Theory of Coaching Basketball, 2 units
PHED 3220 Theory of Coaching Baseball, 2 units
PHED 3230 Theory of Coaching Track and Field, 2 units
PHED 3240 Theory of Coaching Volleyball, 2 units
PHED 3250 Theory of Coaching Softball, 2 units
PHED 3260 Theory of Strength and Conditioning, 2 units
d. Aquatics (2 units)

PHED 3300 Theory \& Analysis of Aquatic Sports, 2 units
e. Gymnastics (2 units)

PHED 3340 Theory \& Analysis of Gymnastics, 2 units
f. Required Supplemental Breadth/Depth Units (15 units)

PHED 3100 Foundations, History, and Philosophy of Physical Education, 3 units
PHED 3700 Sport in Society, 3 units
PHED 4100 Curriculum, Organization, Administration and Instruction of Physical Education, 3 units
PHED 4300 Measurement and Evaluation in Physical Education, 3 units
PHED 4500 Physiology of Exercise, 3 units

## Coaching Certificate Program

The Department of Physical Education offers a Certificate in Coaching consisting of 20 units. This program is designed for non-physical education majors who are in-service teachers or who plan to enter the teaching profession, and physical education majors who plan on coaching but are not in the waiver program.

## Requirements ( 20 units)

1. Complete the following courses with a minimum GPA of 2.0 :

PHED 2100-2135 Sports Officiating, 2 units
PHED 3200-3250 Theory of Coaching, and
PHED 3300-3360 Theory and Analysis of Physical Education Activities, 6 units

468 / Physical Education
PHED $3700 \quad$ Sports in Society, 3 units
PHED 4600
PHED 4940
HLTH 3000
Athletic Administration, 3 units
Ficld Work or Practicum in Physical Education, 2 units*
Prevention and Care of Athletic Injuries, 3 units

* Prerequisite junior standing

Note: Of the 20 unit total, 16 units must be upper division.

## Liberal Studies Concentration in Physical Education

## Requirements ( $\mathbf{2 0}$ units)

1. Complete the following courses ( 6 units):

PHED 3400 Elementary Physical Education, 3 units
PHED 4200 Motor Learning, 3 units
2. Complete one course from Group One of the above major program other than PHED 4200 (3 units).
3. Complete one course from Group Two of the above major program other than PHED 3400 (3 units).
4. Complete three courses from Group Four of the above major program (6 units).
5. Complete elective units to total 20 units from groups $1,2,3$, or 4 .

## Master of Arts, Education with Concentration in Physical Education

Note: See the "School of Education" section in this catalog for procedures and policies related to this degree.

## Requirements ( 31 units)

1. Complete the following courses ( 31 units):

EDGS 5010 Education in Society, 3 units, or
EDGS 5040 Philosophy of Education, 3 units'
EDGS 5050 Methods of Research in Education, 4 units
EDGS 5060 Theories of Instruction, 3 units
EDUC 5770 Seminar: Elementary and Secondary Education, 2 units
PHED 5010 Seminar in Administration and Supervision of Physical
Education and Athletics, 3 units
PHED 5020 Analysis of Sport Motion, 3 units
PHED 5030 Sociological and Psychological Implications in Physical Education, 3 units
PHED 5040 Seminar in Physical Education, 3 units
PHED 5990 Thesis or Project, 4 units
Note: Three units of electives may be taken upon advisement.

## Course Descriptions

## Activity Courses

All activity courses are 1 -unit courses, meet two hours per week, have no prerequisites, may be repeated once for credit, and are graded on a CR/NC basis.

Activity courses may be challenged by passing a proficiency test and written examination.

Fitness \& Conditioning

| PHED 1010 | Backpacking |
| :--- | :--- |
| PHED 1020 | Yoga |
| PHED 1030 | Cycling |
| PHED 1050 | Jogging |
| PHED 1060 | Ski Conditioning |
| PHED 1670 | Judo |
| PHED 1080 | Karate |


| PHED 1090 | Intermediate Karate |
| :--- | :--- |
| PHED 1100 | T'ai Chi Ch'uan |
| PHED 1105 | Aikido |
| PHED 1110 | Personal Defense |
| PHED 1120 | Individualized Fitness |
| PHED 1130 | Weight Training |
| PHED 1160 | Wrestling |
| PHED 1190 | Advanced Conditioning* |

Individual \& Dual Sports

| PHED 1200 | Archery |
| :---: | :---: |
| PHED 1220 | Advanced Archery |
| PHED 1230 | Badminton |
| PHED 1260 | Bowling |
| PHED 1290 | Canoeing |
| PHED 1300 | Fencing |
| PHED 1320 | Advanced Fencing |
| PHED 1330 | Golf |
| PHED 1360 | Gymnastics |
| PHED 1400 | Handball |

PHED 1610 Swimming
PHED 1620 Intermediate Swimming

PHED 1420 Racquetball
PHED 1430 Intermediate Racquetball
PHED 1440 Advanced Racquetball
PHED 1450 Skiing
PHED 1480 Tennis
PHED 1490 Intermediate Tennis
PHED 1500 Advanced Tennis
PHED 1510 Casting \& Angling
PHED 1520 Pickle-ball

## Aquatics

PHED 1630 Advanced Swimming
PHED 1640 Life Saving

## Team Sports

| PHED 1720 | Advanced Baseball |
| :--- | :--- |
| PHED 1740 | Basketball (M) |
| PHED 1760 | Advanced Basketball (M) |
| PHED 1770 | Basketball (W) |
| PHED 1780 | Field Hockey |
| PHED 1790 | Advanced Basketball (W) |
| PHED 1800 | Advanced Field Hockey |


| PHED 1820 | Soccer |
| :--- | :--- |
| PHED 1840 | Advanced Soccer |
| PHED 1850 | Softball |
| PHED 1860 | Track |
| PHED 1870 | Volleyball |
| PHED 1880 | Intermediate Volleyball |
| PHED 1890 | Advanced Volleyball |

## Dance

PHED 1900 Ballet
PHED 1920 Modern Dance
PHED 1930 Inter. Modern Dance
PHED 1940 Advanced Modern Dance
PHED 1950 Social Dance

| PHED 1960 | Modern Jazz Dance |
| :--- | :--- |
| PHED 1965 | Inter Modern Jazz Dance |
| PHED 1970 | Folk Dance |
| PHED 1980 | African Dance |
| PHED 1990 | Dance Aerobics |

[^21]
## Physical Education

## Lower Division

PHED 2100-2135 Sports Officiating (1 unit). The study and interpretation of rules for various sports; procedures, mechanics, and practice in officiating. PHED 2100, Football; PHED 2110, Basketball; PHED 2120, Baseball; PHED 2130, Track and Field; PHED 2135, Volleyball, Softball. (Fall, Spring)

PHED 2140 Water Safety Instruction (2 units). Includes emphasis on the performance and teaching of swimming and advanced lifesaving skills. Students achieving a high level of competence will be awarded the Red Cross Water Safety Instructor's Certificate. Prerequisite: Red Cross Advanced Life Saving Certificate.

PHED 2500-2590 Intercollegiate Athletics (2 units). Theory, practice, and game performance of competitive intercollegiate athletics. Limited to students trying out for the varsity or freshman-junior varsity teams. May be repeated for credit. PHED 2500, Baseball; PHED 2505, Softball; PHED 2510, Basketball (M); PHED 2520, Cross Country; PHED 2525, Cross Country (W); PHED 2530, Golf; PHED 2555, Soccer; PHED 2560, Track andField; PHED 2565, Track and Field (W); PHED 2570 , Volleyball; PHED 2580, Basketball (W). Prerequisite: Consent of instructor. (Fall, Spring)

PHED 2950 Selected Topics in Physical Education (Topics to be specified in Class Schedule) (1-5 units). Development of a selected branch of physical education. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

## Upper Division

PHED 3100 Foundations, History, and Philosophy of Physical Education (3 units). Historical factors and forces guiding the development of physical education; objectives of current physical education and its contribution to the full development of man; development of professional understanding and attitude. Philosophical thoughts guiding the development of physical education from ancient to modern times. (Fall, Spring)

PHED 3200-3250 Theory of Coaching (2 units). Principles, psychology, and coaching techniques underlying participation in competitive interscholastic athletics. (Lecture, 1 hour; laboratory, 2 hours.) PHED 3200, Football; PHED 3210, Basketball; PHED 3220, Baseball; PHED 3230, Track and Field; PHED 3240, Volleyball; PHED 3250, Softball. Prerequisite: Limited to physical education majors and minors, or consent of instructor. (Fall, Winter, Spring)

PHED 3260 Theory of Strength and Conditioning ( 2 units). The role of strength and conditioning for athletes with the primary emphasis on application for coaches to include weight room management, safety, exercise techniques, program design, and other aspects of a comprehensive training program. Prerequisite: Limited to physical education majors and minors, or consent of instructor.

PHED 3300-3360 Theory and Analysis of Physical Education Activities ( 2 units). Development of fundamental skills and special abilities applicable to specific areas. A study of competencies and knowledge needed for teaching and organization. Rules
and field experience in game strategy, tactics, psychological and evaluation techniques. (Two 2-hour laboratories.) PHED 3300, Aquatic Sports; PHED 3310, Combative Activities; PHED 3320, Dance; PHED 3330, Golf/Archery;PHED 3340, Gymnastics; PHED 3350, Racquet Sports; PHED 3360, Team Sports. Prerequisite: Limited to physical education majors and minors or consent of instructor. (Fall, Winter, Spring)

PHED 3400 Elementary Physical Education (3 units). The scope and value of physical education and movement education in the elementary school. This course is aimed at developing the full range of each child's abilities, including cognitive skills, ways of finding and using information, perceptual ability, motor skills, social skills, and effectiye sensitivity. (Fall, Spring)

PHED 3600 Intramural Programs ( 2 units). The organization, administration, and motivation of intramural activities for schools including practical field experience.

PHED 3700 Sport in Society ( 3 units). Introduction to the theoretical study of sport and its relationship to culture and society; investigation and analysis of literature that is concerned with the individual and his/her involvement in play, game, and sport. Emphasis will be on corporate sport and its impact on social institutions and processes. Satisfies upper division writing proficiency requirement. SOCL 1010 is recommended.

PHED 3750 Women in Sport (3 units). Introduction to the female's role within the American sport experience. Historical and socio-cultural perspectives which have influenced the involvement of women in a traditionally male sports world will be emphasized. (Same as WMST 3750)

PHED 3800 Sport Psychology: Concepts and Applications (4 units). The purpose of this course is to provide students with basic background information about the subject of Sport Psychology. It will examine the behavior of individuals participating in various sports. Its focus is on why sports participants behave the way they do in various sport settings and its scope encompasses the major psychological factors underlying their behavior.

PHED 4100 Curriculum Organization, Administration and Instruction of Physical Education (3 units). An introduction to secondary level physical education curriculum planning, development, and évaluation. Preparation forteaching in physical education in secondary schools. Current trends and practices, instructional materials, methodologies, and techniques. Special attention is devoted to The California Framework for Physical Education. (Fall, Spring)

PHED 4200 Motor Learning (3 units). The application of psychological factors relating to the acquisition or performance of perceptual-motor skills. Emphasis upon the structure and function of the nervous system with specific reference to adaptive motor control. Includes an examination of the neurological integration involved in the maintenance of posture, orientation in space, and patterning of voluntary movement. (Fall)

PHED 4300 Measurementand Evaluation in Physical Education (3 units). A study of practical measurements for evaluation in physical education with emphasis on fitness and sports skills. Prerequisite: Junior standing. (Fall, Spring)

PHED 4400 Kinesiology (3 units). A study of anatomical structure and mechanical principles applied to human movement. Analysis of motor skills related to physical education activities. (Lecture, 2 hours; laboratory, 3 hours.) Prerequisites: ZOOL 2250 and junior standing. PHYS 1500 is recommended. (Fall, Spring)

PHED 4500 Physiology of Exercise (3 units). Study of different body systems and the effects of exercise on each system and physical performance. (Lecture, 2 hours; laboratory, 3 hours.) Prerequisites: ZOOL 2230, 2242, and junior standing. CHEM 1000 is recommended. (Spring)

PHED 4600 Athletic Administration (3 units). Basic problems concerned with management, administration, and organization of interscholastic athletic programs including athletic contest management, athletic finances, and budgets.

PHED 4800 Adapted Physical Education (3 units). The nature of specific handicaps which occur in students, the ways in which physical education activities are modified to meet the movement needs of handicapped students, and the laws of the State of California which have implications for the physical education program for handicapped students. ZOOL 2250 is recommended. (Lecture, 2 hours; laboratory, 3 hours) (Fall)

PHED 4940 Field Work or Practicum in Physical Education (1-2 units). Field work is designed for students interested in gaining experience in a teaching or coaching situation off campus. Practicum is designed for students interested in gaining experience in a teaching or coaching situation on campus. May be repeated for a total of 6 units. Prerequisite: Consent of department chair. (Fall, Winter, Spring)

PHED 4950 Selected Topics in Physical Education (Topics to be specified in Class Schedule) ( $1-5$ units). Development of a selected branch of physical education. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

PHED 4980 Individual Study (1-4 units). For students capable of independent work in need of advanced or specialized study. May be repeated for 6 units. Prerequisite: Consent of department chair. (Fall, Winter, Spring)

## Graduate

PHED 5010 Seminar in Administration and Supervision of Physical Education (3 units). Examination of background and current trends in the organization, structure, and administrative practice in today's physical education programs including athletics' practices. Focus is also on facilities, budgeting, equipment purchase, and related school law. (Fall)

PHED 5020 Analysis of Sport Motion (3 units). Biomechanic and physiologic aspects of exercise analysis. The theoretical basis for studying and prescribing exercise, and the practical application of current knowledge in the field of exercise science. Prerequisites: PHED 4400 and 4500. (Spring)
PHED 5030 Sociological and Psychological Implications in Physical Education (3 units). Analysis and application of sociological and psychological data related to participation of the teacher/coach and student/athletic in physical education/athletic
programs. Special emphasis on attitudes, values, societal sub-systems, behavioral techniques, and strategies specific to individual and group instruction in physical education. (Fall)

PHED 5040 Seminar in Physical Education (3 units). To acquaint students with current problems and to provide students an opportunity to do independent work and intensive study with current problems in the physical education profession. (Spring)

PHED 5980 Individual Study (1-4 units). For students capable of independent work in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of department chair. (Fall, Winter, Spring)

PHED 5990 Thesis or Project (4 units). Preparation, completion, and submission of an acceptable thesis (or project) for the Master's degree. (Fall, Winter, Spring)

## Health

## Lower Division

HLTH 1000 Health in Today's Society (3 units). Attention is focused on contemporary health problems and concerns. Typical topics covered are mental and emotional health, sexuality, nutrition, fitness, diseases, consumer education, environmental health, safety, aging, and death and dying. (Fall, Spring)

HLTH 1200 AIDS Education (3 units). Study of HIV transmission, AIDS as a chronic and infectious disease, and prevention of infection. Social, behavioral, and civil rights issues also considered.

## Upper Division

HLTH 3000 Prevention and Care of Athletic Injuries ( 3 units). Principles, practices, and legal aspects of conditioning athletes, with emphasis on the prevention and care of athletic injuries, bandaging, therapy, health habits, and protective equipment. Prerequisites: ZOOL 2250 and junior standing or consent of instructor. (Fall, Spring)
HLTH 3030 Cardiovascular Health, Fitness, and Exercise (3 units). The role of exercise in health and fitness, with primary emphasis on the cardiovascular system and the use of exercise in avoiding disease.

HLTH 3100 Foods and Nutrition ( 3 units). Selection of foods, health products, and services as basis for healthful living; health and nutritional needs at various ages; research findings and their application.

HLTH 3300 Advanced Care and Prevention and Rehabilitation of Athletic Injuries ( 3 units). Advanced study in athletic training including organization and administration, injury recognition, evaluation, and rehabilitation. Course provides for advanced study in prevention, care, and reconditioning of athletic injuries for students who would like to pursue the field professionally. Emphasis will be placed on developing a theoretical understanding and rationale, practical application, special care prevention, and reconditioning in the administration of an athletic training program. It will also integrate athletic training principles and involve students in application of the principles for various types of athletic injuries. Prerequisite: HLTH 3000.

HLTH3500 Drugs and the Athletic Environment (2 units). (Replaces HLTH 2300.) This course will address the drug problem affecting the sports environment. Emphasis will be on drug identification and the medical, abusive, and recreational use of drugs. Consideration will be given to available treatment facilities. (Fall, Spring)

HLTH 4040 The Athlete's Heart (3 units). A study of the anatomical structure and physiological function of the heart. Analysis of the athletic heart and how it differs in structure and function from the normal heart.

HLTH 4200 Elementary School Health and Safety ( 3 units). (Replaces HLTH 3200). Health and safety issues related to elementary school children. Review of comprehensive school health programs for elementary schools. Includes nature and scope of Health Instruction Framework for California Public Schools. Current CPR certification is required to receive credit in the course.

HLTH 4210 Secondary School Health and Safety (3 units). (Replaces HLTH 3200). Health and safety issues related to secondary school youth. Review of comprehensive school health programs for secondary schools. Includes nature and scope of Health Instruction Framework for California Public Schools. Current CPR certification is required to receive credit in the course.

HLTH 4300 Family Health (3 units). Analysis of the role of the family unit in maintaining health of individual members. The relationship of health and success in the school learning environment is emphasized.

HLTH 4500 Health in a Diverse Society ( 3 units). This course will increase awareness of the dimensions and complexities involved in teaching health to people from diverse cultural backgrounds. Emphasis on traditional views of health in various cultures.

HLTH 4600 Health and Fitness Assessment (3 units). Selected areas of health and fitness screening and evaluation. Compiling information for life-style prescription and counseling. (Lecture, 2 hours; laboratory 3, hours) Prerequisites: PHED 4300, HLTH 3100, junior standing. Limited to physical education majors or consent of instructor.

HLTH 4650 Health and Fitness Program Design (2 units). Development of health and fitness programs utilizing principles of fitness conditioning and health and fitness assessment. Introduce principles and procedures of program management as applied to health and fitness programs for setting such as schools, businesses, and the community. Prerequisites: HLTH 4600, PHED 3260, and junior standing. Limited to physical education majors or consent of instructor.
HLTH 4900 Fieldwork or Practicum in Health (1-2 units). This course is designed for students interested in gaining either off-campus (fieldwork) or on-campus (practicum) experience in teaching health, or in athletic training or wellness settings. Prerequisite: Consent of Department Chair.

HLTH 4910 Cooperative Education (2-4 units) This course provides an opportunity to acquire relevant, practical experience in supervised, paid employment within the discipline. Students are placed in private or public sector positions under the
supervision of the employer and departmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisite: Sophomore standing and consent of departmental coordinator.

HLTH 4950 Selected Topics in Health (Topics to be specified in class schedule) (15 units). Development of a specific topic in health. Topics may vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

HLTH 4980 Individual Study (1-4 units). Individual study is designed for students capable of independent work in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of Department Chair.


## Teacher Education

Office: Classroom Building 125, (209) 667-3367
Chair: Doni K. Kobus
Faculty: MelissaM.Aronson, Marylee Bradley, Sharon
Evans Brockman, Joseph W. Corbin*, Diana Mayer Demetrulias*, Jane E. Diekman*, Juan M. Flores, Kathleen A. Galbo, Leodoro Hernandez*, Helena A. Janes, Doni K. Kobus, Reyes Quezada, Nina Ribak-Rosenthal*, Haig A. Rushdoony*, Pamela M. Russ, Armin R. Schulz, Fay Shin, Nancy Jean Smith, Patricia Swanson, Janet H. Towell, Irma Guzman Wagner, William G. Webster*, Anthony T. Vang, Joan E. Wink, Roy Y. Yasui*
Emeritus Faculty: Dr. James Cole, Jack A. Graves, Elizabeth Papageorge, Priscilla R. Smith

Note: Asterisks indicate faculty with joint appointments in the Department of Advanced Studies in Education.

The Department of Teacher Education offers professional programs to prepare candidates for credentials in elementary and secondary school teaching, bilingual emphasis teaching, and reading. Students interested in a credential program may obtain information from the Department Office or the Credentials Office (C-122A). These professional programs are designed to help students achieve basic competencies essential for effective performance within their teaching specialty. The department also offers an advanced professional program to prepare candidates for the Reading Specialist Credential. All credential programs are approved by the California Commission on Teacher Credentialing and teacher preparation programs are approved by the National Council for Accreditation of Teacher Education. The California State Board of Education and the Commission are empowered to change credential requirements without prior notice. The University will make changes in programs leading to credentials whenever revisions are reported in the California Code of Regulations, Title 5, or in other official notifications from the State Board or the Commission.

Also available to qualified students are graduate programs leading to a Master of Arts in Education: Curriculum and Instruction, with a concentration in Elementary Education, Multilingual Education, Physical Education, Reading, or Secondary Education. Students interested in these programs may obtain information from the Department Office or the Graduate Studies Office in the Library Building.

## Teaching Credential Programs

California State University, Stanislaus is authorized to prepare students for two basic teaching credentials. Under the Credentialing Law of 1970 (the Ryan Act), these are the Multiple Subjects Credential (for elementary schools) and the Single Subject Credential (for secondary schools).

Professional Liability Insurance: Many off-campus school facilities require that students carry professional liability insurance before entering into field work/student teaching placement. However, the University does not provide professional liability insurance to students. Therefore, it is the responsibility of the student to obtain this type of insurance if the student so wishes.

Note: All requirements are subject to change based on CTC requirements, Chancellor's Office mandates, and Department of Teacher Education policies. In addition, courses.which are more than seven years old will generally not be accepted to fill professional clear credential requirements.

## Multiple Subjects Credential Program (MSCP) <br> Turlock Campus and Stockton Center

MSCP Crosscultural, Language, and Academic Development (CLAD) Emphasis<br>Coordinators: Sharon E. Brockman and Reyes L. Quezada<br>MSCP Bilingual Crosscultural, Language, and Academic Development<br>(BCLAD) Emphasis - Spanish or Southeast Asian Languages<br>(Cambodian, Hmong, Lao)<br>Coordinator: Leodoro Hernandez

The following credentials may be completed through the Multiple Subjects Credential Program:

- Preliminary Multiple Subjects Credential: Crosscultural, Language, and Academic Development (CLAD) Emphasis
- Preliminary Multiple Subjects Credential: Bilingual Crosscultural, Language, and Academic Development (BCLAD) Emphasis - Spanish or Southeast Asian Languages (Cambodian, Hmong, Lao)
- Preliminary Multiple Subjects Credential (available through December, 1995)
- Professional Clear Multiple Subjects Credential:Multiple Subjects, CLAD, or BCL'AD

The Liberal Studies department offers several waiver programs which aid students in their preparation for entrance into the CLAD/BCLAD Program. For students seeking admission to the BCLAD, a liberal studies degree program with the bilingual/crosscultural concentration is recommended. (See the "Liberal Studies" section of this catalog.) Students with other majors are also acceptable, but the student and adviser must select elective courses to prepare for required language and subject area proficiency.

All students (CLAD and BCLAD) are required to have experience in second language learning and acquisition. Only students who are literate in both English and the language designated by the chosen credential program (Spanish or Southeast Asian Language: Cambodian, Lao, or Hmong) are currently admitted to the BCLAD program, contingent upon successful screening for language proficiency, cultural knowledge, and teaching aptitude.

Through Fall semester of 1995, students may still enroll in the Multiple Subjects Credential Program without CLAD orBCLAD emphasis. Students applying for this credential are strongly advised to continue their schooling and obtain a CLAD Certificate.

## Multiple Subjects Credential Program: CLAD and BCLAD

In the preparation of CLAD/BCLAD candidates, the credential program consistently incorporates four basic themes in the overall curriculum: pluralism, empowerment, equity, and change.

## Prerequisites

1. Multiple Subjects Waiver Program

Each Multiple Subjects Waiver applicant (Liberal Studies Waiver Program at CSU Stanislaus or other approved California college or university waiver program) should be nearing completion of the Liberal Studies course work before applying to the Multiple Subjects Credential Program.

## Other Majors

If the applicant holds a degree other than a CSU Stanislaus Liberal Studies Waiver Program or other non-CSU Stanislaus approved waiver program major, he/she must have passed or be registered for the Multiple Subjects Assessment for Teachers (MSAT) (Content Knowledge, Content Area Exercises 1, and Content Area Exercises 2) before applying to the Multiple Subjects Credential Program.
2. CBEST

Applicants must have passed or be registered to take the California Basic Educational Skills Test (CBEST) before applying to the Multiple Subjects Credential Program. It is highly recommended that this test be taken as early as possible.
3. English Composition

Satisfactory completion of an upper-division English composition course (ENGL 3007, 3009, or equivalent) or applicants who have already completed their degree can substitute a score of 41 or higher on the writing section of the CBEST in place of the composition course.

## 4. Government

Satisfactory completion of a course which includes the study of national government, including the U.S. Constitution (PSCI 1201 or equivalent). If the equivalent of this course was passed by exam the results must be posted on an official transcript.
5. Child Development

Satisfactory completion of a course which covers child growth and development (birth to adolescence). CDEV/PSYC 3140 or equivalent is required.
6. Second Language Experience (CLAD)

Satisfactory completion of six units of lower or upper-division course work in a second language is required. Students with previous second language experience should consult the CLAD Second Language Requirement Information sheet in the Teacher Education Department or Credentials Office to determine whether they are eligible to challenge this requirement.
Second Language Proficiency (BCLAD)
Satisfactory completion of entry and exit language proficiency criteria is required. See the coordinator of the BCLAD program for further information.

## 7. Cross-Cultural Experience-

Evidence of upper-division, crosscultural course work (e.g.,ETHS 4200, SOCL 3250 or similar course work) is required.
8. Early Field Experience

Satisfactory completion of 30 hours of a qualitative, supervised early field experience. See Department of Teacher Education for approved experiences and verification procedures.
9. Second Language Acquisition

Satisfactory completion of a course which covers second language acquisition. EDÚC 4430 , ENGL 4800 or equivalent is required.
10. Diversity in the Classroom

Satisfactory completion of a course which covers diversity in the classroom. EDUC 4200 or equivalent is required.

## 11. Application

Satisfactory completion of additional application requirements. The MSCP application, available at the bookstore on the Turlock campus or at the San Joaquin Delta College bookstore in Stockton, contains detailed information about additional requirements, including:
a. Official transcripts
b. Grade point average
c. Certificate of Clearance/fingerprint cards
d. Completed MSCP application folder to the appropriate office within the appropriate date
e. Interview
12. Acceptance by the MSCP Selection and Review Committee

The student is admitted to the program for a specific initial enrollment term. A written request for a leave of absence is required to postpone entry. Such a request should be directed to the MSCP Selection and Review Committee and filed in the Department of Teacher Education Office. This request must be filed at least one month prior to the semester for which the student is accepted. The request must be approved by the committee. Failure to comply with this regulation will result in the student's withdrawal from the program. Leaves are granted for one term only.

## Requirements Which Must be Met Prior to Student Teaching

1. Grade point average: In order to enroll in student teaching, the student must have completed the MSCP preliminary credential courses with a minimum GPA of 3.0 and received no grade below a "C-."
2. MSAT/waiver and subject matter competence requirements must be fulfilled. $a$. The MSAT/waiver requirement is fulfilled through:
3. Completion of the course work required in the CSU Stanislaus Liberal Studies Waiver Program or in another approved non-CSU Stanislaus waiver program, or
4. Earning a passing score on the Content Knowledge, Content Area Exercise 1, and Content Area Exercise 2 of the Multiple Subjects Assessment for Teachers.
b. The subject matter competence requirement is fulfilled through:
5. Earning a grade of at least " $\mathrm{C}-$ " or credit in all course work used as part of the waiver program, or
6. Earning a passing score in each of the three subsections (Content Knowledge, Content Area 1, and Content Area 2) of the Multiple Subjects Assessment for Teachers.
Requirements for both the MSAT/waiver and subject matter competence requirement ( $a$ and $b$ above) must be met prior to student teaching and verified by the Liberal Studies Coordinator on the proper form.

## Recommendation for the CLAD orBCLAD Preliminary Credential

1. The student will be recommended by CSUS for the Preliminary CLAD or BCLAD Multiple Subjects Credential upon satisfactory completion of the following:
a. All prerequisites to both the MSC Program and to student teaching (including all special screenings);
b. All CSUS catalog and MSC Program application requirements;
c. All professional MSC Program requirements;
d. Earning a minimum of a 3.0 GPA in all professional course work with no grade lower than a "C-"; and
e. Satisfactory passing of the California Basic Educational Skills Test.
$f$. Verification of baccalaureate degree.
2. The preliminary credential is valid for 5 years.

## Crosscultural, Language, and Academic Development (CLAD)

Credential Requirements
Complete the following courses ( 32 units):
Level One: Sociocultural Foundations Course Work
The following courses are completed during the initial phase of the credential program. Students wishing to take EDUC 4000 and EDUC 4400 prior to acceptance into the credential program must file the Intent To Enter Program form with the Teacher Education Department.

EDUC 4000 Historical, Sociocultural, and Political Perspectives on Schools in the U.S., 3 units
EDUC 4400 Introduction to Multilingual Education, 3 units
Level Two: Psychological Foundations and Methodology Course Work
The following courses are completed after acceptance to the credential program. Levels One and Two course work may be taken concurrently.
EDMC 4010 Educational Psychology for the Elementary Classroom, 3 units
EDMC 4110 Reading/Language Arts: A Holistic Perspective, 5 units
EDMC 4120 Elementary Curriculum and Instruction: Mathematics, 2 units
EDMC 4130 Elementary Curriculum and Instruction: Science, 2 units
EDMC 4140 Elementary Curriculum and Instruction: Social Studies, 2 units
Level Three: Student Teaching
The following courses are taken upon successful completion of Levels One and Two course work.

EDMC 4815 Multiple Subjects CLAD Student Teaching I, 5 units
EDMC 4816 Multiple Subjects CLAD Student Teaching II, 5 units
EDMC 4898 Student Teaching Seminar I, 1 unit
EDMC 4899 Student Teaching Seminar II, 1 unit

## Bilingual Crosscultural, Language, and Academic Development (BCLAD) (Spanish Proficiency)

## Credential Requirements

Complete the following courses ( 32 units):
Level One: Sociocultural Foundations Course Work
The following courses are completed during the initial phase of the credential program. Students wishing to take EDUC 4000 and EDUC 4400 prior to acceptance into the credential program must file the Intent To Enter Program form" with the Teacher Education Department.

EDUC 4000 Historical, Sociocultural, and Political Perspectives on Schools in the U.S., 3 units
EDUC 4400 Introduction to Multilingual Education, 3 units
Level Two: Psychological Foundations and Methodology Course Work The following courses are completed after acceptance to the credential program. Levels One and Two course work may be taken concurrently.

EDSB 4010 Educational Psychology for the Elementary Classroom, Bilingual, 3 units
EDSB 4110 Reading/Language Arts: A Holistic Perspective, Bilingual, 5 units
EDSB 4120 Elementary Curriculum and Instruction: Mathematics, Bilingual, 2 units
EDSB 4130 Elementary Curriculum and Instruction: Science, Bilingual, 2 units
EDSB 4140 Elementary Curriculum and Instruction: Social Studies, Bilingual, 2 units
Level Three: Student Teaching
The following courses are taken upon successful completion of Levels One and Two course work.

EDSB 4815 Multiple Subjects BCLAD Student Teaching I, 5 units
EDSB 4816 Multiple Subjects BCLAD Student Teaching II, 5 units
EDSB 4898 Student Teaching Seminar I, 1 unit
EDSB 4899 Student Teaching Seminar II, 1 unit

## Bilingual Crosscultural, Language, and Academic Development (BCLAD) (Southeast Asian Language Proficiency: Cambodian,

 Hmong, Lao)
## Credential Requirements

Complete the following courses ( 32 units):
Level One: Sociocultural Foundations Course Work
The following courses are completed during the initial phase of the credential program. Students wishing to take EDUC 4000 and EDUC 4400 prior to acceptance into the credential program must file the Intent To Enter Program form with the Teacher Education Department.

EDUC 4000 Historical, Sociocultural, and Political Perspectives on Schools in the U.S., 3 units
EDUC 4400 Introduction to Multilingual Education, 3 units

EDAB 4010 Educational Psychology for the Elementary Classroom, Bilingual, 3 units
EDAB 4110 Reading/Language Arts: A Holistic Perspective, Bilingual, 5 units
EDAB 4120 Elementary Curriculum and Instruction: Mathematics, Bilingual, 2 units
EDAB 4130 Elementary Curriculum and Instruction: Science, Bilingual, 2 units
EDAB 4140 Elementary Curriculum and Instruction: Social Studies, Bilingual, 2 units

## Level Three: Student Teaching

The following courses are taken upon successful completion of Levels One and Two course work.

EDAB 4815 Multiple Subjects BCLAD Student Teaching I, 5 units
EDAB 4816 Multiple Subjects BCLAD Student Teaching II, 5 units
EDAB 4898 Student Teaching Seminar I, 1 unit
EDAB 4899 Student Teaching Seminar II, 1 unit

## Professional Clear Multiple Subjects Credential: MSCP, CLAD, or BCLAD

Upon recommendation for a CaliforniaPreliminary Multiple Subjects Credential, students have five years in which to complete the requirements for a Professional Clear Multiple Subjects Credential.

## Requirements ( 30 units)

1. Complete a 30 -unit approved program of postbaccalaureate upper-division/ graduate course work. A minimum GPA of 3.0 for educational course work with no grade lower than a "C-" and a minimum GPA of 3.0 for all postbaccalaureate course work is required. The 30 -unit program must be planned with and approved by the MSCP clear credential adviser in writing. Postbaccalaureate course work taken for the Preliminary Credential may be used to meet a portion of the 30-unit requirement. For students who did not complete their preliminary course work with CSU Stanislaus, there is a residency requirement of six units. (The applicant is urged to consider course work which applies toward an advanced credential, CLAD Certificate, and/or an M.A. degree program. However, such a plan requires consultation with the appropriate advanced credential/M.A. area coordinator.)
Within the 30 unit program, the following courses may be selected: EDUC 4120 Diagnostic Techniques of Teaching, 3 units EDUC 4300 Teaching the Cultural Heritage of the Hmong and Lao People, 3 units
EDUC 4840 Analysis and Strategies of Teaching, 3 units EDUC 4860 Multicultural and Global Education, 3 units EDUC 5200 Classroom Management and Discipline, 3 units EDML 5000 Multilingual in the Content Areas K-12, 3 units

EDML 5001 Multilingual Education Evaluation, 3 units
EDML 5200 Advanced Theories in Teaching the Culturally Diverse Student, 3 units
EDML 5400 Theory of Multilingual Eduçation, 3 units
2. Within the 30 unit program, the following courses must be completed: Required Courses:

EDIT 4730 Microcomputers, Curriculum, and Instruction, 3 units
EDSE 4130 Special Education Strategies for the Classroom Teacher, 3 units
HLTH 4200 Elementary School Health and Safety, 3 units
3. Verification of having met the CPR requirement through course work or a current CPR card.
4. Students seeking a professional clear credential who have received their initial teaching credential from another university in California or from a university in another state should contact the department office to be directed to an adviser.

## Single Subject Credential Program

Coordinator: Jane E. Diekman

## Requirements ( 27 units)

1. Complete the following courses during the first semester ( 13 units):

EDRG 3470 Reading Instruction in the Secondary School, 3 units
EDSS 4150 Effective Teaching in the Secondary School I, 2 units
EDSS 4180 Single Subject Instruction I, 2 units
EDSS 4850 Field Practicum: Secondary Education I, 6 units
2. Complete the following course during Winter Term (4 units): EDSS 4160 Effective Teaching in the Secondary School II, 4 units
Note: EDSS 4160 includes practicum experience.
3. Complete the following courses during the second semester ( 10 units):

EDSS 4170 Effective Teaching in the Secondary School III, 2 units
EDSS 4190 Single Subject Instruction II, 2 units
EDSS 4855 Field Practicum: Secondary Education II, 6 units

## Admission Requirements

1. An application packet for admission to the Single Subject Credential Program may be purchased at the bookstore on the University campus. Admission criteria are those in the catalog effective during the year of application and acceptance. The application folder must be completed and submitted early in the semester preceding admission to the program. See application packet for specific date.
2. Minimal GPA requirements for admission are explained in the Single Subject Credential Program application packet. Requests for exceptions to GPA criteria must be made in writing to the Single Subject Credential Program Selection and Review Committee. Grading in the program is credit/no credit. A credit grade is equivalent to an " A " or " B " grade. A 3.0 GPA must be maintained in credential program courses with no grade lower than a "C-." (See the application packet for details.)
3. Students must have applied to take the state basic skills proficiency examination (CBEST) before applying for admission. The test must be passed before enrollment in EDSS 4850.
4. Students must submit a Certificate of Clearance form when they apply for the program. Copies of the form are available in the Credentials Office.
5. The student is admitted to the program for a specific initial enrollment term. A written request for a leave of absence is required to postpone entry. Such a request should be directed to the SSCP Selection and Review Committee and filed in the Department of Teacher Education Office. The request must be approved by the Committee. Failure to comply with this regulation will result in the student's withdrawal from the program.

## Academic Requirements

1. Complete one of the following single subject matter preparation programs or earn a passing score on the Praxis Series: Professional Assessments for Beginning Teachers, Subject Assessment for the selected subject-matter area and the Content Area Performance Assessment (CAPA) exam as required. Obtain subject matter preparation program advisement from the appropriate academic departments listed as follows:

| Subject Matter | Academic |
| :--- | :--- |
| Preparation Program | Department |
| Art | Art |

English
French, German, Spanish
Mathematics
Music
Physical Education
Science
Social Science

## Academic <br> Art

English
Modern Languages
Mathematics
Music
Physical Education
Biological Science, Physical Science, Chemistry Social Science

Note: The University does not offer subject matter preparation programs in agriculture, business, home economics, or industrial arts, but students who have completed approved subject matter preparation programs elsewhere or passed the NTE in these subject areas may apply to the program.
2. Complete the Graduation Writing Requirement, or a verified score of 41 on the writing portion of CBEST.
3. Complete PSCI 1201 or an equivalent course which fulfills the U.S. Constitution requirement to qualify for a teaching credential.
4. Submit verification of subject-matter competence before beginning the program and enrolling in EDSS 4150. Students who meet subject-matter requirements through the subject matter preparation program or NTE must have subject-matter competence determined by the appropriate academic department at CSU Stanislaus.
Note: This requirement is in addition to that described in \#1 above.

## Academic Recommendations

Crosscultural and special education course work is strongly recommended.

## Pre-Professional Program Requirements

1. Complete EDUC 3500 Early Field Experience or an equivalent course as approved by the coordinator. Requirement must be completed prior to starting the program.
2. Complete PSYC 3240 Human Development II: Adolescence or an equivalent course as approved by the coordinator. Requirement must be completed prior to the end of the program.

## Professional Program

The Single Subject Credential Program is field-centered and performancebased. It integrates theory and practice by providing an ongoing experience within a school setting which focuses on the attainment of the knowledge and skills characteristic of effective teaching. Students are at a center daily from 8:00 A.M. until the end of the public school day for an entire academic year.

## Professional Recommendations

1. Develop a program leading toward a second teaching major or supplementary authorization to enhance employability.
2. Take additional course work to prepare for teaching in a multicultural/multilingual society.

## Requirements for the Professional Clear Single Subject Credential

Adviser: Jane E. Diekman

## Requirements (30 units)

1. To be recommended for a professional clear credential, the applicant must complete a 30 -unit approved program of postbaccalaureate upper-division/ graduate course work with a minimum GPA of 3.00 , including at least 18 units of resident course work preferred of which 12 units relate to single subject teaching. The 30 -unit program must be planned with and approved by the single subject clear credential adviser. (The applicant is urged to consider course work which applies toward the Crosscultural Language and Academic Development (CLAD) Certificate and/or an advanced credential and/or an M.A. degree program. However, such a plan requires consultation with the appropriate certificate/advanced credential/M.A. area coordinator.)
2. The following additional courses are required to obtain a clear credential:

EDIT 4730 Microcomputers, Curriculum, and Instruction, 3 units
EDSE 4130 Special Education Strategies for the Classroom Teacher, 3 units
HLTH 4210 Secondary School Health and Safety, 3 units
3. Verification of having met the CPR requirement through course work or the appropriate current CPR card.
4. Students applying for their Preliminary Credentials prior to January 1, 1993 must also complete one of the following courses. Students applying for their Preliminary Credentials after January 1, 1993 must complete two of the following courses:

EDSS 4500 Teaching Today's Adolescents, 3 units
EDSS 4845 Analysis and Strategies of Teaching in the Secondary School, 3 units
EDUC 4860 Multicultural and Global Education, 3 units
5. In addition, courses which are more than seven years old generally will not be accepted to fill professional clear credential requirements.

## Reading/Language Arts <br> Specialist Credential

Coordinator: Janet H. Towell
The Reading/Language Arts Specialist Credential may be completed independent of or in conjunction with the Master of Arts degree. Courses are scheduled in the late afternoon and evening to enable employed individuals to attend.

## Prerequisites

To be considered for admission to this advanced credential program only, the applicant must:

1. Possess a baccalaureate degree.
2. Have earned at least a 3.0 GPA in the last 60 units attempted.
3. Possess a valid teaching credential.
4. Have at least one year of teaching experience in reading in any grade $\mathrm{K}-12$.
5. Have completed EDRG 3250, EDMS 3110, or EDRG 3470.

## Requirements ( 27 units)

Note: These requirements are associated with the Reading/Language Arts Specialist Credential Program. Some courses are also included in the Master of Arts degree in Reading.

1. Complete the following courses ( 27 units):

EDRG 4100 Reading and Language Arts Instruction: K-12, 3 units
EDRG 4150 Reading: Literature-based Instruction for Children, 3 units
ENGL 4630 Adolescent Literature, 3 units
EDML 5000 Multilingual Education in the Content Area, 3 units
EDRG 5250 Reading and Language Arts: Assessment and Evaluation, 3 units
EDRG 5350 Reading and Language Arts: Research and Trends, 3 units
EDUC 5400 Teachers as Change Agents: Researchers and Writers, 3 units
EDRG 5910 Practicum in Reading and Language Arts, 3 units
An appropriate three-unit elective course selected in consultation with adviser

## Note: Otherappropriate courses may be selected after consultation with the major adviser.

## Application Procedures

To apply for admission and become fully admitted to the advanced credential program only, the applicant must:

1. Complete the University admission form and file it with the Admissions Office in the Library Building (L-110).
2. Submit transcripts to the Admissions Office including at least the last 60 units of college/university course work.
3. Submit letters of recommendation to the Reading Credential Program Coordinator (check with the advanced credential program coordinator for the exact number required).
4. Submit test scores (e.g., CBEST), as required by the advanced credential program, to the Reading Credential Program Coordinator.
5. Submit proof of valid teaching credential to the Reading Credential Program Coordinator.
6. Participate in an interview and have the program file evaluated by the Reading/ Language Arts Specialist Credential Program Advisory Committee.
Note: Before beginning the above procedures, a conference with the program coordinator is required.

## Admission Classifications

The student seeking an advanced credential only may be placed in one of two classifications:

1. Postbaccalaureate Standing: Unclassified (Permits one to enroll in classes as specified by M.A. area coordinator.) To be admitted to Postbaccalaureate Standing: Unclassified, the applicant must:
a. Complete the University Admission form.
b. Meét CSU Stanislaus admission requirements.
2. Graducate Standing: Classified (Admission to the M.A. program is granted.) To move to Graduate Standing: Classified, the applicant must:
a. Submit transcripts of college/university course work, to include at least the last 60 units.
b. Submit letters of recommendation.
c. Submit passing CBEST and other test scores as required.
d. Submit proof of valid teaching credential.
e. Complete at least eight units of advanced program course work with at least a 3.0 GPA .
f. Participate in an interview; have the program file evaluated by a credential program committee.
Note: Obtain more detailed information from the coordinator of the program.

## Grade Requirements

It is expected that the student seeking an advanced credential will maintain a GPA of 3.0 while in the program. Minimum acceptable grade for a credential course is a "C."

## Final Requirements

To obtain the required recommendation for the advanced credential from CSU Stanislaus, the student must:

1. Complete all of the course work required in the advanced credential program.
2. Achieve the competency in the knowledge and skill areas of the program.
3. Submit a minimum overall GPA of 3.0 for all course work required for the credential.
4. Pass an oral exit examination on the knowledge of reading during the last semester of course work.
5. Submit a completed application form for the credential, along with a receipt which verifies that fees have been paid, to the Credentials Office, C-122A. (See the Credentials secretary shortly after midterm of the final semester in the program for assistance in completing the application process for the credential.)

## Graduate Studies in the Department

The Department of Teacher Education offers a Master of Arts degree in Education with an emphasis in one of these areas: Curriculum and Instruction, Elementary, Multilingual Education, Physical Education (through the Department of Physical Education), Reading, and Secondary. Students interested in graduate degree
programs may obtain information from the Department Office in the Classroom Building (C-125) or the Graduate Studies Office in the Library Building. Prerequisites, procedures, and requirements for the M.A. degree are described below. Also included is general information relevant to graduate studies. Reading, and the Reading Specialist Credential Program are under revision. Contact Janet H. Towell, RSCP Coordinator, or Armin Schulz, MA Coordinator, for details at (209) 667-3367.

## Master of Arts Degree

Coordinator: Armin Schulz (for all MA concentrations)
M.A. Area

Elementary Education
Multilingual Education
Physical Education
Reading
Secondary Education

Professor (Advisers)
Phone
A. Schulz (209) 667-3367
J. Wink
W. Morris
(209) 667-3471
J. Towell

Marylee Bradley
(209) 667-3325
(209) 667-3292
(209) 667-3367

## Prerequisites for Admission

1. A baccalaureate degree.
2. A total score of at least 100 using the following formula for grade point average. (GPA), based on the last 60 units of college/university work, and the Miller's Analogies Test (MAT score: GPA x 20 + MAT score = total score). For example, a student with a GPA of 3.0 and a MAT score of 40 would qualify for admission with a total score of $100(3.0 \times 20+40=100)$.

## Application Procedures

1. Complete the University admission form and file it with the Admissions and Records Office in the Library Building (L-110).
2. Submit transcripts to the Admissions and Records Office, including at least the last 60 units of college/university degree course work.
3. Submit two letters of recommendation, which discuss the applicant's potential for graduate-level study, to the Graduate Studies Office in the Library Building (L-151).
4. Submit MAT or GRE score to the Graduate Studies Office.

Note: For MAT information and testing procedures, contact the Testing Office on campus in SSB-130; (209) 667-3157.

## Admission Classifications

Students applying for the M.A. program will be placed in one of two classifications:

1. Postbaccalaureate Standing: Unclassified (Permits students to enroll in classes as specified by M.A. area coordinator.) To be admitted to Postbaccalaureate Standing: Unclassified, the applicant must:
a. Complete the University admission form.
b. Meet CSU Stanislaus admission requirements.
2. Graduate Standing: Classified (Admission to the M.A. program is granted.) To move to Graduate Standing: Classified, the applicant must:
a. Submit letters of recommendation as required by the program.
b. Submit Miller Analogies Test score.
c. Complete at least nine units of M.A. Education course work in residence with at least a 3.0 GPA .
d. Recommendations will be obtained from at least three faculty members with whom the student has studied in M.A. Education courses (this will be facilitated by the coordinator).
e. Fulfill writing competence by submitting a score of at least 41 on the writing section of CBEST.
f. All course work must be completed within seven years.

Note: Prior to being admitted to the program, international applicants whose native language is not English must demonstrate proficiency in English by completing the Test of English as a Foreign Language (TOEFL) with a total score of at least 550 and with part scores of at least 54.

## Common Course Work Requirements

1. Foundations Complete one of the following courses depending on the specific M.A. area of emphasis ( 3 units.):

EDGS 5010 Education in Society, 3 units, or
EDGS 5040 Philosophy of Education, 3 units
2. Common studies Complete the following courses (7 units):

EDĢS 5050 Methods of Research in Education, 4 units
EDGS 5060 Theories of Instruction, 3 units
3. Project/Thesis Complete the following:

EDUC 5960 Project, 1-3 units, or
EDUC 5990 Thesis, 1-3 units, and
Note: May be repeated for a total of 4-6 units.
EDUC 5770 Seminar in Elementary and Secondary Education, 2 units
Curriculum and Instruction: Elementary and Secondary
Concentration Requirements ( 32 units)
Note: Also refer to Common Course Work requirements (see above).

1. Select and complete the following required courses:
a. Curriculum and Instruction Emphasis (3 units)

EDUC 4840 Analysis and Strategies of Teaching 3 units,
b. Concentration Emphasis: Skills (3 units)

EDML 5001 Multilingual Education Evaluation, 3 units
EDUC 5200 Classroom Management and Discipline, 3 units
EDUC 5880 Improving Instructional Skills in a Cultural Context, 3 units
EDUC 5885 Instructional Programs to Enhance Thinking Skills, 3 units
c. Concentration Emphasis: Reading (2-3 units)

EDML 5000 Multilingual Education in the Content Area, 3 units
EDRG 4100 Improving Reading: K - 12 , 2 units
EDRG 4150 Reading: Literature-based Instruction for Children, 3 units

EDRG 4240 Reading Instruction: Primary Grades, 2 units
EDRG 4250 Reading Instruction: Intermediate Grade, 2 units
d. Concentration Emphasis: Research and Trends ( 3 units)

EDUC 4200 Teaching the Gulturally Different, 3 units
EDRG 5350 Research and Trends in Reading and Language Arts, 3 units
EDUC 4860 Multicultural and Global Education, 3 units
EDUC 5330 Research and Trends in Mathematics, Science, and Social Studies, 3 units
EDUC 5340 Research and Trends in Curriculum, 3 units
e. Electives (3-7 units)

4000 or 5000 level Education course(s) selected in consultation with an adviser.

## Curriculum and Instruction: Multilingual Education

The Department of Teacher Education offers a Master of Arts degree in Education with an emphasis in Multilingual Education. The Language Development Specialist certificate may be completed independent of or in conjunction with the Master of Arts degree. Courses are scheduled in the last afternoon and evening to enable employed individuals to attend.

## Concentration Requirements ( $\mathbf{3 2}$ units)

Note: Also refer to Common Course Work requirements on the previous page.

1. Complete the concentration ( 18 units):
a. Theoretical Foundations

EDML 5200 Advanced Theory in Teaching the Culturally Diverse Student, 3 units
EDML 5400 Theory of Multilingual Education, 3 units, or
ENGL 4800 Second Language Acquisition, 3 units,
b. Methods

EDML 5000 Multilingual Education in the Content Area, 3 units
EDML 5001 Multilingual Education Evaluation, 3 units
EDML 5420 Language Arts: Acquisition to Composition, 3 units, or ENGL 4615 TESOL Methods, 3 units
2. Select and complete one of the following electives ( 3 units):

EDML 5940 Field Work: Multilingual Education, 3 units, or
EDUC 4860 Multicultural and Global Education, 3 units
Note: Other appropriate courses may be selected after consultation with the major adviser.

## Curriculum and Instruction: Reading

Concentration Requirements (34 units)
Note: Also refer to Common Course Work requirements on the previous page.

1. Select and complete the following required courses:
a. Theoretical Foundations (9 units)

EDRG 4100 Reading/ Language Arts Instruction: K-12, 3 units, or
EDRG 4150 Reading: Literature-based Instruction for
Children, 3 units

$$
\begin{array}{ll}
\text { EDRG 5350 } & \begin{array}{l}
\text { Reading and Language Arts: Research and } \\
\text { Trends, } 3 \text { units }
\end{array} \\
\text { EDUC 5400 } & \text { Teachers as Change Agents: Researchers and } \\
& \text { Writers, } 3 \text { units. }
\end{array}
$$

b. Methods (9 units)
-EDML 5000 Multilingual Education in the Content Area, 3 units
EDRG 5250 Reading and Language Arts: Assessment and Evaluation, 3 units
EDRG 5910 Practicum in Reading and Language Arts, 3 units
Note: Other appropriate courses may be selected after consultation with the major adviser.

## Other Requirements

In general, more than nine semester units of course work completed in Postbaccalaureate Standing: Unclassified may be applied to a master's degree.

The total number of units, as well as specific courses required, vary with each area of emphasis of the M.A. in Education. (See the relevant coordinator for requirements.) A total of 6 units may be transferred from accredited graduate schools in the U.S. or abroad.

## Grade Requirements

The minimum academic grade point average for earning the M.A. degree is 3.0. The minimum acceptable grade for courses included in the M.A. program is a " C -."

## Final Requirements

The M.A. in Education degree requires the successful completion of all course work, approval of a written project or thesis, and passing of an oral examination. At least 15 semester units must be completed as a student in Graduate Standing: Classified. After all requirements have been met, the student will be awarded the M.A. degree.

## CLAD Certificate <br> Crosscultural Language and Academic Development

The Department of Teacher Education offers the CLAD Certificate. In order to be recommended for the three domains of the CLAD Certificate, each credentialed teacher must take the following 12 semester units.

EDML 5000 Multilingual Education in the Content Area, 3 units
EDML 5001 Multilingual Education Evaluation, 3 units
EDML 5200 Advanced Theories in Teaching the Culturally Diverse Student, 3 units
EDML 5400 Theory of Multilingual Education, 3 units
Enrollment in these courses requires formal admission to the University. Students must also satisfactorily meet the scholastic, professional, personal, and other standards for graduate study as appropriately prescribed by the University. In addition, each CLAD certificate candidate must have completed six semester units of course work which emphasizes the learning of a language other than English, or one of the CTC approved options for meeting this requirement. Information on these options is available in the Credentials Office or from the CLAD Certificate Coordinator.

## Course Descriptions

## Bilingual Crosscultural, Language, and Academic Development (BCLAD Southeast Asian Language Emphasis- Cambodian, Hmong, Lao): Upper Division

## EDAB 4010 Educational Psychology for the Elementary Classroom, Bilingual (3

 units). (Formerly EDBL 3010) Study of selected sociological and psychological based knowledge, skills, and understandings related to teaching in the elementary schools. Emphasis on bilingual issues and concerns. Prerequisites: Admission to the Multiple Subjects Credential Program BCLAD and permission of the MSCP BCLAD coordinator.EDAB 4110 Reading/Language Arts: A Holistic Perspective, Bilingual (5 units). (Formerly EDBL 3110) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in reading and language arts. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDAB 4120 Elementary Curriculum and Instruction: Mathematics, Bilingual (2 units). (Formerly EDBL 3120) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in mathematics. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDAB 4130 Elementary Curriculum and Instruction: Science, Bilingual (2 units). (Formerly EDBL 3130) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in science. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDAB 4140 Elementary Curriculum and Instruction: Social Studies, Bilingual (2 units). (Formerly EDBL 3140) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in social studies. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDAB 4815 Multiple Subjects BCLAD Student Teaching I ( 5 units). (Formerly EDMS 3815) Supervised observation, participation, and student teaching in a public multiple subjects bilingual classroom setting. Concurrent enrollment in EDAB 4898 required. Prerequisites: EDAB 4010, $4110,4120,4130,4140$, EDUC 4000, and $4400 ; 3.00$ GPA in program course work and no grade lower than a "C-"; subjectmatter competence verified.

EDAB 4816 Multiple Subjects BCLAD Student Teaching II (5 units). (Formerly EDBL 4810) Supervised observation, participation, and student teaching in a public multiple subjects bilingual classroom setting. Concurrent enrollment in EDAB 4899 required. Prerequisite: EDAB 4815.

EDAB 4898 Student Teaching Seminar I (1 unit). (Formerly EDBL 3899) The first of two required student teaching seminars. Includes a scheduled on-campus seminar meeting dealing with professional ethics, special activities, use of audio/visual equipment, and student teaching problems. Concurrent enrollment in EDAB 4815 is
required. Taken concurrently with student teaching, but is graded separately. Prerequisites: EDAB 4010, 4110, 4120, 4130, 4140, EDUC 4000, and 4400; 3.00 GPA in program course work and no grade" lower than a "C-"; subject-matter competence verified

EDAB 4899 Student Teaching Seminar II (1 unit). (Formerly EDBL 4899) The second of two required student teaching seminars. Concurrent enrollment in EDAB 4816 is required. Taken concurrently with student teaching, but is graded separately.
Prerequisites: EDAB 4898.

## Crosscultural, Language, and Academic Development (CLAD) Upper Division

EDMC 4010 Educational Psychology for the Elementary Classroom (3 units). (Formerly EDMS 3010) Study of selected sociological and psychological, multicultural, historical, and legal based knowledge, skills, and understandings related to teaching in the elementary schools. Prerequisite: Admission to the Multiple Subjects Credential Program.

EDMC 4110 Reading/Language Arts: A Holistic Perspective (5 units). (Formerly EDMS 3110 ) Introduction to the principles and practices for reading/language arts instruction in grades K-6, with an emphasis on the four communication skills; a holistic approach to literature-based instruction which meets the needs of diverse populations. Prerequisite: Admission to the Multiple Subjects Credential Program.

EDMC 4120 Elementary Curriculum and Instruction: Mathematics (2 units). (Formerly EDMS 3120) Introduction to the materials and methods used in the teaching of mathematics in grades $\mathrm{K}-8$. Emphasis is on instructional planning, concept development and the use of manipulatives for instruction as outlined in the California Mathematics Framework. Prerequisite: Admission to the Multiple Subjects Credential Program.

EDMC 4130 Elementary Curriculum and Instruction: Science ( 2 units). (Formerly EDMS 3130) This course provides an introduction to teaching methodology as it relates to science in grades $\mathrm{K}-8$. Course topics include teaching strategies, lesson design, instructional planning, and the selection of science materials and resources. Prerequisite: Admission to the Multiple Subjects Credential Program.

EDMC 4140 Elementary Curriculum and Instruction: Social Studies (2 units). (Formerly EDMS 3140) Introduction to the purpose and content of the social studies in grades K-8, including the teaching of concepts, skills, values, and attitudes which promote citizenship in democracies in our global community. The focus will be on instructional planning derived from current issues, understandings, and approaches with emphasis on the learning needs of linguistically and cuiturally diverse students. Prerequisite: Admission to the Multiple Subjects Credential Program.

EDMC 4815 Multiple Subjects CLAD Student Teaching I (5 units). (Formerly EDMS 3815) Supervised observation, participation, and student teaching in public school settings. Concurrent enrollment in EDMC 4898 required. Prerequisites: EDMC 3010, 3110, 3120, 3130,3140, EDUC 4000, and 4400; 3.00 GPA in program course work and no grade lower than a "C-"; subject-matter competence verified.

EDMC 4816 Multiple Subjects CLAD Student Teaching II (5 units). (Formerly EDMS 4815) Supervised observation, participation, and student teaching in public elementary school settings. Concurrent enrollment in EDMS 4899 is required. Prerequisites: EDMC 4815 and 4898.

EDMC 4898 Student Teaching Seminar I (1 unit). (Formerly EDMS 3899) The first of two required student teaching seminars. Concurrent enrollment in EDMC 4815 required. Complements student teaching but is graded separately. Prerequisites: EDMC 3010, 3110, 3120,3130,3140, EDUC 4000, and 4400; 3.00 GPA in program course work and no grade lower than a "C-"; subject-matter competence verified.

EDMC 4899 Student Teaching Seminar II (1 unit). (Formerly EDMS 4899) The second of two required student teaching seminars. Concurrent enrollment in EDMC 4816 is required. Complements student teaching but is graded separately. Prerequisites: EDMC 4815 and 4898.

## Multilingual Education: Graduate

EDML 5000 Multilingual Education in the Content Area ( 3 units). The course is designed to provide an overview of theory and methodologies in English language development in the content areas for $\mathrm{K}-12$ schools.

EDML 5001 Multilingual Education Evaluation (3 units). This course is designed to teach the theory and practice of effective first and second language assessment. Emphasis will be placed on the (a) California State-mandated instruments and guidelines for language assessment of $\mathrm{K}-12$ bilingual students, and (b) authentic assessment of first and second language.

EDML 5200 Advanced Theories in Teaching the Culturally Diverse Student (3 units). The course focuses on advanced theories of learning and teaching styles for the culturally diverse students. Identification of suggested teaching proficiency for the multicultural classroom. This course will emphasize curriculum development for culturally diverse students.

EDML 5400 Theory of Multilingual Education (3 units). This course will focus on (1) Crosscultural language and academic development, (2) the role of multilingual education in American public schools, and (3) the implementation of various program models.

EDML 5420 Language Arts: Acquisition to Composition (3 units). This course provides teachers with a knowledge base for designing, implementing, and assessing language acquisition and development programs and methodologies for the language minority student in the $\mathrm{K}-12$ setting.

EDML5940 Field Work: Multilingual Education (3 units). This course will provide a field experience for teachers in a multilingual setting in K-12. The use of theory and practice related to teaching the content areas will be emphasized.

## Bilinguàl Crosscultural, Language, and Academic Development (BCLAD - Spanish Emphasis): Upper Division

## EDSB 4010 Educational Psychology for the Elementary Classroom, Bilingual (3

 units). (Formerly EDBL 3010) Study of selected sociological and psychological based knowledge, skills, and understandings related to teaching in the elementary schools. Emphasis on bilingual issues and concerns. Prerequisites: Admission to the Multiple Subjects Credential Program BCLAD and permission of the MSCP BCLAD coordinator.EDSB 4110 Reading/Language Arts: A Holistic Perspective, Bilingual (5 units). (Formerly EDBL 3110) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in reading and language arts. Planning, demonstratìon, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDSB 4120 Elementary Curriculum and Instruction: Mathematics, Bilingual (2 units). (Formerly EDBL 3120) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in mathematics. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDSB 4130 Elementary Curriculum and Instruction: Science, Bilingual (2 units). (Formerly EDBL 3130) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in science. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDSB 4140 Elementary Curriculum and Instruction: Social Studies, Bilingual (2 units). (Formerly EDBL 3140) Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in social studies. Planning, demonstration, and materials based upon modern trends and techniques. Prerequisite: Admission to the Multiple Subjects Credential Program BCLAD.

EDSB 4815 Multiple Subjects BCLAD Student Teaching I (5 units). (Formerly EDMS 3815) Supervised observation, participation, and student teaching in a public multiple subjects bilingual classroom setting. Concurrent enrollment in EDSB 4898 required. Prerequisites: EDSB 4010,4110,4120,4130,4140, EDUC 4000, and 4400; 3.00 GPA . in program course work and no grade lower than a "C-"; subject-matter competence verified.

EDSB 4816 Multiple Subjects BCLAD Student Teaching II (5 units). (Formerly EDBL 4810) Supervised observation, participation, and student teaching in a public multiple subjects bilingual classroom setting. Concurrent enrollment in EDSB 4899 required. Prerequisite: EDSB 4815.

EDSB 4898 Student Teaching Seminar 1 (1 unit). (Formerly EDBL 3899) The first of two required student teaching seminars. Includes a scheduled on-campus seminar meeting dealing with professional ethics, special activities, use of audio/visual
equipment, and student teaching problems. Concurrent enrollment in EDSB 4815 is required. Taken concurrently with student teaching, but is graded separately. Prerequisites: EDSB 4010, 4110, 4120, 4130, 4140, EDUC 4000, and 4400; 3.00 GPA in program course work and no grade lower than a "C-"; subject-matter competence verified.

EDSB 4899 Student Teaching Seminar II (1 unit). (Formerly EDBL 4899) The second of two required student teaching seminars. Concurrent enrollment in EDSB 4816 is required. Taken concurrently with student teaching, but is graded separately. Prerequisites: EDSB 4898.

## Single Subject: Upper Division

EDSS 4150 Effective Teaching in the Secondary School I ( 2 units). Students begin the study of a variety of processes of instruction which focus on the individual learner in the secondary school. Opportunities are provided for students to begin developing various teaching skills by teaching small groups of peers as well as on a limited basis in the classroom. Participation in the field and regular class attendance are required. Prerequisites: Admission to Single Subject Credential Program.

EDSS 4160 Effective Teaching in the Secondary School II (4 units). Continuation of EDSS 4150. Within this part of the program, there is a transition from a focus on the individual learner and small groups to a focus on large groups of students in the classroom setting. Participation in the field and regular attendance of University classes is required for completion. Prerequisites: Successful completion of EDSS 4150 and 4180.

EDSS 4170 Effective Teaching in the Secondary School III (2 units). Continuation of EDSS 4160. While engaged in an accompanying practicum (4855), the student will focus on effective teaching methodology as it relates to the classroom setting. Attention will be given to learning how to assess students' needs, how to involve them more actively in their learning, and how to improve chances that they learn the required materials in the classroom. Prerequisites: Successful completion of EDSS 4150,4180 , and 4850.

EDSS 4180 Single Subject Instruction I (2 units). Introduction to teaching in single subject instructional settings in the secondary school; study of theory and methodology in the student's single subject area; study of the scope and sequence of the single subject area as part of the total school curriculum; analysis of current trends and practices in teaching the single subject; review of courses of study and instructional materials; use of instructional techniques; analysis of practices appropriate to different types of secondary school students; evaluation of student learning in single subject areas. Prerequisites: Admission to single subject credential program and concurrent enrollment in EDSS 4150.

EDSS 4190 Single Subject Instruction II (2 units). Continuation of EDSS 4180, teaching in single subject instructional settings in the secondary school; increased attention given to teaching single subjects to large groups of secondary students. Whenever possible, this segment of the program will include specialists from appropriate academic areas of the University and/or school district. Prerequisites: Successful completion of EDSS 4150,4180, and 4850, based on an overall evaluation by the appropriate University personnel; concurrent enrollment in EDSS 4170.

EDSS,4500 Teaching Today's Adolescents (3 units). Characteristics of adolescents from a historical and contemporary perspective. Discussion of early to late adolescence. Practical suggestions and implications for educators. Prerequisite: Upperdivision standing.

EDSS 4845 Analysis and Strategies of Teaching in the Secondary School (3 units). Analysis of teaching/learning styles relative to secondary school instruction. Emphasis on teaching strategies that accommodate a variety of learning preferences. Prerequisite: Completion of EDSS 4855, or preliminary credential, or consent of credential adviser.

EDSS 4850 Field Practicum: Secondary Education I (6 units). First segment of intensive sequence of experiences which focus on individual and small group instruction of secondary students in junior and/or senior high school. Participation in the field and adherence to the public school calendar required for completion. Prerequisites: Admission to single subject credential program and concurrent enrollment in EDSSS 4150 and 4180.

EDSS 4855 Field Practicum: Secondary Education II (6 units). A continuation of EDSS 4850. The second segment of an intensive field site sequence of experiences which focus on working with large groups of secondary students in classroom settings in junior and/or senior high school. Daily participation in the field and adherence to the public school calendar required for completion. Prerequisites: Successful completion of EDSS 4150,4180 , and 4850 , based on an overall evaluation by the appropriate University personnel; and concurrent enrollment in EDSS 4170 and 4190.

EDSS 4860 Supervised Student Teaching in Public Secondary School Settings (2-12 units). Prerequisite: Consent of single subject credential program coordinator. May be repeated only once.

## Education: Lower Division

EDUC 1000 Participation in Tutoring (1 unit). Consideration of the role of the tutor and the teacher in the school. Values and limitations of various learning situations. May be repeated for a total of 3 units. Prerequisites: Certificate of Clearance, medical clearance, and consent of instructor.

## Education: Upper Division

EDUC3000 The Instructional Aide ( 2 units). Directed observation and participation in an educational setting as an instructional or teacher aide; practices related to working with children and youth, especially recommended for students interested in teaching. May be repeated for a total of 4 units. Prerequisites: Certificate of Clearance, medical clearance, and consent of instructor.

EDUC 3500 Early Field Experience (2 units). Participants will be involved in a variety of school related experiences to assist them in determining their suitability for becoming a classroom teacher. The course will combine classroom work on the University campus and $\mathrm{K}-12$ field experiences, with a focus on gaining a beginning understanding of the role of the teacher in the contemporary public school.
Note: This course meets the pre-professional program requirement of early field experience for admission to the Multiple Subjects Credential Program or to the single subject credential program.

EDUC 4000 Historical, Sociocultural, and Political Perspectives on Schools in the U.S. ( 3 units). This course is an introduction to public schooling in the United States. It will address the major historical, sociocultural, political, and economic forces that influence schooling and learning outcomes in our society.
EDUC 4100 Working with At-Risk Students in a Community School Setting (1-4 units). This course gives students the opportunity to apply theoretical and practical knowledge of teaching and classroom management and provides experience with culturally and linguistically diverse students in a community school setting. Prerequisite: Consent of instructor.

EDUC 4120 Diagnostic Techniques of Teaching (3 units). (Formerly EDMS 4120) Methods of diagnosing student difficulties and prescribing remediation in terms of curriculum and instruction; performance-based instruction evaluation. Prerequisite: Completion of student teaching.

EDUC4200 Cultural Diversity and the Classroom (3 units). (Formerly EDBL4200) Principles of adapting instructional material and programs to the particular needs of language minority students. The course emphasizes knowledge of cultural perspectives, learning styles, and cross cultural communications in the classroom.
Note: $\quad$ This course partially fulfills the pre-professional program requirement of early field experience for admission to the Multiple Subjects Credential Program(CLAD or BCLAD). (See "CLAD and BCLAD Prerequisite: Early Field Experience").

EDUC 4300 Teaching the Cultural Heritage of the Hmong and Lao People (3 units). Prepare educators for student diversity in the classroom and by providing a study of the cultural heritage of the Hmong and Lao people including their recent history, cultures, family structure, language, arts, music, songs, beliefs, family, values, identify, education, and migration.

EDUC 4430 Cross-Cultural Techniques for Teachers: Language and Sociocultural Issues in School Settings ( 3 units). This course focuses on the importance of social and cultural origins of language and literacy in relation to the needs of students and teachers in a pluralistic society with egalitarian goals.

EDUC 4400 Introduction to Multilingual Education (3 units). (Formerly EDBL 4400) The course focuses on the current theories of bilingualism as well as on the current national and international practices related to dual language instructional models and the education of language minority students. The purpose of this course is to engage in an in-depth study of the extant research on bilingualism.

EDUC 4550 Techniques for Supervising Student Teachers (1 unit). A course designed to provide educators with the professional skills of supervising pre-service and in-service teachers using the clinical supervision process.

EDUC4840 Analysis and Strategies of Teaching (3 units). (Formerly EDMS 4840) Analytical methods used to study the elementary and secondary school instructional process. Models and strategies for effective instruction are emphasized. Prerequisite: Completion of student teaching.

EDUC 4860 Multicultural and Global Education (3 units). This course examines the major concepts and theoretical frameworks of multicultural and global education, the âpplication of the cultural dimensions of teaching and learning, and knowledge of diverse cultures as applied to curricular decisions. Prerequisites: Teaching credential or consent of instructor.

EDUC 4870 Complex Instruction: Groupwork in Heterogeneous Classrooms (3 units). This course will introduce teachers to Complex Instruction, a set of instructional strategies for using cooperative groupwork in academically and linguistically diverse classrooms. Prerequisite: Consent of Instructor.

EDUC 4910 Cooperative Education (2-4 units). This course provides an opportunity to acquire relevant, practical experience in supervised paid employment within the discipline. Students are placed in private or public sector positions under the supervision of the employer and tepartmental Co-op coordinator. May be repeated for a total of 8 units depending upon departmental policy. Prerequisites: Sophomore standing and consent of departmental coordinator.

EDUC 4950 Selected Topics in Education (Topics to be specified in Class Schedule) (1-5 units). Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

EDUC 4980 Individual Study (1-4 units). For qualified undergraduate upperdivision students in need of specialized study not available through regular programs. May be repeated for a total of 6 units. Prerequisites: Complete the appropriate University and Department forms and, at least two weeks prior to the beginning of the term, obtain the following approvals: instructor who will monitor the individual study, adviser, Chair of the Department of Teacher Education, and Dean of the School of Education.

## Education: Graduate

EDUC 5200 Classroom Management and Discipline: Theory and Models (3 units). Research, theory and practices concerning classroom management and discipline. Students will analyze the diverse factors operating in a classroom situation, select from appropriate alternative models, implement, and evaluate the outcomes. Prerequisite: Graduate status or permission of instructor.

EDUC 5330 Research and Trends in Mathematics, Science, and Social Studies, $K-12$ ( 3 units). This course is designed to analyze and evaluate the $\mathrm{K}-12$ curriculum with emphasis on mathematics, science, and social studies. Selected topics for extensive and intensive study. Prerequisite: Consent of education adviser.

EDUC 5340 Research Trends in the Curriculum (3 units). This course is designed to analyze and evaluate the $\mathrm{K}-12$ curriculum in general. Emphasis is on recent research findings and implications. Prerequisite: Consent of education adviser.

[^22]EDUC 5770 Seminar in Elementary and Secondary Education (2 units). This course is designed to analyze and evaluate the interrelationships among content, purposes, organization, policies, and practices in contemporary elementary and secondary schools. Prerequisite: Consent of education adviser.

EDUC 5880 Improving Instructional Skills in Cultural Context (3 units). Focus will be on development of additional teaching skills while considering effects of cultural context on instruction as well as cultural background of the teacher. Prerequisite: Adviser or instructor approval.

EDUC 5885 Instructional Programs to Enhance Thinking Skills (3 units). This course is designed to review and analyze instructional programs designed to improve the $\mathrm{K}-12$ learner's skills in critical thinking and problem solving. Consideration of various nationally tested programs utilizing content processes, materials, and strategies. Prerequisites: Teaching credential and classroom teaching experience.

EDUC 5950 Selected Topics in Teacher Education (Topics to be Specified in Class Schedule) (1-5 units). Development of a selected topic in teacher education. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

EDUC 5960 Project (1-3 units). This course is designed to assist the master's candidate in the preparation of a final project for the fulfillment of the Master's Degree. May be repeated for a total of 6 units. Prerequisite: Consent of M.A. adviser.

EDUC 5980 Individual Study (1-4 units). This course is designed to provide graduate students specialized study related to their degree program. May be repeated for a total of 6 units. Prerequisites: Approval of student graduate committee, consent of instructor.

EDUC 5990 Thesis (1-3 units). This course is designed to assist graduate students in the preparation of their master's thesis. May be repeated for a total of 4-6 units. Prerequisite: Consent of M.A. adviser.


This degree program is made possible through legislation enacted in 1943 (known as the Swan Act). The intent is to provide a baccalaureate degree for vocational teachers who can gain subject matter competence only through occupational or professional experience. The occupational experience credit ( 1 to 40 units) is evaluated by the Board of Examiners for Vocational Teachers and counts towards the Vocational Education major and these are called the student's "Swan Act" units. The degree can be awarded only to students who possess the Designated Subjects Credential in Vocational Education or a California Community College teaching credential in an approved subject matter area. The Bachelor of Vocational Education is accepted as an academic degree program for the Multiple Subjects Credential (for elementary schools) and the Single Subject Credential (for secondary schools).

The applicant must have a minimum of 1,620 hours of full-time teaching experience in an approved vocational class, or 1,000 hours of part-time teaching experience in an approved trade extension class. "Approved" classes are those in conformity with the California State Plan for Vocational Education, Part I, Administrative Provisions.

## Bachelor of Vocational Education

The Bachelor of Vocational Education degree with a major in Vocational Education consists of the segments described below:

## Requirements (124 units minimum)

The 124 units must include at least 40 Upper Division and 30 units residence of which 24 semester units must be Upper Division). A minimum overall 2.00 grade point average is required.

1. Vocational Program (33-40 units)

[^23]a. Major in Vocational Education (24 units) ${ }^{1}$
b. Designated Subjects Credential ( $9-16$ units) ${ }^{2}$
2. Liberal Arts Program
a. General Education ( 51 units, at least 9 of which must be in residence)
b. Upper Division Writing Competency
c. Degree Minor ( 15 unit minimum) ${ }^{3}$
d. Electives ${ }^{4}$
3. University
a. Upper Division (40)
b. Residence (30)

Note: When an applicant applies to CSU Stanislaus, the following data should be included, if available:

- Verification of "Swan Act" units, including date of evaluation
- Verification of Designated Subjects Teaching credential in Vocational

Education or Community College Credential

- Degree minor desired.

[^24]
## The General Faculty

ABRAM, Thomas J. (1983), Professor of Mathematics; B.A. 1974, M.S. 1976, California State University, Northridge; Ph.D. 1983, University of California, Santa Barbara
ABU KHALIL, As'ad (1993), Assistant Professor of Politics/Public Administration; B.A. 1981, M.A. 1983, American University of Beirut; Ph.D. 1988, Georgetown University, Washington, D. C.
AHANOTU, Austin Metumara (1970), Professor of History, B.A. 1967; Berea College; M.A. 1968, Ph.D 1971, University of California, Los Angeles

AKWABl-AMEYAW, Kofi (1990) Associate Professor of Anthropology; B.A. 1970, University of Ghana; M.A. 1981, University of Cincinnati; Ph.D. 1988, University of Florida
ALMY, John (1971), Professor of Organic/General Chemistry; B.A.1964, Johns Hopkins University; Ph.D. 1969, University of Califomia, Los Angeles
ALTER, Richard D. (1979), Professor of Communication Studies; B.A. 1961, Ohio Wesleyan University; M.A. 1965, Ph.D. 1967, University of Utah
ALY, Nael A. (1984), Professor of Operations Management; B.Sc. 1974, M.Sc. 1978, Alexandria University, Egypt; M.S. 1981, Ph.D. 1985, University of Oklahoma
AMRHEIN, John K. (1984), Dean of Library Services; B.A. 1961, Duquesne University; M.L.S. 1963, University of Pittsburgh; M.A. 1967, Pennsylvania State University

ANDERSON, Robert K. (1971), Professor of Language \& Literature: Spanish; B.A. 1966, Brigham Young University; Ph.D. 1973, Saint Louis University
ANDERSON, Roberta T. (1987), Professor of Speech Communication; B.S. 1955, University of Wisconsin, Milwaukee; M. Ed. 1965, Ph.D. 1972, University of Illinois, Urbana
APODACA, Maria L. (1995), Assistant Professor of Chicano Studies; B.A. 1973, California State University, Los Angeles; M.A. 1983; Ph.D. 1994, University of California, Irvine
ARONSON, Melissa M. (1976), Associate Professor of Teacher Education; B.A. 1967, M.A. 1972, California State University, Stanislaus; Ed.D. 1982, University of San Francisco
ASHER, Rita Ann (1982), Director of the Child Development Center; Professor of Psychology; B.S. 1975, State University College at Fredeonia (New York); M.S. 1979, Ph.D. 1984, Texas Tech University
AUBERT, Edward J. (1961), Sr. Director of Admissions and Records; B.S. 1956, University of San Francisco; M.B.A. 1961, University of Califomia, Berkeley
BARNETT, John A. (1984), Professor of Art; B.A. 1966, Western Washington State College; M.F.A. 1971, University of Washington
BARRETT, Thomas P. (1961), Professor of Management: General; B.A. 1954, Northeastern University; M.A. 1958, Michigan State University
BETTENCOURT, Leland R. (1992), Counselor; B.A. 1982, M.S.W. 1984, California State University, Fresno
BLODGETT, Harriet H. (1989), Associate Professor of English (British Literature); A.B. 1954, Queens College, New York; M.A. 1956, University of Chicago; Ph.D. 1968, University of California, Davis
BOFFMAN, June L. (1977), Professor of Nursing; B.S. 1969, M.S. 1970, University of California, San Francisco; Ed.D. 1988, University of San Francisco
BOLLING, Anna L. (1988), Associate Professor of English; B.S. 1965, University of Texas at Austin; M.A. 1970, Southwest Texas State University; Ph.D. 1974, Texas A \& M

BORBA, John A. (1995), Assistant Professor of School Administration; B.A. 1972, M.A. 1978, Ed.D. 1993, California State University, Stanislaus
BOWEN, James C. (1970), Professor of Physical Education; B.A. 1965, University of Northern Iowa; M.A. 1969, Ph.D. 1973, University of Iowa
BOWERS, Donald W. (1971), Associate Vice President for Academic and Human Resources; Professor of Sociology; B.A. 1967, M.A. 1969, Ph.D. 1973, University of Utah
BOWERS, Ida I. (1972), Professor of Physical Geography; B.S. 1961, Central Michigan University; M.A. 1965, Ph.D. 1973, University of Hawaii
BOYER, Laura M. (1987), Librarian (Reference Coordinator); A.B. 1956, George Washington University; A.M. 1959, University of Denver; A.M. 1961, George Peabody College
BRADLEY, Marylee (1993), Assistant Professor of Teacher Education (Secondary Education Generalist); B.S. 1964, State University of New York, Potsdam; A.M. 1965, University of Illinois, Champaign-Urbana
BROCKMAN, Sharon E. (1994), Assistant Professor of Teacher Education; B.A. 1982, Chapman University; M.A. 1985, California State University, San Bernardino; Ph.D. 1994, University of California, Riverside
BROIN, Valerie E. (1990), Associate Professor of Philosophy; B.A. 1977, University of Denver; M.A.T. 1980, University of Florida; Ph.D. 1988, University of Colorado
BROSS, Valerie (1992), Senior Assistant Librarian (Head of Cataloging); B.A. 1975, University of Pennsylvania; A.M.L.S. 1976, University of Michigan, Ann Arbor; A.M. 1984, University of Illinois, Urbana-Champaign

BROWN, Randall B. (1989), Associate Professor of Management; A.B. 1968, Brown University; M.B.A. 1978, University of Virginia, Charlottesville; Ph.D. 1990, University of Massachusetts
BUNNEY-SARHAD, Linda D. (1975), Lecturer in English \& French (Director of the Institute for International Studies); A.B. 1963, University of California, Berkeley; M.A. 1975, Caliifornia State University, Stanislaus

BYRD, James E. (1974), Professor of Analytical/General Chemistry;B.S. 1966, Roosevelt University, Chicago; Ph.D. 1971, University of Chicago
CAMARATA, Martin L. (1964), Professor of Art; B.S. 1956, State University of New York at Buffalo; M.A. 1957, New York University
CAMPBELL, Annhenrie (1991), Associate Professor of Accounting; B.S. 1978, M.B.A. 1988, Humboldt State University; Ph.D. 1991, University of Colorado, Boulder
CARROLL, John E. (1971), Professor of Language \& Literature: English; B.A. 1965, M.A. 1967, Ph.D. 1970, University of New Mexico

CARTER, Thomas John (1981), Professor of Computer Science; B.A. 1970, Dartmouth College; M.A. 1977, George Washington University; Ph.D. 1981, University of Colorado, Boulder
CHAN, Marjorie (1990), Professor of Management; B.S. 1971, California State University, Fresno; M.B.A. 1972, Ph.D. 1981, University of California, Los Angeles
CHERUKURI, U. Rao (1970), Professor of Finance; B. Com. 1954, M. Com. 1956, M. Com. (Hons.) 1958, Andhra University; M.B.A. 1966, Atlanta University; Ph.D. 1972, University of North Carolina
CHIANG, Chau-Pu (1994), Assistant Professor of Sociology and Criminal Justice; B.A. 1983, National Chung-Hsing University; M.A. 1986, Wichita State University; Ph.D. 1991, Washington State University
CHOW, Tai-Low (1969), Professor of Physics; B.S. 1958, National Taiwan University; M.S. 1963, Case Western Reserve University; Ph.D. 1970, University of Rochester

CHRISTOFFERSON, Jay.P. (1970), Interim Dean, College of Arts, Letters and Sciences; Professor of Zoology; B.S. 1961, University of Utah; M.S. 1965, Ph.D. 1970, University of Hawaii
CHRISTOPHER, Renny T. (1995) Assistant Professor of English; B.A. 1982, Mills College; M.A. 1986, San Jose State Unversity; Ph.D. 1992, University of California, Santa Cruz
CLARK, Nancy J. (1979), Professor of Nursing; B.S. 1968, M.S. 1983, California State University, Fresno; M.P.A. 1986, Golden Gate University
CLARKE, Judith L. (1983), Professor of Mathematics; B.A. 1973, M.A. 1976, California State University, Sacramento; Ph.D. 1980, University of California, Davis
COLLA, Virginia Covert (1986), Professor of Music; B.M. 1960, University of the Pacific; M.A. 1970, Occidental College; D.M.A. 1986, University of Illinois, Urbana-Champaign
COLLARD, Clyde V. (1977), Professor of Sociology; B.A. 1966, M.S. 1968, San Jose State University; Ph.D. 1973, Louisiana State University
COLLARD, LauraL. (1981), Associate Director of Academic Advising; B.A. 1980, M.A. 1982, California State University, Stanislaus
CORBIN, Joseph W. (1968), Professor of Education; B.S. 1960, Geneva College; M.Ed. 1961, "University of Pittsburgh; Ed.D. 1967, University of the Pacific
CORTEZ, Victoria L. (1991), Associate Professor of Psychology; B.A. 1984, University of the Pacific; Ph.D. 1992, University of California, Santa Barbara
CRAWFORD, Paula J. (1973), Librarian (Online Searching/Reference); B.A. 1972, University of the Pacific; M.S.L.S. 1973, University of Southern California
CRIST, William D. (1969), Professor of Economics; B.S. 1960, M.A. 1962, Ph.D. 1972, University of Nebraska
CRUZ, Julia G. (1990), Associate Professor of Spanish; B.A. 1962, M.A. 1977, Ph.D. 1982, The University of Texas at Austin
CUEVAS, Jess L. (1976), Coordinator of Student Affirmative Action and Outreach; B.A. 1974, M.A. 1985, California State University, Stanislaus
CUNNINGHAM, Robert S. (1982), Professor of Computer Science; B.A. 1964, Drury College; M.A. 1966, Ph.D. 1969, University of Oregon; M.S. 1982, Oregon State University
CURRY, Richard A. (1995), Provost/Vice President for Academic Affairs; Professor of Spanish; B.A. 1964, M.A. 1967, Ph.D. 1971, University of Washington
DANZIGER, Robert (1991), Associate Professor of Music; B.S. 1966, M.S. 1968, State University of New York, Potsdam; Ph.D. 1978, New York University, New York
DARDON, Gisela (1973), Professor of Language and Literature: Spanish;B.A. 1967, San Francișco College for Women; Ph.D. 1976, University of Arizona
DEAN, Britten (1967), Professor of History; A.B. 1957, Brown University; M.A. 1962, Ph:D. 1969, Columbia University
DEMETRULIAS, Diana Mayer (1983), Associate Vice President for Academic Affairs and Dęan of Graduate Studies and Research; Professor of Education; B.S. 1968, Southern Illinois University at Carbondale; M.A. 1972, Ed.D. 1977, Ball State University
DENG, Pi-Sheng (1990), Professor of Computer Information Systems; B.B.A. 1978, National Cheng Kung University, Taiwan; M.S. 1981, National Chiao Tung University, Taiwan; Ph.D, 1987, Purdue University
DIEKMAN, Jane E. (1971), Associate Professor of Education; B.S. 1958, University of North Dakota; M.A. 1978, California State University, Stanislaus
DINSE, Noble T. (1970), Professor of Drama; B.S. 1968, M.A.T. 1970, Portland State University

DINWIDDIE, Granger (1987), Assistant Professor of Spcial Education; B.A. 1978, University of the Pacific; M.A. 1983, Southern Illinois University, Carbondale; Ph.D. 1987, University of Kansas, Lawrence
DORAZ, Walter E. (1975), Professor of Sociology; B.A. 1970, Southeastern Massachusetts University; M.A. 1972, Ph.D. 1975, Washington State University
DUNBAR, Ellen R. (1994), Director of the Masters of Social Work; Professor of Social Work; B.S. 1954, University of Wisconsin, Stout; MSW 1960, University of Southern California; Ph.D. 1975, Univesity of Southern California
DURBIN, Thomas E. (1970), Professor of Cultural Anthropology;B.A. 1964, University of California, Berkeley; M.A. 1966, Ph.D. 1970, University of California, Los Angeles
DUYST, Kimberley J. (1986), Head Coach (Track) Academic Year; B.S. 1979, M.S. 1980, University of Wyoming
EDMONDSON, Frederick S. (1977), Sr. Director of Student Life/Health Center; B.A. 1971, California State University, Sacramento; M.A. 1973, Califomia Polytechnic State University, San Luis Obispo; Ph.D. 1995, University of the Pacific
ENTIN, Kenneth (1971), Professor of Political Science; B.A. 1966, City College of New York; M.A. 1967, Ph.D. 1971, New York University
ERICKSON, Edward C. (1970), Professor of Economics; B.A. 1965, M.A. 1966, University of California, Riverside; Ph.D. 1970, University of Southern California
FANNING, Richard W. (1995), Assistant Professor of History: B.A. 1976, B.A. 1981, M.A. 1983, University of Washington, Seattle; Ph.D. 1988, Indiana University, Bloomington
FAZAL, S. Abdul (1976), Professor of Mathematics; B.S. 1968, University of East Africa, Nairobi, Kenya; M.A. 1970, Ph.D. 1974, University of California, Berkeley
FELDMAN, Louis A. (1968), Professor of Mathematics; B.S. 1963, University of Michigan; M.A. 1965, Ph.D. 1969, University of California, Berkeley
FINLEY, T. Peter (1970), Director of Academic Advising; B.A. History, 1958, B.A. English, 1964, Ph.D. 1972, University of Washington
FLETCHER, J. Sue (1983), Professor of Physical Education and Health; B.S. 1968, M.S. 1971, California State University, Fresno; Ed. D. 1981, University of San Francisco
FLORES, Juan M. (1988), Professor of Teacher Education (Multicultural-Bilingual); B.A. 1974, Stanford University; M.A. 1976, California State University, San Francisco; Ed.D. 1983, University of the Pacific
FLOYD, Charles E. (1993), Assistant Professor of Social Work; B.A. 1970, Califomia State University, Chico; MSW 1975, California State University, Fresno; Ph.D. 1992, University of South Carolina
FLOYD, Renea (1994), Counselor; B.A. 1976, Bethel College; M.A. 1979, Wichita State
FULLER, Michael C. (1971), Professor of Language and Literature: French; B.A. 1964, University of Idaho; M.A. 1966, Ph.D. 1971, University of Washington
GACKOWSKI, Zbigniew J. (1984), Professor of Business Computer Information Systems; B.S. 1953, Wroctow University of Technology; M.S. 1955, Ph.D. 1968, Warsaw University of Technology
GALBO, Kathleen A. (1986), Associate Professor of Elementary Education; B.A. 1967, M.A. 1975, San Francisco State University; Ph.D. 1982, University of Oregon

GARFIELD, Sara E. (1986), Assistant Professor in Teacher Education; B.S. 1974, M.S.Ed. 1982, University of Wisconsin, Superior

GARNER, Don E. (1987), Professor of Accounting; B.S. 1962, Ohio State University; M.S. 1968, California State University, Sacramento; D.B.A. 1972, University of Southern California; C.P.A. Illinois and Ohio

GERSTENFELD, Phyllis B. (1993), Assistant Professor of Criminal Justice; B.A. 1988, Reed College, Portland; M.A., J.D., 1992, University of Nebraska, Lincoln
GHIGLIERI, Sylvia M. (1961), Professor of Music/Keyboard; B.M. 1954, Dominican College; Diploma 1954, Music Academy of the West at Santa Barbara; Diploma 1955, Conservatoire de la Musique at Fontainebleau, France; M.M. 1960, University of the Pacific
GIARAMITA, Mario J. (1993), Assistant Professor of Geology; B.A. 1980, Queens College, City University of New York; M.S. 1984, Ph.D. 1989 University of California, Davis
GIVENTER, Lawrence L. (1975), Professor of Political Science; B.S.M.E. 1967, New Jersey Institute of Technology; M.S. 1968, Massachusetts Institute of Technology; Ph.D. 1976, University of Pittsburgh
GNEPA, Tahi J. (1990), Associate Professor of International Business; B.S. 1980, Ecole Superieure de Commerce d'Abidjan (Ivory Coast); M.S.B. 1982, Ph.D. 1989, University of Wisconsin, Madison
GOEDECKE, David S. (1984), Professor of Music; B.A. 1952, M.A. 1960, Washington State University; D.M.A. 1976, University of Oregon
GOODWYN, Susan W. (1991), Associate Professor of Psychology; B.A. 1978, University of Maryland, European Division; M.S. 1980, University of London; Ph.D. 1986, University of California, Davis
GORDON, Joy (1995), Assistant Professor of Philosophy; B.A. 1980, Brandeis, J.D. 1984, Boston University of Law; M.A. 1989; Ph.D. 1993, Yale University
GRANT, Curtis R. (1966), Professor of History; A.B. 1960, Stanford University; M.A. 1961, University of California , Davis
GUAGLIANONE, Curtis L. (1993), Associate Professor of Educational Administration; B.A. 1980, Biola University; M.A. 1982, Califomia State University, Fresno, Ed.D. 1993, University of the Pacific
HACKWELL, Glenn A. (1961), Professor of Zoology; B.S. 1957, M.S. 1958, Brigham Young University; Ph.D. 1967, Oregon State University; Registered Professional Entomologist, 1972, Entomological Society of America
HAMILTON, Hobart G., Jr. (1968), Professor of Inorganic/General Chemistry; B.S. 1961, University of Texas, El Paso; M.S. 1963, Ph.D. 1967, New Mexico State University
HANSON, James C. (1960), Professor of Zoology; B.A. 1955, M.A. 1957, University of the Pacific; Ph.D. 1967, Oregon State University
HARRIS, Edward C. (1983), Professor of Music; B.M. 1970, M.A. 1973, San Francisco State University; Dr. of Arts 1985, University of Northem Colorado
HARRIS, Robert R. (1991) Coach, Academic Year (Athletic Trainer); B.S. 1986, California State University, San Luis Obispo; M.S. 1990, University of Arizona, Tucson
HEJKA-EKINS, April(1988), Associate Professor of Politics and Public Administration; B.A. 1969, Northern Illinois University; M.S.W. 1971, University of Illinois at Chicago Circle; Ph.D. 1987, University of Southern California
HENDRICKS, Judith J. (1982), Professor of Political Science; B.A. 1976, M.A. 1977, University of Houston; Ph.D. 1982, Temple University
HERNANDEZ, Edward H. (1995), Assistant Professor of Management, DMD; B.A. 1988, California State University, Long Beach
HERNANDEZ, Leodoro (1980), Professor of Education; B.A. 1966, UNIVersity of Omaha; M.A. 1968, Chapman College; Ed.D. 1976, University of Northern Colorado

HESSE, Bruce E. (1984), Associate Professor of Psychology; B.A. 1971, Westem Illinois University; M.A. 1977, Ph.D. 1984, Western Michigan University
HILLERY, Joan R. (1969), Director of Financial Aid/Scholarships
HILPERT, Fred P. Jr. (1977), Professor of Speech Communication; B.A. 1962, University of Washington; M.A. 1969, Califomia State University, Chico; Ph.D. 1972, University of Oregon
HOWARD, Jane S. (1978), Professor of Psychology; B.A. 1973, Mount Holyoke College; M.A. 1977, Ph.D. 1973, Western Michigan University
HUGHES, Marvalene (1994), President; Professor of Psychology;B.A. 1960; M.S. 1962, Tuskegee University; Ph.D. 1970, Florida State University
HUGHES, Steven W. (1971), Professor of Political Science;B.A. 1966, Whittier College; Ph.D. 1971, University of North Carolina
JAASMA, Marjorie A. (1988), Assistant Professor of Communication Studies; B.A. 1970, Calvin College; M.A. 1971, University of Minnesota; M.A. 1988, California State University, Stanislaus; Ph.D. 1995, University of the Pacific
JAMES, Ralph L. (1970), Professor of Mathematics; B.S. 1963, University of Washington; M.S. 1965, Ph.D. 1970, Oregon State University
JANES, Helena A. (1995), Assistant Professor of Teacher Education; B.A. 1966, Oxford University
JENKINS, David O. (1970), Professor of Accounting; B.B.A. 1952, Loyola University of Los Angeles; M.A. 1955, The Catholic University of America; C.P.A. 1958, State of California; D.B.A. 1963, University of Southern California
JOHNSON, Lola V. (1960), Professor of Language and Literature: English; B.A. 1956, M.A. 1959, University of the Pacific

JOHNSON, Marvin W. (1985), Professor of Physics; B.A. 1971, California State University, Stanislaus; M.S. 1972, Ph.D. 1977, University of Illinois, Urbana
JONES, John L. (1988), Head Coach, Basketball; B.A. 1965, M.A. 1966, Humbolt State University
KANE, Constance M. (1994), Assistant Professor of Education; B.A. 1973, University of Northern Iowa; M.A. 1982, Ph.D. 1992, St. Mary's University.
KARLSTROM, Eric T. (1989), Assistant Professor of Geography \& Honors Program; B.S. 1971, Northern Arizona University; M.A. 1977, University of Wyoming; Ph.D. 1981, University of Calgary, Canada
KATSMA, Diane (1993), Assistant Professor of Nursing; B.S. 1981, Walla Walla College, College Place, Washington; M.S. 1985, University of California, Los Angeles
KAVASCH, Deborah H. (1979), Professor of Music: Theory/Voice; B.A. 1971, B.M. 1972, M.M. 1973, Bowling Green State University; Ph.D. 1978, University of California, San Diego
KEELER, Judith A. (1969), Professor of Zoology; B.A. 1966, Whittier College; M.S. 1969, Ph.D. 1973, Northwestern University
KEYMER, David K. (1992), Vice President for Student Affairs/Dean of Students; Adjunct Professor of History; B.A. 1958, Hiram College; M.A. 1967, New York University; Ph.D. 1977, Yale University
KHADE, Shivaji B. (1989) Associate Professor of Production Operations Management; B.S. 1976, University of Bombay, India; M.Tech. 1981, Indian Institute of Technology, Bombay, India; M. Eng. 1985, Lamar University, Texas; M.B.A. 1986, Ph.D. 1990, University of Houston
KIMLICKA, Thomas M. (1978), Professor of Psychology; A.B. 1973, University of California, Berkeley; M.S. 1976, Ph.D. 1978, Washington State University

KIMYAI, Abbas (1984), Professor of Geology; B.A. 1956, Teachers College, Tehran, Iran; B.S. 1956, Tehran University; Ph.D. 1964, New York University
KLEIN, James M. (1984), Professor of Music; B.M. 1975, M.M. 1977, University of Texas, Austin; D.M.A. 1981, University of Cincinnati, College-Conservatory of Music
KOBUS, Doni K. (1986), Associate Professor of Education; B.S. 1968, Cornell University; M. Ed. 1975, Ed.D. 1985, University of the Pacific
KRABACH, Ann L. (1977), Director of the Writing Center; Lecturer in Language \& Literature: English; B.A. 1975, M.A. 1977, California State University, Stanislaus
LAMIE, Edward L. (1982), Director of Institutional Research; Professor of Computer Science; A.B. 1969, San Diego State University; M.S. 1971, University of Southern California; Ph.D. 1974, Michigan State University
LEE, Albert Yin-Po (1970), Professor of Economics; B.A. 1955, National Taiwan University; Ph.D. 1979, Southern Illinois University
LEONARD, Elizabeth (1995), Assistant Professor of Psychology; B.A. 1981, Trinity University; M.A. 1983, University of California, Santa Barbara; Ph.D. 1993, Oklahoma State University
LEVECK, Paula J. (1981), Professor of Nursing; B.S. 1959, University of Ilinois, Chicago; M.S. 1961, Ph.D. 1980, University of California, San Francisco
LEVERING, Richard A. (1973), Professor of Drama; A.B. 1961, M.A. 1968, California State University, Long Beach
LI, Peter Ping (1995), Assistant Professor of Management, DMD; B.A. 1982, Shanghai International Studies University; M.B.A. 1987, University of International Business and Economics; Ph.D. 1991, George Washington University
LINDSAY, David H. (1991), Associate Professor of Accounting; B.A. 1976, Case Western Reserve University: M.B.A. 1983, Cleveland State University;Ph.D. 1992, Kent State University
LINDSLEY, Sheryl L. (1995), Assistant Professor of Communication Studies; B.A. 1988, California State University, Hayward; M.A. 1992, California State University, San Francisco
LITTLEWOOD, Ian M. (1993), Assistant Professor of Physics; B.A. 1972, M.A., Ph.D., 1977, Oxford University, England
LODEWYCK, Ronald W. (1973), Professor of Business ComputerInformation Systems; B.A. 1965, Illinois Institute of Technology; M.S. 1966, Ph.D. 1973, Northwestern University
LUEVANO, RichardL. (1971), Professor of ChicanoStudies;B.A. 1970, CaliforniaState University, Stanislaus; M.A. 1971, San Jose State University
LUO, Ping (1995), Assistant Professor of Physical Education and Health; B.A. 1983, Chongqing University; M.S. 1991, SUNY at Brockport College; M.S. 1993, West Virginia University
MACDONALD, Rhoda E. (1982), Professor of Sociology; B.A. 1972, Oklahoma Baptist University; M.S. 1974, Portland State University; Ph.D. 1979, University of Minnesota, Minneapolis
MACK, Gerhard G. (1970), Professor of Language \& Literature: German; A.B. 1965, California State University, Los Angeles; M.A. 1967, Ph.D. 1971, University of Southern Califomia
MARQUES, Pamela J. (1995), Assistant Professor of Social Work; B.A. 1976, Antioch College; M.A. 1979, University of Denver
MARSHALL, Susan L. (1988), Associate Professor of English;B.A. 1978, University of California, San Diego; M.A. 1981, Ph.D. 1986, University of Califomia, Santa Barbara

## 510/Faculty

MAYOL, Pete S. (1968), Professor of Botany; B.S.A. 1957, University of the Philippines; M.S. 1965, Oklahoma State University; Ph.D. 1968, Purdue University

McCREARY, Jamie M. (1975), Professor of Psychology; B.S. 1971, University of Pittsburgh; M.A. 1972, Ph.D. 1975, University of Florida
McDERMOTT, Douglas W. (1970), Professor of Drama; A.B. 1958, Pomona College; M.A. 1960, University of North Carolina; Ph.D. 1963, University of Iowa

McGREW, James D. (1976), Director of Public Affairs; B.A. 1966, California State University, Los Angeles; M.S. 1975, California State University, Hayward
MENDONCA, Karen L. (1980), Senior Director for Retention Services/Director of Counseling, Career Development, and Academic Support Services;B.A. 1974,M.A. 1976, California State University, Chico; M.A. 1977, University of San Francisco; Ph.D. 1995, University of Califomia at Berkeley
MIDDLETON-KEIRN, Susan (1981), Professor of Anthropology; B.A. 1967, M.A. 1970, Ph.D. 1975, University of Florida
MILLAR, LeAnn Jean (1981), Head Coach, Academic Year; B.A. 1980, Buena Vista College; M.S. 1981, Washington State University
MILLER, Joe M. (1994), Assistant Professor of Music; B.A. 1987, University of Tennessee; M.M. 1992, University of Cincinnati
MILLER-ANTONIO, Sari (1993), Assistant Professor of Physical Anthropology; B.A. 1974, Colgate University; M.A. 1987, Ph.D. 1992, University of Arizona, Tucson
MOREN, Martha M. (1971), Professor of Physical Education; B.S. 1967, M.S. 1971, California State University, Hayward
MORGAN, Cynthia L. (1974), Int. Associate Dean, ALS/Professor of Psychology; A.B. 1968, Temple University; M.A. 1971, Ph.D. 1974, University of Wisconsin, Madison
MORRIS, William M. (1971), Professor Physical Education; A.B. 1962, M.A. 1964, California State University, Chico; Ed.D. 1969, University of Utah
MUEDEKING, George D. (1972), Professor of Sociology; B.A. 1965, Pacific Lutheran University; M.A. 1968, Ph.D. 1972, Washington State University
MURTI, A. K. Gene (1983), Pُrofessor Management-Quantitative; B.E. 1959, M.S. University, Baroda, India; M.S.I.E. 1965, Wayne State University; Ph.D. 1971, Illinois Institute of Technology
MYERS, Linda S. (1989), Associate Professor of Psychology; B.S. 1980, University of Maryland; Ph.D. 1985, Uniformed Services University of the Health Sciences, Bethesda, Maryland
NAPTON, Lewis K. (1971), Professor Archaeology; B.S. 1959, Montana State University; M.A. 1965, University of Montana; Ph.D. 1970, University of Californa, Berkeley
NEELEY, William E. (1976), Professor of Politicai Science; B.A. 1966, University of Washington; Ph.D. 1978, University of Nevada
NELSON, Todd D. (1995), Assistant Professor of Psychology; B.A. 1989, University of Minnesota; M.S. 1991, Illinois State University
NEMZER, Dennis H. (1984), Associate Professor of Mathematics; B.A. 1970, M.S. 1979, California State University, Northridge; Ph.D. 1984, University of California, Santa Barbara
NOVAK, Gary D. (1973), Professor of Psychology; A.B. 1968, Rutgers University; M.A. 1970, Temple University; Ph.D. 1974, State University of New York at Stony Brook
O'BRIEN, Paul W. (1993), Assistant Professor of Sociology; B.A. 1985, Metropolitan State College of Denver; M.A. 1987, University of Colorado, Denver; Ph.D. 1992, Colorado State University, Fort Collins

O'DONNELL, Jerome J. (1986), Associate Professor of Drama; B.A. 1970, Florida State University; M.F.A. 1978, Temple University
OLIVANT, David (1995), Assistant Professor of Art; B.F.A. 1980, Falmouth School of Art; M.F.A. 1984, Royal College of Art
OPPENHEIM, Samuel A. (1971), Coordinator of Regional Distance Learning; Professor of History; B.A. 1962, University of Arizona; A.M. 1964, Harvard University; Ph.D. 1972, Indiana University
OZUNA, William (1973), Adviser; B.A. 1970, M.A. 1977, California State University, Stanislaus
PALLOTTA, Gina M, (1990) Associate Professor of Psychology; B.A. 1983, M.S. 1985, California State University, Stanislaus; Ph.D. 1991, West Virginia University
PANDELL, Alexander J. (1970), Professor of Organic/General Chemistry; B.S. 1964, San Francisco State University; Ph.D. 1968, Stanford University
PATTERSON, Richard G. (1972), Director of Community and Minority Affairs; B.S. 1971, University of Nevada, Reno
PATZER, Gordon L. (1995), Dean, School of Business Administration; Professor of Marketing; B.A. 1973, Moorhead State University; M.S. 1975, Pittsburg State University; M.B.A. 1976, University of Minnesota; Ph.D. 1980, Virginia Polytechnic Institute and State University
PERONA, Michael J. (1973), Professor of Physical/General Chemistry;B.A. 1964, Ph.D. 1968, University of California, Santa Barbara
PERPICH, Diane (1995), Assistant Professor of Philosophy; B.A. 1984, Bryn Mawr College; M.A. 1987, The University of Chicago
PETERS, Priscilla S. (1972), Librarian (Serials/Systems); A.B. 1971, Stanford University; M.L.S. 1972, University of California, Berkeley
PHILLIPS, William H. (1974), Professor of Language \& Literature: English; B.A. 1962, Purdue University; M.A. 1966, Rutgers University; Ph.D. 1972, Indiana University
PIERCE, Wayne S. (1971), Professor of Botany; A.B. 1964, Humboldt State University; M.S. 1967, Ph.D. 1971, Washington State University

PISKOTI, James (1969), Professor of Art; B.S. 1967, University of Michigan; M.F.A. 1969, Yale University
PITMAN, Leon S. (1969), Professor of Human Geography; B.S. 1965, Brigham Young University; M.A. 1966, University of Oklahoma; Ph.D. 1973, Louisiana State University
QUEZADA, Reyes L. (1993), Assistant Professor of Elementary Education; B.A. 1979, San Jose State University; M.A. 1987, San Diego State University; Ed.D. 1991, Northern Arizona University, Flagstaff
REGALADO, Samuel (1987), Associate Professor of History; B.A. 1980, California State University, Northridge; M.A. 1983_Ph.D. 1987, Washington State University, Pullman
RENEAU, Dana M. (1987), Associate Professor of Mathematics; A.B. 1977, University of California, Berkeley; M.A. 1981,M.S. 1982,Ph.D. 1987, University of California, Davis
RENNING, H. Dieter (1970), Professor of Economics; Dr. rer. pol. (Doctor of Economics) 1961, University of Freiburg, Germany
REUBEN, Paul P. (1971), Professor of Language \& Literature: English; B.A. 1961, Patna College,India; M.A. 1963, Patna University, India; Ph.D. 1970, Bowling Green State University
RHODES, Cecil A. (1989), Associate Professor of Sociology; B.A. 1973, California State University, Fresno; J.D. 1980, Western State University College of Law

ROBBIN, C. Roxanne (1990), Associate Professor of Art History; B.A. 1980, University of Washington; Ph.D. 1990, University of California, Santa Barbara
ROE, Pamela (1971), Professor of Zoology; B.A. 1965, University of Texas; M.S. 1967, Ph.D. 1971, University of Washington
ROSENTHAL, Nina R. (1976), Professor of Education; B.S. 1969, M.S. 1971, Ph.D. 1975, Syracuse University
RUSS, Pamela M. (1991), Assistant Professor of Teacher Education; B.A. 1977, California State University, Chico; M.A. 1987, Ph.D. 1990, University of New Mexico, Albuquerque
SANCHEZ, Lilia G. (1995), Assistant Professor of Spanish; B.A. 1980, M.A. 1981, California State University, Sảcramento; Ph.D. 1993, University of California, Davis
SANTOS, Robert L. (1970), Librarian (Library Instruction/Reference); B.S. 1969, California State University, Stanislaus; M.A. 1970, University of Southern California
SANTOS, Robert Lee (1980), International Students Advisor; Counselor; B.A. 1968, California State University, Stanslaus; M.A. 1970, California State University, Sacramento; Ph.D. 1979, Southern Illinois University at Carbondale
SARRAILLE, John J. (1986), Professor of Computer Science; A.B. 1973, University of California, Berkeley; M.S. 1986, University of Washington; Ph.D. 1980, University of California, San Diego
SAVINI, Richard (1983), Professor of Art; B.F.A. 1968, Pratt Institute; M.F.A. 1970, Brooklyn College
SCHEFKOWITZ, Janet (1992), Coach, Academic Year; B.S. 1978, State University of New York, Brockport; M.S. 1981, San Francisco State University
SCHMANDT, Michael J. (1994), Assistant Professor of Geography; B.A. 1987, California State University, Fresno; M.A. 1991, Ph.D. 1995, Arizona State University
SCHMIDT, Arnold A. (1995) , Assistant Professor of English; B.A. 1986, SUNY/New Paltz; M.A. 1990, State University of New York at New Paltz; Ph.D. 1994, Vanderbilt University
SCHOENTHALER, STEPHEN J: (1982), Professor of Sociology; B.A. 1970, State University College at Geneseo, New York; M.A. 1975, Syracuse University; Ph.D. 1980, State University of New York at Buffalo
SCHULZ, Armin R. (1990) Associate Professor of Teacher Education; B.S. 1968, Concordia Teachers College, Seward, Nebraska; M.A. 1973 San Francisco State University, Ed.D. 1987, University of the Pacific
SETTERA, George E., Jr. (1971), Professor of Language and Literature: English; B.S. 1964, Portland State University; Ph.D. 1971, University of Oregon
SHAW, Gary C. (1969), Professor of Political Science; B.A. 1966, Utah State University; M.A. 1967, Ph.D. 1970, Michigan State University

SHERMAN, Stanley E. (1969), Professor of Psychology; B.A. 1956, University of California, Berkeley; B.D. 1959, Berkeley Baptist Divinity School; M.A. 1966, San Jose State University; Ph.D. 1969, University of Washington; Certified Clinical Psychologist 1970, State of California
SHIN, Fay H. (1994), Assistant Professor of Teacher Education; B.A. 1986, University of California, Los Angeles; M.S. 1993, Ph.D. 1994, University of Southem California
SHIPLEY, Kathleen N. (1987), 'Director of the Faculty Mentor Program; Lecturer in Communication Studies; B.A. 1965, M.A. 1966, University of California, Santa Barbara
SHORT, Terrie Lee (1980), Honors Program Coordinator; Lecturer in Mathematics; B.S. 1979, M.A. 1986, California State University, Stanislaus

SMITH, Nancy J. (1995), Assistant Professor of Teacher Education; B.A. 1979, Western Michigan Ửniversity; M.A. 1984, Eastern Michigan University
SNEIZEK, Karen M. (1984), Professor of Special Education; B.A. 1972, California State University, Fresno; M.Ed. 1979, Ph.D. 1983, Pennsylvania State University
SOUZA, Christine H. (1994), Assistant Professor of Nursing; B.S. 1988, California State Univèrsity, Sonoma; M.S. 1991, University of California, San Francisco
STANISLAW, Harold (1996), Associate Professor of Psychology; B.A. 1978, Yale University; M.A. 1981, University of California, Riverside; M.A. 1983, Ph.D. 1987, University of California, Los Angeles
STONE; Koni K. (1994), Assistant Professor of Chemistry; B.A. 1984, University of Nebraska at Omaha; Ph.D. 1990, Wayne State University
STRYKER, Steven B. (1990), Associate Professor of English \& Modern Language; B.A. 1968, M.A. 1976, M.Ed. 1980, Ph.D, 1984, University of Arizona, Tucson
SUMSER, John R. (1990), Associate Professor of Communication Studies; B.A. 1976, M.A. 1979, San Jose State University; M.A. 1985, Ph.D.1989, State University of New York, Stony Brook
SUNDAR, Viji K. (1978), Professor of Mathematics; B.S. 1962, M.S. 1964, University of Poona, India; M.S. 1968, Ph.D. 1973, University of Illinois, Urbana
SWANSON, Patricia E. (1993), Assistant Professor of Teacher Education, (Elementary Education Curriculum Instruction); B.A. 1980, Middlebury College; M.A. 1991, M.A. 1993, Ph.D. 1993, Stanford University

TANIGUCHI, Nancy J. (1989), Associate Professor of History; B.A. 1968, University of Arizona; M.A. 1981, Ph.D. 1985, University of Utah .
THOMPSON, Evan M. (1965), Professor of Organic/General Chemistry; B.A. 1960, Ph.D. ${ }^{4} 1964$, Brigham Young University
THOMPSON, Mark (1993), Assistant Professor of English; B.A. 1982, East Central University, Ada, Oklahoma; M.A. 1989, University of Oklahoma
THOMSEN, Judith A. (1977), Senior Assistant Librarian; B.A. 1972, M.A. 1974, University of California, Davis; M.L.S. 1976, University of California, Berkeley
TORDOFF, WalterIII (1970), Professor of Zoology; B.A. 1965, University of Massachusetts; M.S. 1967, Ph.D. 1971, Colorado State University
TOWELL, Janet H. (1990), Associate Professor of Teacher Education; B.S. 1972, M.A. 1979, Appalachian State University; Ed.D. 1985, University of Maryland, College Park
TRIPI, Frank J. (1971), Professor of Sociology; B.A. 1961, M.A. 1963, California State University, Los Angeles; Ph.D. 1971, University of California, Los Angeles
TSACLE, Eleftherios G. (1973), Associate Professor of Business Computer Information Systems; B.S. 1968, University of San Francisco; M.A. 1971, University of California, Berkeley; M.S. 1977, University of California, Davis
TUEDIO, James A. (1983), Professor of Philosophy; A.B. 1976, University of California, SantarCruz; M.A. 1980, Ph.D. 1983, University of Colorado, Boulder
VANDERMOLEN, Ronald J. (1969), Professor of History; B.A. 1961, Calvin College; M.A. 1962, DePaul University, Ph.D. 1969, Michigan State University

VANG, Anthony T. K. (1993), Assistant Professor of Teacher Education, (Language Acquisition); B.S. 1986, M.A. 1988, Ed.D. 1992, University of San Francisco
VAN REGENMORTER, Robert J. (1981), Professor of Accounting; B.A. 1963, Ferris State College; M.B.A. 1966, Michigan State University; Ph.D. 1973, Oklahoma State University; C.P.A. 1974, State of Tennessee
VELLENGA, Daniel R. (1986), Professor of Finance; B.S. 1961, M.B.A. 1963, University of Illinois, Urbana; Ph.D. 1974, Michigan State University

## 514 / Faculty

WADE, Jere D. (1969), Professor of Drama; B.A. 1958, M.A. 1966, University of California, Davis; Ph.D. 1972, University of Oregon
WAGNER, Andrew J. (1995), Assistañt Professor of Finance, DMD; B.A. 1989, Alfred University
WAGNER, Irma Guzman (1995), Dean, School of Education; Professor of Teacher Education; B.A. 1961, San Jose State University; M.A., Ph.D. 1976, Claremont Graduate School
WAKEFIELD, James A., Jr. (1974), Professor of Psychology; B.A. 1970, University of Texas, Austin; M.A. 1973, Ph.D. 1973, University of Houston
WASHINGTON, Delo E. (1972), Professor of Black Studies; B.A. 1957, Spelman College; M.S.W. 1959, Atlanta University; Ph.D. 1977, University of California, Berkeley
WATKINS, Cathy L. (1990), Associate Professor of Special Education; B.S. 1981, M.A. 1983, California State University, Stanislaus; Ph.D. 1987, University of Florida, Gainsville
WATSON, Flora M.C. (1977), Assistant Professor of Zoology; B.A. 1967, Whittier College; M.S. 1969, Idaho State University; Ph.D. 1972, University of Southern California, Los Angeles
WEBSTER, William G. (1976), Professor of Education; B.S. 1951, Southern University, Baton Rouge; M.S. 1967, California State University, Hayward; Ed.D. 1976, University of the Pacific
WEEDON, Jerry L. (1971), Professor of Speech Communication; B.A. 1958, California State University, Long Beach; M.A. 1963, Ph.D. 1969, University of California, Los Angeles
WEIKART, Richard C. (1994), Assistant Professor of History; B.A. 1980, M.A. 1989, Texas Christian University
WERNESS, Hope B. (1976), Professor of Art; B.A. 1965, University of California, Santa Barbara; M.A. 1968, Tulane University; Ph.D. 1972, University of California, Santa Barbara
WHITE, Everett Edison III (1992), Assistant Professor of Economics; B.A. 1969, M.A. 1974, Ph.D. 1979, Virginia Polytechnic Institute, Blacksburg, Virginia
WILLIAMS, Daniel F. (1971), Professor of Zoology; B.A. 1966, Central Washington State College; M.S. 1968, Ph.D. 1971, University of New Mexico
WILLIAMS, Jack W. (1969), Professor of Language and Literature: English; B.A. 1962, M.A. 1966, University of Colorado,

WILLIAMS, Kaylene C. (1986), Professor of Marketing; B.A. 1973, M.B.A. 1976, California State University, Sacramento; D.B.A. 1980, University of Tennessee, Knoxville
WINK, Joan (1991), Associate Professor of Teacher Education; B.A. 1966, Yankton College, Yankton, South Dakota; M.A. in Spanish, 1982, M.Ed. in Educational Foundations and Administration, Bilingual Emphasis, 1985, University of Arizona; Ph.D. 1991, Texas A. \& M. University
WOLD, John T. (1970), Professor of Political Science; B.A. 1965, California Lutheran College; M.A 1968, Ph.D. 1972, Johns Hopkins University
WOLF, Steven J. (1993), Assistant Professor of Botany; B.A. 1974, State University of New York at Albany; M.S. 1977, Ph.D. 1981, University of Alberta
YASUI, Roy Y. (1971), Professor of Education and Geology; B.Ed. 1964, University of Alberta; M.S. 1965, Ph.D. 1967, University of Oregon
YOUNG, Thomas J. (1981), Interim Special Assistant to the President for Affirmative Action; Professor of Journalism/Mass Communication; B.A. 1970, California State University, Long Beach; M.S. 1971,Illinois State University; Ph.D. 1975, University of Oregon

YOUNG, W. Andraw (1989), Assistant Professor of Philosophy; B.A. 1981, University of California, Santa Cruz; M.A. 1986, Ph.D. 1988, Vanderbilt University
YOUNGBLOM, Janey H. (1990), Associate Professor of Biological Sciences; M.A, 1977, M.S. 1978, Rutgers University; Ph.D. 1987, University of Minnesota, Minneapolis
ZARLING, Raymond L. (1983), Professor of Computer Science; B.A. 1967, Luther College, Decorah, Iowa; M.A. 1968, University of Michigan; Ph.D. 1976, University of North Carolina
ZHANG, Lu Rose (1994), Assistant Professor of Physics; B.S. 1982, ECNU, China; M.S. 1987, Mississippi State University; Ph.D. 1992, University of California, Davis

## Emeritus Faculty

AAMODT, Melvin H. (1970), Professor of Human Geography, Emeritus; B.A. 1958, Brigham Young University; M.A. 1960, University of Wisconsin; Ph.D. 1968, Indiana University
BANKS, Amberse M. (1978), Lecturer in Mathematics, Emeritus; B.S. 1950, California State University, Fresno; M.S. 1958, Emory University; M.S. 1970, Westem Washington University
BRUGGMAN, Joseph E. (1960), Professor of Music, Emeritus; B.A. 1941, San Jose State University; M.A. 1947, Ed.D. 1949, Columbia University
CASWELL, John E. (1960), Professor of History, Emeritus; B.A. 1934, M.A. 1937, University of Oregon; Ph.D. 1952, Stanford University
CHANG, Shang-Wang (1969), Professor of Mathematics, Emeritus; B.E. (Engineering) '1947, Tohuku University, Japan; M.S. 1961, Kansas State Teachers College; Ph.D. 1969, Iowa State University
COLE, James C. (1964), Professor of Education, Emeritus; A.B. 1947, M.A. 1948, Stanford University; Ed.D. 1956, Teachers College, Columbia University
CONANT, Ripchard D. (1969), Professor of Physical Education, Emeritus; A.B. 1955, Occidental'College; M.S. 1956, University of California, Los Angeles; Ph.D. 1969, University of Oregon
GALLOWAY, R. Dean (1960), Director of the Library, Emeritus; A.B. 1947 Humboldt State University Conservatory; M.S. 1950, University of Southern California
GOLDSMITH, W. Mack (1966), Professor of Psychology, Emeritus; A.B. 1957, Ripon College; Ph.D. 1966, Cornell University
GOODWIN, James M. (1968), Professor of Physics, Emeritus; B.S. 1958, Pennsylvania State University; M.S. 1964, Ph.D. 1968, University of Washington
GRAVES, Jack A. (1969), Professor of Education, Emeritus; B.A. 1953, Arizona State University; M.A. 1961, Ed.D. 1968, University of California, Berkeley
GRILLOS, Steve J. (1965), Professor of Botany, Emeritus; B.S. 1951, University of Denver; M.S. 1952, University of Wyoming; Ph.D. 1956, Oregon State University
HABASHI, Zaki I. (1965), Professor of Physical Education, Emeritus; B.S. 1944, Higher Institute of Physical Education, Cairo, U.A.R.; M.A. 1957, University of Wyoming; LL.B. 1962, University of Alexandria, U.A.R.; Ed.D. 1961, University of Colorado
HANNA, Charles C. (1977), Professor of Education, Emeritus; B.A. 1955, Gustavus Adolphus College; M.S. 1960, Mankato State College; Ed.D. 1969, Montana State University
HANNY, James K. (1966), Professor of Physical Education, Emeritus; B.A. 1949, M.A. 1957, University of the Pacific; Ed.D 1972, Laurence University

HAYES, William H. (1971), Professor of Philosophy, Emeritus; B.A. 1947, Columbia College, Columbia University; M.A. 1952, Ph.D. 1967, University of California, Berkeley
HINKSON, Jimmy W. (1970), Professor of Biochemistry/General, Emeritus; B.S. 1956, M.S. 1958, Brigham Young University; Ph.D. 1962, Indiana University

JENSEN, James P. (1961), Professor of Language and Literature: English, Emeritus;B.A. 1953, M.A. 1957, Ph.D. 1964, University of Washington
JOHNSON, Jacqueline B. (1976), Professor of Nursing, Emeritus; B.S. 1949, Adelphi University; M.S. 1962, St. John's University, Jamaica, New York; Ed.D. 1981, University of San Francisco
KOTTKE,FrederickE. (1963), Professor of Economics, Emeritus; B.S. 1952,Pepperdine College; M.A. 1957, Ph.D. 1960, University of Southern California
MARIA, Narendra L. (1968), Professor of Mathematics, Emeritus; B.A. 1948, M.A. 1949, Punjab University, India; Ph.D. 1968, University of California, Berkeley
MORICONI, R. J. (1968), Professor of Education, Emeritus; A.B. 1955, M.A. 1957, Stanford University; Ed.D. 1967, University of Florida
NELSON, Wayne E. (1970), Professor of Physical Education, Emeritus; B.S. 1951, M.S. 1957, University of Wisconsin; Ed.D. 1970, University of New Mexico
NORTON, Max C. (1961), Professor of Communication Disorders, Emeritus; B.A. 1951, M.A. 1955, University of the Pacific; Ph.D. 1962, University of Denver

PAPAGEORGE, Andrew J. (1984), Professor of Management, Emeritus; B.S. 1943, U.S. Naval Academy; M.B.A. 1954, Stanford University; Ph.D. 1967, University of California, Los Angeles
PAPGEORGE, Elizabeth-Anne (1985), Professor of Elementàry Education, Emeritus; B.A. 1954, Suffolk University, Boston; M.Ed. 1960, Boston University; Ed.D. 1973, College of William and Mary
PARKER, J. Carlyle (1963), University Archivist, Emeritus; A.B. 1957, Brigham Young University; M.L.S. 1958, University of California, Berkeley
RUSHDOONY, Haig A. (1961), Professor of Education, Emeritus; A.B. 1949, M.A. 1953, San Francisco State University; Ed.D. 1961, University of california, Berkeley
SCHWARCZ, Ervin H. (1967), Professor of Physics, Emeritus; B.S. 1945, Ohio State University; M.S. 1948, Ph.D. 1955, University of Michigan
SMITH, Priscilla R. (1968), Professor of Education, Emeritus; A.B. 1941, John R. Stetson University; M.Ed. 1955, National College Education; Ed.D. 1963, University of Denver
SMURR, J. W. (1967), Professor of History, Emeritus; B.A. 1950, M.A. 1951, University of Montana; Ph.D. 1960, Indiana University
STENZEL, David B. (1961), Professor of History, Emeritus; Diploma 1950, University of Vienna; B.S. 1951,Georgetown Uñiversity; M.A. 1954, Ph.D. 1957, University of California, Berkeley
SWAIN, Lorna M. (1961), Professor of Education, Emeritus; A.B. 1937, University of California, Berkeley; M.A. 1954, Humboldt State University; Ed.D. 1960, Stanford University

## Appendix A

## Eligibility Index Table for California High School Graduates or Residents of California

Current (1995-96) Eligibility Index (SAT I Tests taken prior to April 1995)
See next page for revised SAT I Eligibility Index.

| GPA | ACT score | SATI score | GPA | $\begin{gathered} \text { ACT } \\ \text { score } \end{gathered}$ | SATI score | GPA | ACT score | SATI score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Above 3.00 qualifies with any score |  |  |  |  |  |  |  |  |
| 2.99 | 10 | 410 | 2.65 | 17 | 680 | 2.31 | 24 | 960 |
| 2.98 | 10 | 420 | 2.64 | 17 | 690 | 2.30 | 24 | 960 |
| 2.97 | 10 | 430 | 2.63 | 17 | 700 | 2.29 | 24 | 970 |
| 2.96 | 11 | 440 | 2.62 | 17 | 710 | 2.28 | 24 | 980 |
| 2.95 | 11 | 440 | 2.61 | 18 | 720 | 2.27 | 24 | 990 |
| 2.94 | 11 | 450 | 2.60 | 18 | 720 | 2.26 | 25 | 1000 |
| 2.93 | 11 | 460 | 2.59 | 18 | 730 | 2.25 | 25 | 1000 |
| 2.92 | 11 | 470 | 2.58 | 18 | 740 | 2.24 | 25 | 1010 |
| 2.91 | 12 | 480 | 2.57 | 18 | 750 | 2.23 | 25 | 1020 |
| 2.90 | 12 | 480 | 2.56 | 19 | 760 | 2.22 | 25 | 1030 |
| 2.89 | 12 | 490 | 2.55 | 19 | 760 | 2.21 | 26 | 1040 |
| 2.88 | 12 | 500 | 2.54 | 19 | 770 | 2.20 | 26 | 1040 |
| 2.87 | 12 | 510 | 2.53 | 19 | 780 | 2.19 | 26 | 1050 |
| 2.86 | 13 | 520 | 2.52 | 19 | 790 | 2.18 | 26 | 1060 |
| 2.85 | 13 | 520 | 2.51 | 20 | 800 | 2.17 | 26 | 1070 |
| 2.84 | 13 | 530 | 2.50 | 20 | 800 | 2.16 | 27 | 1080 |
| 2.83 | 13 | 540 | 2.49 | 20 | 810 | 2.15 | 27 | 1080 |
| 2.82 | 13 | 550 | 2.48 | 20 | 820 | 2.14 | 27 | 1090 |
| 2.81 | 14 | 560 | 2.47 | 20 | 830 | 2.13 | 27 | 1100 |
| 2.80 | 14 | 560 | 2.46 | 21 | 840 | 2.12 | 27 | 1110 |
| 2.79 | 14 | 570 | 2.45 | 21 | 840 | 2.11 | 28 | 1120 |
| 2.78 | 14 | 580 | 2.44 | 21 | 850 | 2.10 | 28 | 1120 |
| 2.77 | 14 | 590 | 2.43 | 21 | 860 | 2.09 | 28 | 1130 |
| 2.76 | 15 | 600 | 2.42 | 21 | 870 | 2.08 | 28 | 1140 |
| 2.75 | 15 | 600 | 2.41 | 22 | 880 | 2.07 | 28 | 1150 |
| 2.74 | 15 | 610 | 2.40 | 22 | 880 | 2.06 | 29 | 1160 |
| 2.73 | 15 | 620 | 2.39 | 22 | 890 | 2.05 | 29 | 1160 |
| 2.72 | . 15 | 630 | 2.38 | 22 | 900 | 2.04 | 29 | 1170 |
| 2.71 | 16 | 640 | 2.37 | 22 | 910 | 2.03 | 29 | 1180 |
| 2.70 | 16 | 640 | 2.36 | 23 | 920 | 2.02 | 29 | 1190 |
| 2.69 | 16 | 650 | 2.35 | 23 | 920 | 2.01 | 30 | 1200 |
| 2.68 | 16 | 660 | 2.34 | 23 | 930 | 2.00 | 30 | 1200 |
| 2.67 | 16 | 670 | 2.33 | 23 | 940 | Below 2.00 does not qualify for regular admission |  |  |
| 2.66 | 17 | 680 | 2.32 | 23 | 950 |  |  |  |

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 <br> Revised (1995-96) Eligibility Index (Reflects recentering of SAT I Tests taken April 1995 and thereafter) 

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

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

## Appendix $B$

## History of Calendar Changes

From September 1960 through summer 1965, the University operated on the semester system, each semester being approximately 16 weeks in length.

In September, 1965, the University converted to the quarter system, each quarter being about 11 weeks in length.

Beginning with the 1973 Summer Session, the.University returned to the semester system.
In September 1973, the University adopted a 4-1-4 calendar which provides for a 13-week Fall Semester, a one-month Winter Term, and a 13 -week Spring sèmester.

Semester units can be converted to quarter units by multiplying by $11 / 2(4$ semester units $x$ $11 / 2=6$ quarter units). Quarter units are converted to semester units by multiplying by $2 / 3$ ( 9 quarter units $\times 2 / 3=6$ semester units).

## Appendix C

## Determination of Residence for Non-resident Tuition Purposes

The campus Admissions and Records Office determines the residence status of all new and returning students for non-resident tuition purposes. Responses to the Application for Admission and, if necessary, other evidence furnished by the studentare used in making this determination. A student who fails to submit adequate information to establish a right to classification as a Califormia resident will be classified as a nonresident.

The following statement of the rules regarding residency determination for non-resident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by The CaliforniaState University is found in California Education Code Sections 68000-68090, 68121, 68123, 68124, and 89705-89707.5, and in Title 5 of the California Code of Regulations, Sections 41900-41912. A copy of the statutes and regulations is available for inspection at the campus Admissions and Records Office.

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

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

In general, an unmarried minor (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of abode. The residence of an unmarried minor who has a parent living cannot be changed by the minor's own act, by the appointment of a legal guardian or by the relinquishment of a parent's right of control.

A married person may establish his or her residence independent of his or her spouse.
An alien may establish his or her residence, unless precluded by the Immigration and Nationality Act fromestablishing domicile in the United States. An unmarried minor alien derives his orher residence from the parent with whom the minor maintains or last maintained his or her place of abode.

Non-resident students seeking reclassification are required by law to complete a supplemental questionnaire concerning financial independence.

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

Quarter term campuses
Fall September 20
Winter January 5
Spring Aprill 1
Summer July 1

Semester term campuses
Fall September 20
Winter January 5 (Stanislaus only)
Spring January 25

## 520 / Appendixes

Questions regarding residence determination dates should be directed to the campus Admissions and Records Office which can give you the residence determination date for the term for which you are registering.

There are exceptions from non-resident tuition, including

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18 , the exception continues for one year to enable the student to qualify as a resident student.
2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time.
3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year.
4. Dependent children and spouses of persons in active military service stationed in California on the residence determination date. The exception, once attained, is not affected by retirement or transfer of the military person outside the state.
5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. Effective January 1, 1994, this exception continues until the miltary personnel has resided in the state the minimum time necessary to become a resident.
6. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous residence is maintained at an institution.
7. Graduates of any school located in California that is operated by the Unted States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.
8. Certain credentialed, full-time employees of California school districts.
9. Full-time State University employees and their children and spouses; State employees assigned to work outside the State and their children and spouses. This exception applies only for the minimum time required for the student to obtain Califormia residence and maintain that residence for one year.
10. Certain exchange students.
11. Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties.
Any student, following a final campus decision on his or her residence classification only, may make written appeal to:

The California State University
Office of General Counsel
400 Golden Shore
Long Beach, Califoria 90802-4275
within 120 calendar days of notification of the final decision on campus of the classification. The Office of General Counsel may make a decision on the issue, or it may send the matter back to the campus for further review. Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as non-residents and payment of non-resident 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 non-residents, and non-resident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions and Records Office. Applications for a change in classification with respect to a previous term are not accepted.

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

## Appendix D <br> Procedure for the Establishment or Abolishment of a Student Body Fee

The law governing The California State University provides that a student body fee may be established by student referendum with the approval of $2 / 3$ of those students voting. The Student Body Fee was established at CSU Stanislaus by student referendum on November 19, 1987. The same fee can be abolished by a similar $2 / 3$ approval of students voting on a referendum called for by a petition signed by $10 \%$ of the regularly enrolled students (California Education Code, Section 89300). The level of the fee is set by the Chancellor. An increase in the student body fee may be approved by the Chancellor only following a referendum on the fee increase approved by a majority of students voting. Student body fees support a variety of cultural and recreational programs, child care centers, and special student support programs.

## Appendix E

## Refund Regulations

Refunds are not automatic. Whether a fee may be refunded and the circumstances under which a fee or any part of a fee may be refunded vary depending on the particular fee involved. Requirements governing refund may include such matters as the reason for seeking a refund, the number of days of instruction which have elapsed before application for refund is made, and the degree to which the campus has provided the services for which the fee has been charged.

Written application for refund of fees must be made on the Request for Refund form available from the Admissions and Records Office. The form must be completed and submitted prior to the Registration Calendar deadline. Refunds are considered only after a student files a Withdrawal Form at the Admissions and Records Office, or after submission of an Add/Drop Form which places a student in a lower fee category, or when a student who paid full-time fees obtains no more than 6.0 units. Refunds resulting from a change of program will be based on the date the Add/Drop Form is processed by the Records Office. Refunds requested later than 14 calendar days after the commencement of instruction will be considered only in the case of death, medical disability, or compulsory military service. Appropriate documentation supporting the Request for Refund must be attached to the form. Students are responsible for making sure they have met all administrative deadlines with all affected University departments including facuity, School or College, Admissions \& Records Office, Financial Aid Office, Housing Office, Public Safety, and State Accounting Office. Students may not rely on anyone else to complete the necessary refund procedures on their behalf.

Fees which may not be refunded include:

1. Late registration fee.
2. The student body (ASI - Associated Students Inc.) organization fee, instructionally related activities fee (IRA), and student body center fee (University Union) except upon complete withdrawal from all classes within the first 14 days of instruction.

Fees which may be refunded include:

1. A fee collected in error.
2. State University fee, the student body (ASI - Associated Students Inc.) organization fee, instructionally related activities fee (IRA), and student body center fee (University Union) upon complete withdrawal'within the first 14 days of instruction from the campus except for $\$ 5.00$ which shall be retained from the student services fee to cover the cost of registration in all cases other than those mentioned in number 4 below.
3. The difference between the two applicable student services fees ( 6.0 units or less versus more than 6 units), less $\$ 5.00$ if the unit load of the refund applicant is reduced to a lower fee category not later than 14 days following the day of the term when instruction begins.
4. Any fee, other than the application fee, paid by a refund applicant unable to continue a course because of a campus rule, compulsory military service, death, or physical disability. In each such case, the circumstances concerning the inability to contunue shall be stated on the application for refund and supported by attaching appropriate documentation.
5. Application for admission fees shall be refunded only upon satisfactory proof that the applicant was unable to begin the term with respect to which the application was made by reason of the student's death, physical disability, or compulsory military service.
6. All or part of a fee, other than the state university fee (SUF), the student body (ASI - Associated Students Inc.) organization fee, instructionally related activities fee (IRA), and student body center fee (University Union), a summer session tuition fee, or an extension course tuition fee, not eamed by the Trustees of the California State University system.
7. Special session tuition fees, in accordance with the allowable formula. For more information regarding refunds for special sessions, contact the University Extended Education Office at (209) 6673111.

For a student who is attending CSU, Stanislaus for the first time, and ONLY for the first term of attendance, AND is receiving Title IV financial aid assistance, the refund of fees and charges shall be equal to the portion of the period of enrollment for which the student has been charged that remains on the last day of attendance by the student, rounded downward to the nearest ten percent of that period, less any unpaid charges owed by the student for the period of enrollment for which the student has been charged, and less a reasonable administrative fee not to exceed the lesser of five percent of the fees and charges to be refunded, or $\$ 100$. No fees shall be refunded when the date of student's withdrawal is after the 60 percent point in the period of enrollment for which the student has been charged. "The portion of the period of enrollment for which the student has been charged that remains" shall be determined by dividing the total number of weeks comprising the period of enrollment for which the student has been charged into the number of weeks remaining in that period as of the last recorded day of attendance by the student.

## Appendixes

Refunds of Duplicate Degree Tuition and Non-resident Tuition will be made in accordance with the following schedule if a Request for Refund is completed and submitted within the time limits specified. If the day of the term when instruction begins is any day of the calendar week other than Monday, or other than Tuesday if Monday falls on a holiday, the week shall be disregarded for the purposes of this section. In each case, the first week shall be deemed to begin on the following Monday.

| 1. | Tuition <br> Earned | Available <br> for Refund |  |
| :--- | :--- | :---: | :---: |
| 2. | Before or during the first week of the semester <br> During the second week of the semester | $0 \%$ | $100 \%$ |
| 3. | During the third week of the semester | $30 \%$ | $70 \%$ |
| 4. During the fourth week of the semester | $50 \%$ | $70 \%$ |  |
| 5. During the fifth week of the emester | $70 \%$ | $30 \%$ |  |
| 6. During the sixth week of the semester | $80 \%$ | $20 \%$ |  |
| 7. During the seventh week of the semester | $100 \%$ | $0 \%$ |  |

## Appendix $F$

## Average Annual Cost of Education and

## Sources of Funds per Full-time Equivalent Student

The 22 campuses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. The total state appropriation to the CSU for $1994 / 95$, (including capital outlay funding in the amount of $\$ 11,870,000^{*}$ ) is $\$ 1,565,020,000$. However, the total cost of education for CSU is $\$ 2,183,470,000$, which must provide support for a projected 250,000 full-time equivalent (FTES) students. The number of full-time equivalent students is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load).

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

Thus, excluding costs which relate to capital outlay (i.e., building amortization), the average cost of education per FTE student is $\$ 8,734$. Of this amount, the average student fee support per FTE is $\$ 2,106$. (The State University Fee, application fee, and nonresident tuition are included in the average costs paid by the students; indıvidual students may pay less or more than $\$ 2,106$, depending on whether they are parttime, full-time, resident, or nonresident students.)

Total cost of education

- State appropriation
- Student fee support
-Support from other sources

Average Cost Per Student

| Amount |  |  |
| :---: | :---: | :---: |
| $\$ 2,183,470,000$ | (FTE) | Percentage |
| $1,553,150,000$ | 68,734 | 100.0 |
| $526,521,000$ | 2,13 | 71.1 |
| $103,799,000$ | 415 | 24.1 |
|  | 4.8 |  |

*Does not include $\$ 17,000,000$ of special capital outlay bond funds for special repairs and deferred maintenance.

## Appendix G

## 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 a campus.
d. Obstruction ordisruption, 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 carnpus 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 atta 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 bazing 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, nonacademic 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 ablackjack, slingshot, billy, sandclub, sandbag, metalknuckles, 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.
6. 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.

## 524 / Appendixes

41303. Conduct by Applicants for Admission. Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302 . Admission or readmission may be qualified or denied to any person who, while a student, commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41032. 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.

## Appendix H

## Grade Assignment and Grade Appeal Procedures

## Introduction

The grade assignment and grade appeal procedures of Califomia State University, Stanislaus are based upon the following premises:

1. An important duty of teaching faculty is the timely and accurate evaluation of student work and the assignment of an appropriate grade.
2. It is the responsibility of qualified faculty to assign a grade when the instructor of record does not do so.
3. By order of the Chancellor's Office, the Senate of CSUS is responsible for providing students a grade appeal procedure.
4. There is a presumption that grades assigned by faculty members are correct. Thus, the burden of proof rests with the individual who is appealing.
5. Appeal procedures are available only for review of alleged capricious grading and not for review of the judgment of an instructor in assessing the quality of a student's work. In absence of capricious grading, the grade determined by the instructor of record is final. Capricious grading, as that term is used herein, constitutes any of the following:
a. Instructor failure to notify students as to the basis of grade determination in a clear and timely manner.
b. The assignment of a grade by a substantial departure from the instructor's previously announced standards.
c. The assignment of a grade on some basis other than the student's performance in the course.
d. Discrimination or prejudice.
e. Error in calculating the grade.
f. Arbitrary grade assignment (the lack of consistent and equitable standards for grade assignment).

The grade appeal shall be dismissed by the Grade Appeal Committee if:

- The allegations would not constitute capricious grading, or
- The only disagreement is with the instructor's grading standards, or
- The appeal was not timely, or
- The student has not provided the instructor with written notification.

6. Students who can demonstrate a reasonable doubt about the correctness of an assigned grade deserve access to a due process hearing before an appropriate body and, when justified, deserve to receive a grade correction.

## Procedures

## Grade Assignment

1. Reporting Grades. At the end of each term instructors are required to submit grade reports to the Admissions and Records Office within 72 hours after each final examination period. The grades are recorded in writing and in the appropriate area on the Final Grade Report form. This form is prepared by computer printout and distributed to the faculty by the Admissions and Records Office. A cover sheet is attached giving the procedures to follow in reporting grades and the specific due dates. The Final Grade Report requires the instructor's signature and the date. Reports are accepted only from the instructor, the department secretary, or other duly authorized department representatives.
2. If the instructor of record fails to assign a grade within 10 working days after grades are due, the department chair shall appoint two (2), appropriate faculty members and these three persons will jointly determine the grade. The department chair will be vested with the authority and required to inform the Admissions and Records Office in writing to record the grade.
3. If the chair is the instructor of record, the appropriate School/College Dean or his/her designee shall assume the responsibility normally discharged by the chair.

## Change of Grade by the Instructor of Record

Grade chănges are submitted to the Admissions and Records Office by the instructor on the Change of Grade Card. The appropriateness of the instructor's grade change is determined by the department chair whose signature is required on the Change of Grade Card, in addition to the instructor's signature. The Change of Grade Card is accepted only from the instructor, the department secretary, or other duly authorized department representative. There is no time limit imposed for such grade changes.

## Grade Appeal Policy and Procedures

1. If a student believes a grade assigned is incorrect, the student must file with the instructor a written statement of appeal within the first four weeks of the immediately following fall or spring semester. This appeal must detail and document the compelling reason(s) which form the basis for the student's contention that the assigned grade is incorrect. The instructor will respond in writing, within 15 working days on receipt of the appeal, indicating either approval or denial of the appeal. (If the appropriate School/College Dean or his/her designee judges that the instructor of record is inaccessible, the student may initiate the appeal with the department chair.)
2. In the event the instructor denies the appeal or fails to respond in writing, and the student wishes to pursue the matter further, the student shall submit the written appeal to the department chair with any further clarifications and/or contentions the student chooses to add to the original appeal. This action must be taken within 15 working days of the time the instructorinforms the student of the denial. The department chair will, on receipt of the written appeal from the student, constitute a Grade Appeal Committee within 15 working days.
3. The Grade Appeal Committee shall be appointed by the chair in consultation with the student and instructor and consist of one faculty member from the involved department, one faculty member from outside the involved department, and the President of the Associated Students or his/her designee. The department chair shall, in consultation with the instructor and student, appoint the chair of the Grade Appeal Committee.
4. The duties of the Grade Appeal Committee shall be completed within 15 working days from the date constituted. This committee shall be provided all prior written correspondence from the student and instructor related to the grade appeal.
5. The Committee will review the written documents and take one of the following actions:
a. judge that the appeal has no merit and so inform the student and instructor in writing, in which case the matter is ended, or
b. judge that there is reasonable doubt regarding the correctness of the grade and, in this event, initiate a hearing.
6. In the event a hearing is initiated, the Committee shall investigate and discuss the matter with the involved student and instructor. Both the student and instructor shall be entitled to be present throughout the hearing and to present evidence, including testimony by other persons. The student and instructor may be accompanied by a person from the University faculty or student body to assist them in presenting evidence. The hearing shall not be open to the public. At the close of the hearing, the Committee shall deliberate privately. The chair of the Grade Appeal Committee shall assure that the following procedures are employed in the conduct of the hearing:
a. Efforts may be made to resolve the matter by extra-procedural settlement at any time.
b. The student shall first make an opening statement by presenting evidence which the student believes constitutes legitimate grounds for the grade appeal.
c. After the student has presented his/her evidence, the Committee may agree to terminate the hearing, if the evidence presented does not constitute legitimate grounds for the grade appeal.
d. After the student presents evidence in support of the grade appeal, the instructor may present rebuttal evidence.
e. Following the private deliberations of the Committee, the Committee chair shall, in writing, inform the student, instructor, and department chair of their findings. If the Committee finds that there is a compelling reason to approve the grade appeal, the instructor is expected to change the grade to the grade recommended by the Committee.

## 526 / Appendixes

f. In the event the instructor chooses not the change the grade, the department chair shall be vested with the authority and required to inform the Admissions and Records Office in writing to change the original grade to the grade recommended by the Committee. The transcript shall reflect that the grade was changed as a result of administrative action.
7. If the department chair is the instructor of record, or serves in lieu of the instructor, the appropriate School/College Dean or his/her designee shall assume the responsibilities normally discharged by the chair.
8. In the event the student or instructor alleges that improper grade appeal procedures were employed, the appropriate School/College Dean or his/her designee shall investigate and take corrective action, if improprieties have occurred.
9. The Committee is not authorized to reprimand or otherwise take disciplinary action against the instructor. Evidence put before the Committee shall be admissible in any disciplinary proceedings which may thereafter be undertaken against the instructor, but the disciplinary body shall make an independent determination of whether that evidence and any other information before that body constitutes sufficient proof of the conduct charged.
10. None of the established procedures available to the instructor to raise grievances before the Faculty Affairs Committee or through CSU grievance procedures shall be abridged or affected by the actions of the Committee.
11. The Provost/Vice President for Academic Affairs or his/her designee shall annually provide a written summary of grade appeals to the CSUS Academic Senate and President.

Specific questions regarding Grade Appeal Procedures should be referred to the Associate Vice President for Academic Affairs, located in the Library Building, Room 175; or call (209) 667-3082.

## Appendix I

## 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) and California Education Code Section 67100 et seq., set out requirements designed to protect the privacy of students concerning their records maintained by the campus. Specifically, the statute and regulations govern access to student records maintained by the campus, and the release of such records. In brief, the law provides that the campus must provide students access to records directly related to the student and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. The right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes and the regulations on campus. Copies of these policies and procedures may be obtained at the Records Office or from the Vice President for Student Affairs. Among the types of information included in the campus statement of policies and procedures are: 1) the types of student records and the information contained therein; 2) the official responsible for the maintenance of each type of record; 3) the location of access lists which indicate persons requesting or receiving information from the record; 4) policies for reviewing and expunging records; 5 ) the access rights of students; 6 ) the procedures for challenging the content of student records; 7) the cost which will be charged for reproducing copies of records; and 8) the right of the student to file a complaint with the Department of Education. An office and review board have been established by the Department to investigate and adjudicate violations and complaints. The office designated for this purpose is: The Family Educational Rights and Privacy Act Office (FERPA), U.S. Department of Education, 330 "C" Street, Room 4511, Washington, D.C. 20202.

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

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

## Appendix J

## Institutional and Financial Assistance

The following information concerning student financial assistance may be obtained from the Director of Financial Aid/Scholarships, Library 110, (209) 667-3336.

1. student financial assistance programs available to students who enroll at CSU Stanislaus;
2. the methods by which such assistance is distributed among recipients who enroll at CSU Stanislaus;
3. the means, including forms, by which application for student financial assistance is made and requirements for accurately preparing such application;
4. the rights and responsibilities of students receiving financial assistance; and
5. the standards the student must maintain to be considered to be making satisfactory progress for the purpose of establishing and maintaining eligibility for financial assistance.

The following information concerning the cost of attending CSU Stanislaus is available from the Fiscal Affairs Office, (209) 667-3241.

1. fees and tuition (where applicable);
2. estimated costs of books and supplies;
3. estimates of typical student room and board costs and typical commuting costs; and
4. any additional costs of the program in which the student is enrolled or expresses a specific interest.

Information conceming the refund policy of CSU Stanislaus for the return of unearned tuition and fees or other refundable portions of costs is available from the Fiscal Affairs Office, (209) 667-3241.

Information concerning CSU Stanislaus policies regarding any refund due to the Federal Title IV student assistance programs as required by the regulations is available from the Fiscal Affairs Office, (209) 667-3241.

Information concerning the academic programs of CSU Stanislaus may be obtained from the Associate Vice President for Academic Affairs, Library 175b, (209) 667-3082 and may include:

1. the current degree programs and other educational and training programs;
2. the instructional, laboratory, and other physical plant facilities which relate to the academic program;
3. the faculty and other instructional personnel;
4. data regarding student retention at CSU Stanislaus and, if available, the number and percentage of students completing the program in which the student is enrolled or expressed interest; and
5. the names of associations, agencies, or governmental bodies which accredit, approve, or license the institution and its programs, and the procedures under which any current or prospective student may obtain or review upon request a copy of the documents describing the institution's accreditation, approval, or licensing.

Information regarding special facilities and services available to handicapped students may be obtained from Counseling, Career Development and Academic Support Services, Student Services Building, Room 111, (209) 667-3381.

## Appendix K <br> Sexual Harassment Policy and Procedures <br> Preamble

This policy provides a definition of sexual harassment. It specifies pre-disciplinary, pre-grievance procedures for report and resolving complaints of sexual harassment and recommends that an education program be initiated. Formal disciplinary and grievance procedures are already defined by existing policies, executive orders, codes, and collective bargaining contracts pertinent to University employees and students.*

No individual shall be subject to reprisal for using this policy, nor shall its use preclude subsequent disciplinary or grievance measures. All units of campus community are expected to comply with this policy.

Except as needed in processing the complaint, both the Sexual Harassment Advisors and Sexual Harassment Officers are required to maintain confidentiality in dealing with sexual harassment complaints.

[^25]
## Definition of Sexual Harassment

Sexual Harassment is one person's use of University authority, rank, or position to distort a University relationship by conduct which emphasizes anòther person's sexuality. Sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature are forms of sexual harassment when the person with authority, rank, or position:
a. Requires submission as an explicit or implicit condition of instruction, employment, or participation in any University activity; or
b. Distorts academic or personnel evaluations based on response to such conduct; or
c. Hinders performance by creating or allowing sexually intimidating, hostile, or offensive behavior to occur in the University or in a University-related setting.
Sexual harassment is unethical and unprofessional conduct, illegal, and against California State Stanislaus University policy. It may occur in written, spoken, physical, and visual forms.

The University will act to eliminate sexual harassment within its jurisdiction. A person with University authority, rank, or position must not use that power to create sexual pressure on someone else or on the workplace in general.

The University will evaluate each incident of alleged sexual harassment and apply appropriate remedies.

The University can dismiss employees or expel students for sexual harassment.
The University recognizes that any member of the campus community might be called upon to listen to a complaint of alleged sexual harassment. The listener should be objective and attentive, while discouraging use of names. No records should be kept, or should promises for specific action or final decisions be made. The listener should refer the complainant to a Sexual Harassment Advisor or to a University SexualHarassment officer. Complainants may go to the Sexual Harassment officer without first consulting a Sexual Harassment Advisor and may request an investigation at any time.

## Sexual Harassment Advisors (SHA)

All SHAs are volunteers. The Affirmative Action Officers shall arrange for a course for training of advisors. People who have successfully completed the course may serve as SHAs. Advisors will be available to serve a sources of initial information to any individual who has a complaint or who needs information about sexual harassment.

The names of the advisors shall be published at the beginning of each term. Advisors will have information about applicable laws, University policies and procedures, and options available for resolution of complaints. The advisors shall:
a. Serve as resource persons to individuals with complaints or inquires which may involve sexual harassment;
b. Advise the complainant regarding applicable University policies and procedures and outline various informal and formal options.
c. Inform the appropriate sexual harassment officer if a complaint is received which is deemed sufficiently serious to warrant further action.
Discussion between complainants and Sexual Harassment Advisors shall occur without a written complaint and without identification of the person bringing the complaint and shall not imply guilt or innocence. No written record of specific complaints or actions taken to this point in the procedures shall be kept.

However, a simple tally of the number and type of complaints shall be kept and reported to the appropriate Sexual Harassment Officer at the end of each term.

If further action is requested by the complainant, the SHA shall refer the complainant to a Sexual Harassment Officer (SHO) and explain the responsibilities and duties of those officers. In addition, SHAs have an obligation to notify SHOs when it appears the University should act, even if the complainant has not requested further action. The SHA is not authorized to notify either the accused or any supervisor of the accused.

## Sexual Harassment Officers (SHO)

Sexual Harassment Officers are presidential designees and in that capacity are accountable directly to the President. The SHOs shall be the Director of Personnel or designee, California State University Affirmative Action Officer, and Director of Student Services. SHOs are empowered to hear and evaluate each complaint of alleged sexual harassment and to attempt resolution. SHOs shall observe basic standards of due process and confidentiality in all actions.

The Sexual Harassment Officer shall pursue complaints promptly through the stages outlined below.
Any discussion, investigation, or action taken under these procedures shall not conflict with student grievance procedures, regulations goveming student affairs, collective bargaining contracts, and Executive Order 419.

## Pre-Formal Resolution of Complaints

The complainant may choose to enter into a pre-formal discussion or to request that the SHO conduct an investigation immediately. (See Item 2 following).

## 1. Pre-Formal Discussion

Pre-formal discussion or resolution does not require a written complaint. Any SHO will hear complaints, determine the remedy sought, and review options for resolution. The review shall include a discussion of applicable University polieies and procedures as well as external options for resolution. The SHO shall aid the complainant in identifying ways in which further harassment might be prevented. University policy requires that the Affirmative Action Office keep written records of all complaints. Such records need not identify complainant or alleged harasser by name nor shall they be part of any individual's official file at this stage of the procedure.

At the request of the complainant, the SHO may attempt to resolve the situation by taking some or all of the following steps:
a. Informing the alleged harasser directly or through an appropriate administrator or supervisor that a problem has been raised conceming that person's conduct.
b. Informing the alleged harasser of University policy regarding sexual harassment.
c.: Assisting the alleged harasser in identifying behaviors which might lead to complaints and ways in which that behavior might be changed to avoid further complaints.
d. Recommending that an oral or written warning or reprimand be issued to the alleged harasser.

## 2. Pre-Formal Investigation and Reporting

At the request of the complainant and upon receipt of a written and signed complaint, the approprate SHO shall initiate an investigation. Investigation procedures may include meetings at which both the complainant and the alleged harasser are present.

At the conclusion of the investigation, if further action is deemed warranted by the appropriate SHO , a writter report shall be submitted to the President. The report shall include a description of the facts, the remedy sought by the complainant, and recommendations for further action as deemed appropriate by the SHO. These recommendations shall be based upon the strength of evidence against the accused, the seriousness of action(s) that led to the complaint, and the remedy sought by the complainant. If formal disciplinary action is initiated, copies of the report shall be sent to the appropriate grievance/disciplinary action officer for faculty or staff or students, as well as to thé complainant and the accused.

Upon receipt of the SHO's Report, the President or appropriate grievance/disciplinary action officer shall:
a. Make every attempt to resolve the complaint to the satisfaction of both the complainant and the accused;
b. Inform both parties of procedures available to them should either be dissatisfied with the resolution of the complaint.
If such a meeting(s) results in a settlement, the terms of the settlement shall be put in writing and be signed by the complainant, the alleged harasser, and the SHO.

If either party is dissatisfied with actions taken up to this point, redress may be pursued through existing complaint, grievance, or disciplinary procedures in student policies and regulations, collective bargaining contracts, and Execative Order 419.

## Sexual Harassment/Educational Program

A University Program should be offered which defines the nature of Sexual Harassment, its negative psychological effects, its destructive impact on productivity, and its potential costs in the event of litigation. The availability of such a program should be appropriately publicized within the University.

## Appendix L

## Learning Disabled Student G.E.-Breadth Requirement Waiver

The following is a policy for waiving the General Education-Breadth (G.E.B) requirement in the area of Mathematics for a student with a learning disability or neurological disorder. Students for whom the G.E.B. Mathematics requirement is waived are required instead to complete additional course work in the G.E.B. Area B.1. Physical Science, or other selected G.E.B. area.

1. The student will have taken the Entry Level Mathematics test (ELM) with accommodations, such as additional testing time.
2. The student will have completed the appropriate developmental math course(s) with accommodations in both testing and instruction methods.
3. The student must be registered with Disabled Student Services (DSS).
4. The student must have adocumented learning disability which meets the established California State guidelines. The learning disability must be in areas that adversely affect the student's mathematical processing skills.
5. A student with a neurological disorder must be assessed by a qualified professional. The verification must specifically state that the disorder adversely affects the student's mathematical processing skills.

## 530/Appendixes

6. The student will submit a Petition for Waiver to the Coordinator of Disabled Student Services, and will attach a letter addressing the following:
a. Type of disability,
b. previous efforts made,
c. potential for success at the University,
d. support services utilized.
7. If a disability is identified, the Coordinator of the Disabled Student Services Program will address a request for waiver of the ELM requirement to the Associate Vice President for Academic Affairs, summarizing the evidence for the disability. The request may include the recommendation that the student substitute work in G.E.B. Area B.1. for the requirements in Area B.3. A waiver under this procedure is available only for the mathematics requirement under General Education and Breadth; it does not apply to a mathematics course which is a support or major requirement.
8. The Associate Vice President for Academic Affairs (or designee), in consultation with the Coordinator of Disabled Student Services, will decide whether the waiver is warranted. If the student wishes to appeal the decision, a request may be submitted to the Appeals Committee, which will review and approve or disapprove. The approved or disapproved request will be returned to the DSS Coordinator, who will notify the student. If the request is approved, the Associate Vice President for Academic Affairs will notify the Admissions and Records Office so satisfaction of the requirements under ELM and G.E.B. Area B.3. can be recorded.

## Appendix M

Learning Disabled Student Course Substitutions in the Major, Minor, or Concentration
The following is a policy for course substitutions in a student's major, minor, concentration, or specified prerequisites, for a student with a learning disability or neurological disorder.

1. The student shall be registered with Disabled Student Services (DSS).
2. The student must have a documented learning disability which meets the established California State guidelines. The learning disability must be in areas that adversely affect the student's ability to meet specific course requirements.
3. A student with a neurological or physical disorder must be assessed by a qualified professional. The verification must specifically state that the disorder adversely affects processing or physical skills necessary in the required course.
4. A student who perceives a need to substitute a course in the student's degree program or prerequisites shall submit a Petition for Waiver. The student shall attach a letter addressing the following issues:
a. Type of disability,
b. previous efforts made,
c. potential for success in major,
d. utilization of support services.
5. The petition shall go to the appropriate department chairperson, who, in consultation with the Coordinator of Disabled Student Services, shall make a decision on the appropriateness of the petition. If approved, the department shall notify the Admissions and Records Office in writing, with a copy to the Coordinator of Disabled Student Services.
6. The department's decision shall be considered final.
7. If a student decides to pursue a teaching credential or waiver program, he/she must realize that he/ she will still be required to demonstrate proficiency on state-mandated tests (e.g., CBEST, NTE) and in course work in the waiver program, (e.g. MATH 1030 and 1040).

## Appendix $\mathbf{N}$

College Board Advanced Placement Examination Policy

| AP Exam Title | Required Score | Course Equivalency | Units Allowed | G.E. <br> Area | LIBS <br> Area | Major Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art |  |  |  |  |  |  |
| History of Art | 3 | Art 2515 | 6 | C. 1 | C. 1 | Yes |
|  | 3 | Art 2520 |  | C. 1 | C. 1 | Yes |
| Studio Art | 3 | Art 1000 | 6 | C. 1 | C. 1 | Yes |
|  | 3 | Art 1100 |  | C. 1 | C. 1 | Yes |
| Biology | 3 | Biol 1010 | 8 | B. 2 | B. 2 | Yes |
| Biology Lab | 3 | Biol 1020 |  | B. 2 | B. 2 | Yes |
| Chemistry | 3 | Chem 1100 <br> No Lab Credit | 5 | B. 1 | B. 3 | Yes |
| Computer Science A | 3 | CS 1500 | 3 | None | None | Yes |
| Computer Science AB | 3 | CS 1500 | 6 | None | None | Yes |
|  | 3 | CS 2500 |  | None | None | Yes |
| Economics (Macro.) | 3 | Econ 2500 | 6 | D.2.a | None | Yes |
| Economics (Micro.) | 3 | Econ 2510 |  | D.2.a | None | Yes |
| English/Language \& Comp. | 3 | Engl 1001 | 3 | A. 2 | D.2.a | No |
| English/Literature \& Comp. | 3 | Engl 1001 | 6 | A. 2 | D.2.a | No |
|  | 3 | Engl 1010 |  | C. 2 | C. 4 | No |
| French Language | 3 | Fren 2010 | 8 | C. 3 | C. 6 | Yes |
|  | 3 | Fren 2020 |  | C. 3 | C. 6 | Yes |
| French Literature | 3 | None | 6 | C. 3 | C. 4 | No |
| German Language | 3 | Germ 2010 | 8 | C. 3 | C. 6 | No |
|  | 3 | Germ 2020 |  | C. 3 | C. 6 | No |
| German Literature | 3 | None | 6 | C. 3 | C. 4 | No |
| Govt. and Politics/Compar. | 3 | None | 3 | D.2.a | None | No |
| Govt. and Politics/U.S.* | 3 | PS 1201* | 3 | D.1.b* | A.1* | Yes* |
| History/European | 3 | None | 6 | D.2.a | None | No |
| History/United States | 3 | Hist 2600 | 6 | D.1.a | A. 2 | Yes |
| Latin/Virgil | 3 | FLAN 1090 | 6 | C. 3 | C. 6 | No |
|  | 3 | FLAN 1091 |  | C. 3 | C. 6 | No |
| Mathematics/Calculus AB | 3 | Math 1100 | 6 | B. 3 | None | No |
|  | 3 | Math 1410 |  | B. 3 | None | Yes |
| Mathematics/Calculus BC | 3 | Math 1410 | 6 | B. 3 | None | Yes |
|  |  | Math 1420 |  | None | None | Yes |
| Music Theory | 3 | Mus 1220 | 6 | None | None | Yes |
|  |  | Mus 1230 |  | None | None | Yes |
| Physics B | 3 | Consult Dept. | 6 | B. 1 | None | No |
| Physics C/Mechanics | 3 | Phys 2250** |  | B. 1 | None | Yes |
| Electricity \& Magnetism | 3 | Phys 2260** | 4 | B. 1 | None | Yes |
| Psychology | 3 | Psyc 2010 | 3 | D.2.b | A. 3 | Yes |
| Spanish Language | 3 | Span 2010 or 2011 | 8 | C. 3 | C. 6 | Yes |
|  |  | $\begin{gathered} \text { Span } 2020 \\ \text { or } 2015 \end{gathered}$ |  | C. 3 | C. 6 | Yes |
| Spanish Literature | 3 | None | 6 | C. 3 | C. 4 | No |

[^26]
## Index

## A

Academic: Advising, 46; Calendar, 1; Disqualification, 89; Probation, 66; Program, 14; Renewal, 68; Standards, 64
Acceptance and Evaluation of Credit, 34
Accounting, 410
Accreditation, 14, 19
ACT and SAT, 24
Adding and Dropping Courses, 56
Additional Baccalaureate Degree, 82
Address Change, 61
Administration, CSU Stanislaus, 11
Administrative Academic Disqualification, 89
Administrative Services Credentials, 447
Administrative Symbols, 64
Admission to the University, 22; Adult Reentry, 46; Adult Students, 29; Application Fee, 29; Catalog Rights, 71; Course Work Completed Ten Years Before Enrollment, 35; CSU Visitors Program, 29; First-time freshman, 24; Foreign Students, 27; Graduate Programs, 84; Health Screening, 24; Ineligible Undergraduates, 28; International Students, 27; Postbaccalaureate, 85; Procedures and Policies, 22; Provisional, 26; Returning Students, 33; Students with Disabilities, 26; Subject Requirements, 25; Supplementary Admission Criteria, 24; Test Requirements, 24; TOEFL Requirement, 28, 86; Transcripts Required, 32; Transfer, 35; Undergraduate requirements, 24; Undergraduate Transfer, 27; Veterans, 36
Adult Reentry, 46
Adult Students, 29
Adv. Studies in Education, Department of, 442
Advanced Credentials, 445
Advanced Placement Exam, 34
Advanced Placement Program, 26
Advising, Academic, 46
Advisory Board, 11
African-American Studies, 213
Aging. See Gerontology
Aid, Financial, 44
Alan Pattee Scholarships, 45
ALS Department Chairs, 98
ALS Program Directors or Coordinators, 98
Anthropology, 100; Cultural, 100; Physical, 101
Appeal of Disqualification Status, 89
Appeal of University Requirements, 62

Appendixes, 517; Calendar Changes, History of, 519; College Board Advanced Placement. Exam Policy, 531; Cost of Education, 522; Determination of Residence, 519; Disabled Students' G.E.B. Waiver, 529; Disabled Students' Course Subtitution, 530; Eligibility Index Table, 517, 518; Grade Assignment and Appeal, 524; Institutional and Financial Assistance, 527; Privacy Rights of Students, 526; Refund Regulations, 521; Sexual Harassment Policy, 527: Student Body Fee, Establishment/Abolishment, 520; Student Discipline, 522
Application Acknowledgment, 23
Application Fee, 29, 41
Application Filing Periods, 23
Application for Graduation, 93
Application Procedures: Graduate, 85; Undergraduate, 23
Applied Concentration in the Geography Major, 217
Applied Physics, 336
Applied Studies, 109; (Liberal Studies), 258
Archaeology, 101
Art, 111; Art History, 113; Printmaking
Certificate Program, 115; Studio, 111
Arts, Letters, and Sciences, College of, 98
Arts-Humanities (Liberal Studies), 259
Associated Students, Inc. (ASD), 52
Astronomy, 341
Attendance, Class, 53
Auditing Classes, 53
Average Annual Cost of Education, 522

## B

Baccalaureate Degree Requirements, 72
Bilingual Crosscultural, Language, and Academic De, 477; BCLAD, 477
Bilingual/Cross-Cultural: (Liberal Studies), 262
Biological Sciences, 122
Biology, 127
Black Studies, 213
Botany, 129
Breadth Requirements, 74
Business Administration, School of, 403; Accounting, 410; Bachelor of Science, 404; Computer Information, 431; Finance, 415; Management, 419; Marketing, 423; Master of Business Administration, 406; Master of Science in Business Admin., Managment, 408; Operations Management, 427

## C

Calendar, 1
Calendar Changes, History of, 519
California Articulation Number (CAN), 40
California State University System: Campuses,
7; Office of the Chancellor, 7; Trustees, 6
Cambodian. See FLAN
Campus Information Center, 18
Career: Counseling, 47; Days, 47; Development Programs, 46-48; Information Library, 47
Career Fair, 47
Catalog Orders, ii
Catalog Rights, 89
Catalog Rights/Catalog Year, 71
Center for Management Development and Research, 403
Certified Management Accountant Examination, 411
Certified Public Accountant Examination, 411
Challenge Examinations, 34, 54
Change of Address, 61
Change of Educational Objectives, 56
Changes in Rules and Policies, ii
Chemistry, 135
Chicano Studies, 212
Child Development, 143
Child Development Center (CDC), 152
Children's Center Permits, 148
Chinese. See FLAN
CLAD Certificate, 491
Class Attendance, 53
Class Schedule, ii
Classification: Full and Part Time, 60; Graduate, 61; Undergraduate, 60
Clear Multiple Subjects Credential, 482
Clear Single Subject Credential, 485
Coaching Certificate Program, 467
Cognitive Studies, 153
College Board Advanced Placement Examination Polic, 531
College of Arts, Letters, and Sciences, 98
Communication Studies, 158; Speech Communication, 159
Community Colleges: Transfer Credit from, 35
Comprehensive Examination, Graduate, 91
Computer Information Systems, 431
Computer Science, 167
Concentration in TESOL, 196
Concentration in the Teaching of Writing, 195
Concentrations. See specific discipline for requirements
Concurrent Enrollment, 29, 53
Continuing Baccalaureate Students, 85
Continuous Enrollment Requirement, 57

Cooperative Education Program, 38
Corrections, 174
Correspondence Courses, 35
Cost of Education, 522
Counseling and Career Development: School Credential, 450
Counseling Programs, 48
Course Changes, Adding or Dropping, 56
Course Level Identification, 97
Course Notations, 97
Course Numbering System, 97
Course Work Completed Ten Years Before Enrollment, 35
Courses in Progress, 32
Courses Repeated, 68
Credential Programs: Credential Waiver Program. See specific discipline for requirements. See specific discipline for réquirements
Credit, Acceptance of, 34
Credit by Examination, 34
Credit for Extension and Correspondence Courses, 35; for Military Service, 36; for Noncollegiate Instruction, 35; General Education, 53; Postbaccalaureate, 55; Transfer of, 34
Credit/No Credit Grading, 66
Criminal Justice, 173
Crosscultural, Language, and Academic Development, 477; CLAD, 477
CSU Application Filing Periods, 23
CSU Visitors Program, 29
Curriculum and Instruction: Multilingual Education, 490
Curriculum and Instruction: Reading, 490

## D

Debts Owed to the Institution, 43
Decision Support Systems Management, 432
Declaration of Degree Objectives, 56
Degree Programs in Stockton, 20
Degrees Offered, 71
Determination of Residence for Tuition Purposes, 519
Disability Nondiscrimination Policy, 62
Disabled Student G.E.B Requirement Waiver: Math G.E.B. Waiver, 529
Disabled Student Services Program, 26, 49
Disabled Students Policy, 439
Discrimination, 62
Disenrollment, 57
Disqualification, 66, 88
Division of Continuing and Extended Education, 20
Dormitory, 51

## 534 / Index

Drama, 180
Dropping and Adding Courses, 56
Duplicate Degree Tuition, 42

## E

Economics, 185
Education: Counseling, 452; Graduate Studies, 454; Instructional Technology, 455; Preliminary Administration, 450; Professional Administration, 451
Edücation, School of, 438; Advanced Credentials, 445; Advanced Studies in Education, 442; BCLAD (Southeast Asian Emphasis), 492; BCLAD (Spanish Emphasis), 495; Credential Programs, 440; Dept Chairs and Program Coordinators, 438; Master's Degrees, 438, 443, 468, 488; Multiple Subject Credentials (CLAD), 493; Physical Education and Health, 458; Single Subject Credentials, 496; Vocational Education, 501
Education, Special Ed, 455
Education: Graduate, 499
Educational Assistance for Veterans, 36
Educational Opportunity Program (EOP), 50
Educational Services, 46
Eligibility Index, 25, 517, 518
Emeritus Faculty, 515
Employers, On-Campus Recruiting, 47
English, 191
English as a Second Language (ESL), 33
English-Speech (Liberal Studies), 255
Enrollment in Courses, 39, 53, 57
Entomology, 124, 131
Environmental and Resource Studies, 207
Environmental Sciences, 124, 153, 209, 336
Ethnic Studies, 211
Ethnography, 101
Ethnology, 101
Evaluation and Acceptance of Credit, 34
Examinations: ACT and SAT, 24; Challenge Examinations, 54
Exceptional Children and Youth: (Liberal Studies), 263
Excess Units, 54
Exploration Geophysics, 225
Extended Education. See Continuing and Extended Education
Extension and Correspondence Course Credit, 35
Extension Course Registration, 33
Extension Programs, 35, 90

## F

Facility Reservations, 18
Faculty, 503

Faculty Mentor Program, 49
Fall Semester, 1
Fees, 41; Application, 41; Debts Owed Institution, 43; Non-Resident Tuition, 519
Filing Periods for Applications, 23
Final Examinations, Graduates, 91
Finance, 415
Financial Aid, 44
Financial Assistance, 527
First-time Freshman, 24
FLAN (Critical Foreign Languages), 285
Foreign Language: Subject Requirement, 88
Foreign Languages. See Modem Languages
Foreign Students: Admission Requirements, 27; Program, 49
Four-One-Four (4-1-4) Academic Year, 15
French: Bachelor of Arts Degree, 289; Degree Minor, 289; Liberal Studies Concentration, 290
Freshman Requirements, 24
Full/Part-time Classification, 60

## G

General Education, 53; Breadth Requirements, 74; Upper-Division, 77
General Faculty, 503
Genetics, 124
Geography, 216
Geology, 224
German: Degree Minor, 293; Liberal Studies Concentration, 293
Gerontology, 230
Grade Point Computation, 65
Grades: Academic Renewal, 68; Appeal Procedures, 62, 524; Assignment Procedures, 524; Credit/No Credit, 66; Reports, 61
Grading Options, 65
Grading System, 64
Graduate Classification, 61
Graduate Programs, 84; Admission Requirements, 85; Application Procedures, 85; Credit For Undergraduate Courses, 90; Disqualification, 88; Grade Requirements, 88; Outdated Course Work, 91; Probation, 88; Qualifying Examinations,
90; Second Master's, 93; Thesis/Project/
Exam, 91; Writing Proficiency, 87
Graduate Record Examinations (GRE), 90
Graduation Application, 72, 85, 93
Graduation, Honors at, 72, 93
Graduation Reqt in Writing Proficiency, 33, 197
Graduation Requirements (Catalog Rights), 71
Grievances, Student. See Petitions
Guidance Information System, 47

## H

Hardship Petitions, 28
Health: Center, 50; Insurance, 50; Professions, 37; Screening, 24; Services, 50
Health Concentration, 461
High School Advanced Placement Program, 26
History, 231
History of Calendar Changes, 519
HIV/AIDS Nondiscrimination Policy, 63
Hmong. See FLAN
Honors: at Entrance, 26; Graduation with,
72, 93; High School Courses, 25; List of
Students, 64; Program/Curriculum, 242
Housing, 51
Human Immunodeficiency Virus (HIV/AIDS), 63
Human Services Concentration, 391
Humanities, 78, 244

## I

Impacted Programs, 23; Supplementary Admission Criteria, 24
Incomplete Course Work, 59, 64
Individual Study Courses, 55
Ineligible Undergraduates, 28
Institute for International Studies, 17
Institutional and ${ }^{i}$ Financial Assistance, 527
Instructional Media Center, 17
Instructional Technology, 455
Insurance Requirement (International Student), 28
Intensive Leaming Experience (ILE), 33
Intercollegiate Athletics, 18
Intercollegiate Athletics Nondiscrimination Policy, 62
Interdepartmental Degree Program, 377
International: Relations, 235; Students Program,
49; Admission Requirements, 27; Studies, 380
International Baccalaureate, 34
International Studies Institute, 17
Internships, 38
Interpersonal Studies, 245
Intramural Sport Activities, 51

## J

Japanese, See FLAN
Job Fäir, Summer, 47
Journalism, 246
Junior Composition. See Writing Competency

## L

Latin. See FLAN
Latin American Studies, 248
Law (Prelaw), 343
Law Enforcement/Corrections, 175
Law Preprofessional Program, 38
Learning Handicapped Specialist Credential, 448
Leave of Absence, 57
Legal Referral Program, 48
Liberal Studies, 249
Liberal Studies (Multiple Subjects Waiver Program): Concentrations. See specific disciplines for requirements
Library, Vasche, 16
Linguistics, 103
Loans, Students, 44

## M

MA/MS Interdisciplinary Studies Program, 95

## Major, 80

Management, 419
Marine Biology, 125, 127
Marine Sciences, 266
Marketing, 423
Master of Social Work Program, 386
Master's Degree Program Requirements: Second Master's Degree, 93
Master's Degree Program Requirements, 86
Mathematical Computing Concentration, 277
Mathematics, 275
Mathematics Competency, 73
Mathematics Subject Matter Preparation
Program, 277
Mathematics-Sciences (Liberal Studies), 253
Measles and Rubella immunizations, 24
Medical College Admissions Test (MCAT), 38
Mentor Program, 49
Microbiology, 125, 131
Microelectronics, 334
Military Service, Credit for, 36
Minors, 82
Mission Statement, 9
Modern Languages, 285; FLAN (Critical
Foreign Languages), 285; French, 289; German, 293; Spanish, 297
Moss Landing Marine Laboratories, 266
Multicultural, 79
Multidisciplinary Studies, 302
Multilingual Education, 494
Multiple Majors, 82
Multiple Subjects: Teaching Credentials, 477
Music, 305

## N

Natural Science, 132
Non-Discrimination Policy, 62
Non-Resident Students, 519; Postbaccalaureate, 86
Numbering System, Course, 97
Nursing, 322

## 0

Objectives (Change of Major), 56
Office of the Chancellor, 7
Operations Management, 427
Operations Research/Statistics, 277
Organizational Communication, 158
Orientation Programs, 46
Outdated Course Work and Units, 91

## P

Part-time Status, 60
Pathfinders, 48
Personal Counseling, 48
Personal Growth Presentations, 48
Petitions, 62; Hardship, 28
Petroleum Geology, 225
Philosophy, 327
Physical Education and Health, 458
Physical Sciences, 332; Bachelor of Arts Degree, 334
Physics, 332, 337; Bachelor of Arts, 332; Bachelor of Science, 332
Placement, Career, 48
Placement File, 48
Plagiarism, 522
Planned Student Leaves, 58
Policies and Procedures, 53
Political Science, 344
Politics and Public Administration, 343
Portuguese, 296. See FLAN
Postbaccalaureate: Admission Requirements,
85, Application Procedures, 85; Credit,
55; Unclassified Student, 90
Prehistonc Archaeology, 101
Prelaw Courses, 348
Preparation for Preprofessional Studies, 37
Preprofessional Studies, 37, Prelaw; 38; Premedical and Health Services, 37
Privacy Rights of Students, 63, 526
Probation, 66, 88
Procedure for the Establishment or Abolition: of Student Body Fees, 520
Procedures for Application, Graduate, $85^{*}$
Program Unit Limits, 54
Project, Graduate, 91

Provisional Admission, 26
Psychology, 359; Behavior Analysis,
365; Counseling, 365; Developmental,
361; Experimental, 361; Master's Degrees, 363
Public Administration, 353; Graduate Studies, 353; Master of (MPA), 353
Public Safety, 18

## Q

Qualifying Examinations, 90

## R

Racial Discrimination, 63
Reading/Language Arts: Specialist Credential, 486
Records, Privacy Rights, 526
Recreation Concentration, 464
Recreational Sports Program, 51
Recruiting by Employers, 47
Reentry Students, Adult, 46
Refund Regulations, 521
Reinstatement, 67
Renewal, Academic, 68
Repeated Courses, 68, 90
Report Delayed, 65
Requirements: Freshman, 24; Graduation, 71; Subject, 25, 55
Residency Requirements, $519^{*}$
Residential Life Village, 51
Returning Students, 33
Rules and Policies, ii
Russian. See FLAN
Russian and East European Studies, 376

## S

SAT and ACT, 24
Satisfactory Progress Work, 60, 65
SBA Departments Chairs and Directors, 403
Schedule of Classes: Class Schedule, ii
Scholarship Standards, 66, 72
Scholarships, 45; Alan Pattee Scholarships, 45
School of Business Administration, 403
School of Education, 438
Second Baccalaureate Degree, 82
Second Master's Degree, 93
Servicemembers Opportunity,Colleges, 36
Severely Handicapped Specialist Credential, 448
Sex Discrimination, 62
Sexual Harassment Policy, 527, 530
Single'Subject Teaching Credential, 483
Small Business Institute (SBI), 404

Social Sciences, 377; International Studies, 380; Liberal Studies Concentration, 251; Teaching Credential, 385; Urban and Community Studies, 383
Social Security Number, 63
Social Work, Masters Program, 386
Sociology, 390
Space and Earth Sciences, 336
Spanish, 297; Bachelor of Arts Degree, 297; Degree Minor, 297; Liberal Studies Concentration, 298
Special Administrative Action, 67
Special Course Numbers, 97
Special Education, 455
Special Majors, Undergraduate, 81
Special Programs, 49
Speech Communication, 159
Spring Semester, 2
Student: Activities, 51; Assistant Program,
45; Body Fee, 520; Classifications,
60; Discipline, 522; Employment Service,
48; Government, 52. See also
ASI; Grievances, 62; Housing, 51; Life, 50, 51; Loans, 44; Privacy Rights, 63; Support Services, 50
Student Body Fee, Establish/Abolish, 520
Student Telephone Access Network (STAN), 61
Students with Disabilities, 26, 49
Studio Art, 111
Subject Requirements, 25, 55; Califomia Govt, State/Local (Title 5), 76; Challenge Examinations, 54; Foreign Language, 88; Substitution for Students with Disabilities, 26; U.S. History and Constitution (Title 5), 76

Summer Bridge Program (SBP), 50
Summer Job Fair, 47
Summer Sessions, 2, 33
Supplementary Admission Criteria, 24
Suspension, 522
Systems Analysis and Design, 432
Systemwide Tests Required of Most New Students, 33

## T

Teacher Fair, 47
Teaching Credential Programs, 476
Teacher Education, Department of, 476
Teaching English to Speakers of Other: Languages (TESOL), 192; Certificate, 194
Test of English as Foreign: Language (TOEFL), 28, 86
Test Requirements, 24
Testing Services, 49
Thesis, Graduate, 91

Transcripts, 32, 61, 85
Transfer: Admission as an Undergraduate, 27; of Credit from a Community College, 35
Trustees, California State University, 6

## U

Unauthorized Incomplete, 64
Undergraduate: Admission Requirements, 24; Application Procedures, 23; Classification, 60; Enrollment in Graduate Courses, 55; Programs, Graduate Credit, 90; Transfer, 27
University Advisory Board, 11
University Mission, 9
University Union, 52
Upper Division Writing Proficiency, 197
Upper-division General Education, 77
Urban and Community Studies, 383

## V

Validation of Outdated Course Work, 91
Veterans, 32, 36; Credit for Military Service, 36; Educational Assistance,
36; Servicemembers Opportunity Colleges,
36; Unit Load Requirement, 36; Veterans
Services, 36
Veterinary Medicine, 37
Visitors Program, CSU, 29
Vocational Education, 501

## W

Warrior Week, 51
Wellness Management Concentration, 462
Winter Term, 71
Withdrawal from Courses, 56, 65
Withdrawal From CSU Stanislaus, 59
Women's Studies, 398
Work Study Program, 44
Workshop Credit, 35
Writing Competency, 197
Writing Proficiency, 73
Writing Proficiency Requirement, 87; Graduation, 33
Writing Proficiency Screening Test, 73
Z

Zoology, 125, 132

tomodesto

## California State University, Stanisiaus

801 West Monte Vista Avenue
Turlock, California 95382
The California State University


[^0]:    $\dagger$ Applications for financial aid are accepted on an annual basis each year.

[^1]:    $\dagger$ Applications for financial aid are accepted on an annual basis each year.

[^2]:    ${ }^{1}$ Inquiries regarding the application of these policies should be directed to the English Department (L195) or the Advising Center (C116).
    ${ }^{2}$ Learning disability inquiries should be directed to the Learning Disability Coordinator (SSB118).

[^3]:    ${ }^{3}$ The College Board SAT and Achievement Tests were replaced by SAT I and SAT II respectively, beginning March 1994.
    ${ }^{4}$ ENGL 1001 enrollees will be subject to Writing Center Requirements.

[^4]:    ${ }^{5}$ An Entry Level Mathematics Workbook is available from the Kiva Bookstore or the Library to assist students in preparing for the ELM test.
    ${ }^{6}$ Students with learning disabilities related to mathematics should refer to Appendix $L$ for the Learning Disabled Student General Education Breadth Requirement waiver policy.
    ${ }^{7}$ The College Board SAT and Achievement Tests were replaced by SAT I and SAT II respectively, beginning March 1994.

[^5]:    * Students also may be subject to expulsion, suspension, and/or probation for other causes. See "Student Discipline," Appendix G of this catalog.

[^6]:    ${ }^{1}$ Subject and/or unit requirements may be fulfilled by the University's credit-by-examination procedure.
    ${ }^{2}$ Requirement may be satisfied partially by acceptable score on the CSU English Equivalency Examination. Area A.1, 2 and 3 should be completed before the junior year. Transfer students who have not completed Area A should do so during their first year in residence.
    ${ }^{3}$ Requirements may be satisfied partially by acceptable scores on the CLEP Natural Sciences General Examination.

[^7]:    ${ }^{4}$ Requirements may be partiaily satisfied by acceptable scores on a CLEP Subject Examination or a CSU mathematics test. (See Appendix L in the 1993-95 Catalog for Learning Disabled Student waiver.)
    ${ }^{5}$ Requirements may be satisfied partially by acceptable scores on the CLEP Humanities General Examination.

[^8]:    ${ }^{6}$ Requirements may be satisfied partially by acceptable scores on the CLEP Social Sciences General Examination.
    ${ }^{7}$ Students age 25 years or older at entry to CSU Stanislaus will not be held for this requirement.

[^9]:    * See "Liberal Studies" section for complete list of liberal studies concentrations. ** Upper-division program open to RNs only.

[^10]:    * These courses are acceptable for section 2.b.iii requirement for the major.
    (**) These courses are not offered on a yearly basis.

[^11]:    *CHEM 1100, which is a prerequisite for this course, can be taken in place of CHEM 1000 for those Liberal Studies students opting for the chemistry concentration.

[^12]:    * Majors should consult with instructor before enrolling.

[^13]:    *Most of these units will double-count in the major.

[^14]:    * A student who can demonstrate equivalent preparation may be exempt from four to eight units of the lower-division requirement.

[^15]:    $\dagger$ Only those students who can demonstrate native oral proficiency may enroll in these intermediate courses for native speakers.

[^16]:    * MUS 1000 and MUS 1190 may not apply toward the twenty units of the concentration if used to satisfy Liberal Studies Area C requirements.

[^17]:    * Available only to students in departmental internship program.

[^18]:    * This course meets the Title V requirements for a graduate project.
    **This degree is a planned future offering.

[^19]:    * Requires computer literacy

[^20]:    ** First Aid and CPR Certification are required before sitting for the NATA Certification Exam.

[^21]:    * Consent of Instructor Required

[^22]:    EDUC 5400 Teachers as Change Agents: Researchers and Writers (3 units). Topics will include training on planning and implementing in-services and staff development, curriculum design and evaluation, grant writing and writing for publications, technology, and community/parent relationships. Prerequisites: Teaching credential; consent of education adviser.

[^23]:    ${ }^{1}$ The degree program requires a minimum of 24 upper-division units in the major. All or a major portion of this credit will be awarded for work experience by the Board of Examiners for Vocational Teachers upon application by the student to the Bureau of Industrial Education, California State Department of Education; ("Swan Act". evaluation). If the student fails to obtain 24 units of credit through the "Swan" evaluation, the remaining units in the Vocational Education major are to be taken in regular California State University, Stanislaus upper-division courses or appropriate extension courses related to the student's interests, selected with the approval of the vocational education adviser.

[^24]:    ${ }^{2}$ A student must have obtained the clear Designated Subjects Teaching Credential in Vocational Education or a California Community College teaching credential in an approved subject matter area before graduating from the BVE degree program. Vocational teacher training completed by the applicant may be used toward electives. ${ }^{3}$ Degree Minor: Students must select a minor from those listed in the University catalog. Courses to meet the requirements for a minor must be arranged with a minor adviser (usually the department chair) in the department offering the minor.
    ${ }^{4}$ Included as electives are courses transferred by another college which are not used elsewhere in the degree program. Additional courses required to meet the minimum requirement for graduation ( 124 units) must be chosen in consultation with the vocational education adviser from among courses and programs throughout the University.

[^25]:    * If the physical safety of any University individual is in question, the President will act immediately, within the authority of Title 5, Section 41301, the Education Code Sec. 22505 or the Penal Code Sec. 626.4 to protect the threatened party. Formal proceedings may be initiated immediately by the President in consultation with the Sexual Harassment Officer(s), and the appropriate grievance/disciplinary action officer.

[^26]:    *) Does not include California State \& Local Govemment
    No Lab Credit

