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TWENTY YEARS OF SERVICE TO CALIFORNIA
CSUC/20
The California State University and Colleges

Cover photo by Monte Kruse
California State College, Stanislaus
Campus Map

BUILDING KEY

A  Art
AM  Amphitheatre
C  Classroom Bldg.
CY  Corporation Yard
D  Drama Building
DH  Dining Hall
E  Educational Services
FH  Field House
G  Gymnasium
HC  Health Center
IC  Innovative Center
ISB  Instructional Services Bldg.
ITV  Instructional TV Center
L  Library Building
M  Music Building
O  Observatory
S  Science Building
SUB  Student Union Bldg.
VP  Visitor Parking
YRH  Yosemite Resident Hall
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THE 4-1-4 AT CAL STATE STANISLAUS

California State College, Stanislaus is the first public, four-year institution of higher learning in California to adopt a 4-1-4 academic calendar. Response to the program, now beginning its ninth year, has been enthusiastic, especially to the wide variety of innovative courses offered.

Under 4-1-4, the academic year consists of two 13-week semesters and a month-long Winter Term beginning in January. Fall Semester ends before Christmas 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 unique structure of the 4-1-4 year provides greater opportunities for an innovative and challenging curriculum.

The most exciting 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 College's commitment to intellectual inquiry and creative pedagogy. To further stimulate academic innovation and to encourage students to explore unfamiliar disciplines, most Winter Term courses and projects are graded on a Credit/No Credit basis. Winter Term courses are required for graduation as an integral part of the 4-1-4 calendar.

During the Winter Term both teacher and learner 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. Furthermore, Winter Term policy at Cal State Stanislaus facilitates interdisciplinary teaching and learning, invites off-campus field work and research, allows students to propose courses or projects, and permits foreign study via off-campus courses. (See Winter Term Bulletin.)
# Academic Calendar 1981-82

## 1981

### FALL SEMESTER

**September 14 — December 18, 1981**

#### SEPTEMBER

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<td>7</td>
<td>MON</td>
<td>Labor Day Holiday (College closed)</td>
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<td>9</td>
<td>WED</td>
<td>First day to add or drop a course</td>
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<tr>
<td>14</td>
<td>MON</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>25</td>
<td>FRI</td>
<td>Last day to apply for Fall 1981 graduation</td>
</tr>
<tr>
<td>28</td>
<td>MON</td>
<td>Last day to add a course</td>
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#### OCTOBER

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<td>9</td>
<td>FRI</td>
<td>Last day to drop a course</td>
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Last day to withdraw from College

Applications due for Spring 1982 and Summer 1982 graduation

#### NOVEMBER

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<th>Date</th>
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<tr>
<td>11</td>
<td>WED</td>
<td>Veterans Day Holiday (College closed)</td>
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<td>24</td>
<td>TUE</td>
<td>Last day to submit approved master's degree thesis for Fall Semester 1981 graduation</td>
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<td>26-29</td>
<td>THU-SUN</td>
<td>Thanksgiving Holiday (College closed)</td>
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#### DECEMBER

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<td>Last day of classes for Fall Semester 1981</td>
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<tr>
<td>14</td>
<td>MON</td>
<td>Reading Day*</td>
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<tr>
<td>15-18</td>
<td>TUE-FRI</td>
<td>Final examinations, projects and evaluations</td>
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<td>18</td>
<td>FRI</td>
<td>Fall Semester 1981 ends</td>
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<tr>
<td>24-27</td>
<td>THU-SUN</td>
<td>Christmas Holiday (College closed)</td>
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*Late afternoon and evening classes will normally convene.

## 1982

### WINTER TERM

**January 4 — February 2, 1982**

#### JANUARY

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<td>New Year's Holiday (College closed)</td>
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<td>4</td>
<td>MON</td>
<td>Instruction begins</td>
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<tr>
<td>6</td>
<td>WED</td>
<td>Last day to add a course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to drop a course</td>
</tr>
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</table>
8 FRI  Last day to apply for Winter Term 1982 graduation
         Applications due for Fall Semester 1982 graduation

12 TUE  Last day to submit approved master's degree thesis for Winter Term 1982 graduation

FEBRUARY
2 TUE  Last day of classes for Winter Term 1982
       Winter Term 1982 ends

1982 SPRING SEMESTER
February 16 — May 29, 1982

FEBRUARY
15 MON  Washington's Birthday Holiday (College closed)
16 TUE  Instruction begins
         First day to add or drop a course
24 WED  Last day to apply for Spring Semester 1982
         and Summer 1982 graduation

MARCH
2 TUE  Last day to add a course
15 MON  Last day to drop a course
         Last day to withdraw from College
         Applications due for Winter Term 1982 graduation

APRIL
5-9 MON-FRI  Spring Vacation

MAY
4 TUE  Last day to submit approved master's degree thesis for Spring Semester 1982 graduation
14 FRI  Warrior Day (No classes held)
21 FRI  Last day of classes for Spring Semester 1982
25-28 TUE-FRI  Final examinations, projects and evaluations
29 SAT  Commencement
         Spring Semester 1982 ends
31 MON  Memorial Day Holiday (College closed)
ADMISSION AND REGISTRATION CALENDAR
1981-82

FOR FALL SEMESTER 1981

NOV 1-30, 1980...................Initial period for accepting admission applications for Fall Semester 1981

DEC 1, 1980......................Extended filing period begins for Fall Semester 1981 admission applications

APR 1, 1981......................Last day to file applications for financial aid in Fall Semester 1981

MAY 4, 1981......................Beginning of first priority advisement and registration period for Fall Semester 1981

MAY 22, 1981.....................End of first priority advisement & registration period for Fall Semester 1981

MAY 26, 1981.....................Beginning of second priority registration period for Fall Semester 1981

AUG 28, 1981.....................End of second priority registration period for Fall Semester 1981

AUG 31, 1981.....................Beginning of lowest priority registration period for Fall Semester 1981

SEP 14, 1981.....................Late registration fee begins ($5)

SEP 23, 1981.....................Last day to complete admission application procedures

SEP 28, 1981.....................Last day of lowest priority registration for Fall Semester 1981

Last day to file for partial refund of fees after withdrawing from College

FOR WINTER TERM 1982

JUN 1-30, 1981.....................Initial period for accepting admission applications for Winter Term 1982

JUL 1, 1981......................Extended filing period begins for Winter Term 1982 admission applications

NOV 19, 1981.....................Beginning of first priority advisement and registration period for Winter Term 1982

DEC 11, 1981.....................End of first priority advisement and registration period for Winter Term 1982

DEC 14, 1981.....................Beginning of lowest priority registration period for Winter Term 1982

DEC 29, 1981.....................Last day to complete admission application procedures

JAN 4, 1982.....................Beginning of lowest priority advisement period

Late registration fee begins ($5)

JAN 6, 1982.....................Last day of lowest priority advisement and registration for Winter Term 1982

JAN 18, 1982.....................Last day to file for partial refund of fees after withdrawing from College
FOR SPRING SEMESTER 1982

AUG 1-31, 1981..................Initial period of accepting admissions applications for Spring Semester 1982
SEP 1, 1981.....................Extended filing period begins for Spring Semester 1982 admission applications
NOV 16, 1981....................Last day to file applications for financial aid in Spring Semester 1982
NOV 19, 1981....................Beginning of first priority advisement and registration period for Spring Semester 1982
DEC 11, 1981....................End of first priority advisement and registration period for Spring 1982
DEC 14, 1981....................Beginning of second priority registration period for Spring Semester 1982
FEB 2, 1982.....................End of second priority registration period for Spring Semester 1982
FEB 3, 1982.....................Beginning of lowest priority registration period for Spring Semester 1982
FEB 16, 1982....................Late registration fee begins ($5)
FEB 25, 1982....................Last day to complete admission application procedures
MAR 2, 1982.....................Last day to file for partial refund of fees after withdrawing from the College
                        Last day of lowest priority registration for Spring Semester 1982

FOR FALL SEMESTER 1982

NOV 1-30, 1981..................Initial period for accepting admission applications for Fall Semester 1982
DEC 1, 1981.....................Extended filing period begins for Fall Semester 1982 admission applications
MAY 3, 1982.....................Beginning of first priority advisement and registration period for Fall Semester 1982
MAY 21, 1982....................End of first priority advisement and registration period for Fall Semester 1982
MAY 24, 1982....................Beginning of second priority registration period for Fall Semester 1982

Faculty are available for academic advising during the instructional year, including specified academic workdays prior to each semester and Winter Term. Faculty are normally not on campus during summer and spring vacations and during breaks between academic terms. Before coming to campus for advising, students should review the academic advisement policy in the College Catalog and then contact the department of their major to arrange for an advising appointment. If such contact cannot be made the student should call the Academic Advising Center, (209) 667-3304.
Class registration is determined on the basis of two criteria: (1) registration period, and (2) class standing. There are three distinct registration periods preceding each semester. These registration periods are labeled FIRST PRIORITY, SECOND PRIORITY, and LOWEST PRIORITY. As the labels imply, registration during the FIRST PRIORITY period increases one's likelihood of enrollment in a selected class. Within the FIRST PRIORITY and SECOND PRIORITY registration periods, the criterion of class standing is also applied. The order followed in registration preference is: FRESHMEN, GRADUATES, SENIORS, JUNIORS, and SOPHOMORES. Thus, for example, a freshman who submits a registration form and pays fees on the last day of the FIRST PRIORITY period will be registered in a class before a sophomore who submits a registration form on the first day. A sophomore registering during the FIRST PRIORITY period will, however, be registered in a class ahead of any individual submitting a registration form during the SECOND PRIORITY period. During the LOWEST PRIORITY period, registration forms are processed daily according to the class standing previously stated. All students are subject to the priority in effect at the time they submit their registration form and pay their fees. ACADEMIC ADVISEMENT AND REGISTRATION AT THE EARLIEST POSSIBLE DATE IS RECOMMENDED.

### 1981

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SUMMER SESSION CALENDAR 1981-82

SUMMER SESSION 1981

FIRST SESSION  (June 15 — July 24)
APR 1-JUN 15 WED-MON  First priority registration period
JUN 15 MON  Instruction begins
JUN 16-22 TUE-MON  Lowest priority registration period ($5 late fee)
JUN 22 MON  Last day for lowest priority registration
JUN 26 FRI  Last day to add a course
JUN 24 FRI  Last day to drop a course
JUL 24 FRI  Last day to file for partial refund of fees

SECOND SESSION  (July 27 — August 14)
APR 1-JUL 27 WED-MON  First priority registration period
JUL 27 MON  Instruction begins
JUL 28-29 TUE-WED  Lowest priority registration period ($5 late fee)
JUL 29 WED  Last day to drop a course
JUL 31 FRI  Last day to file for partial refund of fees

SUMMER SESSION 1982

FIRST SESSION  (June 14 — July 23)
APR 1-JUN 14 THU-MON  First priority registration period
JUN 14 MON  Instruction begins
JUN 15-21 TUE-MON  Lowest priority registration period ($5 late fee)
JUL 5 MON  Independence Day Holiday (College closed)
JUL 23 FRI  First Session ends

SECOND SESSION  (July 26 — August 13)
APR 1-JUL 26 THU-MON  First priority registration period
JUL 26 MON  Instruction begins
JUL 27-28 TUE-WED  Lowest priority registration period ($5 late fee)
AUG 13 FRI  Second Session ends
THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

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. Today, 16 of the 19 campuses have the title "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. The newest campus--California State College, Bakersfield--began instruction in 1970.

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

The Trustees, the Chancellor and the Presidents develop system-wide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of The California State University and Colleges, 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 and Colleges 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 or major field selected by the student.

The CSUC offers more than 1,400 bachelor's and master's degree programs in some 200 subject areas. Approximately 350 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.

The Consortium of the CSUC draws on the resources of the 19 campuses to offer regional and statewide off-campus degree, certificate, and credential programs to individuals who find it difficult or impossible to attend classes on a campus. In addition to Consortium programs, individual campuses also offer external degree programs.

Enrollments in Fall 1980 totaled over 300,000 students, who were taught by a faculty of 18,000. Last year the system awarded over 52 percent of the bachelor's degrees and 32 percent of the master's degrees granted in California. Almost 800,000 persons have been graduated from the 19 campuses since 1960.
TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

EX OFFICIO TRUSTEES

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Governor of California
State Capitol
Sacramento 95814

The Honorable Mike Curb
Lieutenant Governor of California
State Capitol
Sacramento 95814

The Honorable Willie L. Brown, Jr.
Speaker of the Assembly
State Capitol
Sacramento 95814

The Honorable Wilson C. Riles
State Superintendent of Public Instruction
721 Capitol Mall
Sacramento 95814

Dr. Glenn S. Dumke
Chancellor of The California State University and Colleges
400 Golden Shore
Long Beach 90802

APPOINTED TRUSTEES

Appointments are for a term of eight years, except for a student Trustee and alumni 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. Charles Luckman (1982)
9200 Sunset Boulevard
Los Angeles 90069

Mr. Frank P. Adams (1981)
235 Montgomery St., Suite 1045
San Francisco 94104

Mr. Dean S. Lesher (1981)
P. O. Box 5166
Walnut Creek 94598

Dr. Claudia H. Hampton (1982)
450 N. Grand, Room G353
Los Angeles 90012

Dr. Mary Jean Pew (1983)
5515 Franklin Avenue
Los Angeles 90028

Mr. Willie J. Stennis (1983)
3947 Landmark
Culver City 90230

Dr. Juan Gómez-Guinones (1984)
Professor, History Department
University of California, Los Angeles
405 Hilgard Avenue
Los Angeles 90024

Mr. John F. O'Connell (1982)
P. O. Box 3965
San Francisco 94119

291 S. La Cienega Blvd.
Beverly Hills 90211

Mr. Michael R. Peevey (1985)
215 Market Street, Suite 930
San Francisco 94105

Mr. John F. Crowley (1985)
3068 17th Street
San Francisco 94103
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President  Vice Chairperson

Dr. Claudia H. Hampton  Chancellor Glenn S. Dumke
Chairperson  Secretary-Treasurer

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The California State University and Colleges
400 Golden Shore
Long Beach, California 90802
(213) 590-5506

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Mr. Harry Harmon  Executive Vice Chancellor

Mr. D. Dale Hanner  Vice Chancellor, Business Affairs

Dr. Alex C. Sherriffs  Vice Chancellor, Academic Affairs

Dr. Robert Tyndall  Acting Vice Chancellor, Faculty
and Staff Affairs

Mr. Mayer Chapman  General Counsel

*Appointment subject to confirmation by the State Senate.
THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

California State College, Bakersfield
9001 Stockdale Highway
Bakersfield, California 93309
Dr. Jacob P. Frankel, President
(805) 833-2011

California State University, Chico
1st & Normal Streets
Chico, California 95929
Dr. Robin S. Wilson, President
(916) 895-5011

California State University, Dominguez Hills
Carson, California 90747
Dr. Donald R. Gerth, President
(213) 516-3300

California State University, Fresno
Shaw and Cedar Avenues
Fresno, California 93740
Dr. Harold H. Hask, President
(209) 487-9011

California State University, Fullerton
Fullerton, California 92634
Dr. Miles D. McCarthy, Acting President
(714) 773-2011

California State University, Hayward
Hayward, California 94542
Dr. Ellis E. McCune, President
(415) 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. Stephen Horn, President
(213) 498-4111

California State University, Los Angeles
5151 State University Drive
Los Angeles, California 90032
Dr. James M. Rosser, President
(213) 224-0111
California State University, Northridge
18111 Nordhoff Street
Northridge, California 91330
Dr. James W. Cleary, President
(213) 885-1200

California State Polytechnic University, Pomona
3801 West Temple Avenue
Pomona, California 91768
Dr. Hugh O. La Bounty, Jr., President
(714) 598-4592

California State University, Sacramento
6000 J Street
Sacramento, California 95819
Dr. W. Lloyd Johns, President
(916) 454-6011

California State College, San Bernardino
5500 State College Parkway
San Bernardino, California 92407
Dr. John M. Pfau, President
(714) 887-7201

San Diego State University
5300 Campanile Drive
San Diego, California 92182
Dr. Thomas B. Day, President
(714) 265-5000

Imperial Valley Campus
720 Heber Avenue
Calexico, California 92231
(714) 357-3721

San Francisco State University
1600 Holloway Avenue
San Francisco, California 94132
Dr. Paul F. Romberg, President
(415) 469-2141

San Jose State University
Washington Square
San Jose, California 95192
Dr. Gail Fullerton, President
(408) 277-2000

California Polytechnic State University,
San Luis Obispo
San Luis Obispo, California 93407
Dr. Warren J. Baker, President
(805) 546-0111
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, California 94928
Dr. Peter Diamandopoulos, President
(707) 664-2880

California State College, Stanislaus
801 W. Monte Vista Avenue
Turlock, California 95380
Dr. A. Walter Olson, President
(209) 667-3122
Each of The California State University and Colleges by action of the Legislature is privileged to name an advisory board composed of citizens representative of the area served by the college. Appointees are approved by The California State University and Colleges Board of Trustees, and through their participation the college is better able to develop its program in relation to the needs of the college service area. The College is grateful to the following persons for their willingness to serve in this important capacity.

Carmen Jackson (Mrs.), Chair .......................................................... Turlock
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A. J. Cusenza ...................................................................................... Modesto
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Vice President for Academic Affairs ......... Reuben Torch, Ph.D.
Dean of Students ................................ Richard Sebok, Ed.D.
Executive Dean .................................... Gerard J. Crowley, Ed.M.
Business Manager ................................. Frank C. BaIbo, B.S.
Affirmative Action Officer ..................... Joan D. Steele, Ph.D.

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Associate Vice President for Academic Affairs Hobart G. Hamilton, Jr., Ph.D.
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Director of Admissions and Articulation Edward J. Aubert, M.B.A.
Registrar ........................................ C. W. Quinley, Jr., A.B.
Coordinator of Instructional Media Center Melvin R. Nickerson, Ph.D.
Coordinator of Academic Personnel Records E. Lorraine Johnson, B.A.
Research and Grants Coordinator .............. Joan D. Steele, Ph.D.
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Acting Chair, Department of Art ................ Hope B. Werness, Ph.D.
Chair, Department of Biological Sciences Walter Tordoff III, Ph.D.
Chair, Division of Business Administration Hime B. Kirshen, Ph.D.
Chair, Department of Chemistry .............. John Almy, Ph.D.
Chair, Department of Communication Studies Fred P. Hilpert, Ph.D.
Chair, Department of Drama .................... Jere D. Wade, Ph.D.
Chair, Department of Economics ................ Frederick E. Kottke, Ph.D.
Chair, Division of Education .................. Charles R. Farrar, Ed.D.
Chair, Department of English, Foreign Languages, and Philosophy Lola V. Johnson, M.A.
Coordinators, Ethnic Studies .................. Richard Luevano, M.A.
and DeIo Washington, Ph.D.
Chair, Department of History ................ Ronald J. VanderMolen, Ph.D.
Chair, Department of Mathematics ............ Narendra L. Maria, Ph.D.
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Chair, Department of Nursing ........ Jacqueline B. Johnson, M.S.
Chair, Department of Physical Education and Health ........ James K. Hanny, Ed.D.
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Chair, Department of Sociology ........ Donald W. Bowers, Ph.D.

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Kathleen Leatherbarrow, F.N.P.
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Director of Testing, Reentry, Disabled Students Adviser, Women's Center Adviser ........ Jerome J. Beamish, Ph.D.
Foreign Student Adviser ............ Franklin B. Holder, Ph.D.
Director of Counseling, Legal Referral, Academic Achievement Program ................ Fred Edmondson, M.A.
Counselor .......................... Robert L. Santos, Ph.D.
Director of Career Development, Student Employment Service .............. Karen Mendonca, M.A.
Coordinator of Employer Relations, Job Center Directors ............... Catherine Rapp, B.A.
Director of Activities/Intramurals,
Greek Adviser ...................... Steven S. Mortensen, B.S.
Activities Adviser .................. Donald C. Lawson, B.A.
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Retention Services Coordinator ........ Carlos R. Skeete, B.A.
Director of Student Special Services .......... Juanita Jackson, B.A.
Assistant Director of Special Programs,
Learning Center Coordinator ........ T. Peter Finley, Ph.D.

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Personnel Officer .................. Thomas Parr III, M.A.
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Accounting Officer ........................................... Donald S. Kent, B.S.
Procurement and Support Services Officer ................. Thomas J. White, A.B.
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Coordinator of Articulation ................................... Jess L. Cuevas, B.A.
Director of Public Information ................................ Wilford R. Keener, B.A.

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Head of Public Services and Assistant
   Director of the Library ..................................... J. Carlyle Parker, M.L.S.
Head of Technical Services ................................... Peter C. Mollema, Jr., M.A.L.S.
Head Catalog Librarian ....................................... Agnes L. Bennett, A.M.L.S.
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Nothing in this catalog shall be construed, operate as, or have the effect of an abridgement or a limitation of any rights, powers, or privileges of the Board of Trustees of The California State University and Colleges, the Chancellor of The California State University and Colleges, 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 and Colleges. 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.
AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY

California State College, Stanislaus provides students access to its programs without regard to ethnicity, sex, age, or physical disability. The College policies and procedures are in accordance with Federal Executive Orders 11246 and 11375 as amended, the Civil Rights Act of 1964 as amended, Title IX of the Educational Act of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, and other pertinent legislation to assure affirmative action and equal employment opportunity for all qualified persons without regard to race, sex, marital status, age, disability, religion, national origin, or Vietnam era veteran status.

NONDISCRIMINATION ON THE BASIS OF RACE, COLOR, OR NATIONAL ORIGIN

The California State University and Colleges complies with the requirements of Title VI of the Civil Rights Act of 1964 as amended and the regulations adopted thereunder. No person shall, on the ground 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 and Colleges.

NONDISCRIMINATION ON THE BASIS OF SEX

The California State University and Colleges 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 educational programs and activities operated by California State College, 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 College, Stanislaus may be referred to the campus Affirmative Action Officer who is assigned the administrative responsibility of reviewing such matters or to the Regional Director of the Office for Civil Rights, Region 9, 1275 Market Street, 14th Floor, San Francisco, California 94103.

NONDISCRIMINATION ON THE BASIS OF HANDICAP

The California State University and Colleges does not discriminate on the basis of handicap. The CSUC operates in accordance with Sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder, in admission or access to or treatment or employment in the programs and activities of The California State University and Colleges. The Affirmative Action Officer, Dean of Students Richard Sebok, and Executive Dean Gerard Crowley have been designated to coordinate the efforts of California State College, Stanislaus to comply with the Act and its implementing regulations. Inquiries concerning compliance may be addressed to any of the above at the College.
The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (45 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 1) access to student records maintained by the campus, and 2) the release of such records. In brief, the law provides that the campus must provide students access to official records directly related to the student and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate; the right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes and the regulations on the campus. Copies of these policies and procedures may be obtained at the Student Services Office in L-102. Among the types of information included in the campus statement of policies and procedures is: 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 public 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, the most recent previous educational agency or institution attended by the student and any other information authorized in
writing by the student. The above designated information is sub-
ject to release by the campus at any time unless the campus has
received prior written objection from the student specifying
information which the student requests not be released. Written
objections should be sent to the office that is involved with the
specific objections, e.g., Admissions and Records, Placement, etc.

The campus is authorized to provide access to student records
to campus officials and employees who have legitimate educational
interests in such access. These persons are those who have res-
ponsibilities in connection with the campus' academic, administra-
tive, or service functions and who have reason for using student
records connected with their campus or other related academic
responsibilities.

REQUIREMENT AND 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 Title 5, California Administrative
Code, Section 41201. 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.
GENERAL INFORMATION

THE COLLEGE AND COMMUNITY

California State College, Stanislaus is a liberal arts institution founded in 1957 as the 14th member of the California State University and Colleges. Classes were first offered in 1960 in temporary quarters, and in 1965 the College moved to its permanent 250-acre campus on the north edge of Turlock in Stanislaus County. The College opened with approximately 750 upper-division students; enrollment since has grown to a current figure of approximately 4,000.

The majority of the students are from the college's six-county service area; however, the entire state is well represented on the campus, as are other western states and a number of foreign countries.

The College continues to attract attention in educational circles with one of the most innovative and dynamic academic programs in the state system. Curriculum policy in the future is expected to be a substantial continuation and expansion of the College's broad-based liberal arts package.

Bachelor degrees are offered in 27 subject areas; and master's degrees are offered in nine: Business Administration, Education, English, History, Marine Science, Psychology, Public Administration, Speech, and Special Major.

Turlock is located midway between the San Francisco Bay area and the Sierra Nevada mountains. Students enjoy the rural setting of the campus, yet have easy access to the outstanding cultural events in San Francisco and the recreational pastimes of the Sierra. For those who enjoy the ocean, Santa Cruz and the Monterey Peninsula are also nearby. There are also several lakes, parks, and other recreational areas much closer to Turlock.

The City of Turlock is a growing community of nearly 30,000 persons, and is situated on the southern edge of Stanislaus County, about 13 miles south of Modesto, the county seat. The economy of Turlock, as in most cities of Central California, is based largely upon agricultural products and food processing plants.

Turlock has six elementary schools, a junior high school, a high school, a hospital, a daily newspaper, a radio station, and two theatres. Housing and shopping facilities are within walking distance of the College.
General Information

THE ACADEMIC PROGRAM

Being a small liberal arts college, CSCS combines academic excellence with a friendly, close-knit spirit among the students and faculty. The favorable faculty-student ratio permits small discussion groups, and a sense of informality.

Students are encouraged to develop a broad background in their first two years before majoring in one of the 27 areas available through the College. The major areas are:

- Anthropology
- Art
- Biological Sciences
- Business Administration
- Chemistry
- Child Development
- Drama
- Economics
- English
- French
- Geography
- History
- Liberal Studies
- Mathematics
- Music
- Nursing (RNs only)
- Physical Education
- Physical Sciences
- Politics
- Political Science
- Psychology
- Social Sciences
- Sociology
- Spanish
- Special Major
- Speech Communication
- Vocational Education

Courses are also offered in astronomy, German, health, ethnic studies, geology, journalism, philosophy, and recreation to supplement the existing major programs.

Masters degrees available are: Master of Arts in Education, English, History, Psychology, Special Major, and Speech Communication; Master of Business Administration; Master of Science in Marine Science and Psychology; and Master of Public Administration.

ACCREDITATION

California State College, Stanislaus is fully accredited by the Western Association of Schools and Colleges. The Department of Chemistry is nationally accredited by the American Chemical Society.

4-1-4 ACADEMIC CALENDAR

From September 1960 through Summer 1965, the College operated on the semester system, each semester being approximately 16 weeks in length.

In September 1965, the College converted to the quarter system, each quarter being about 11 weeks in length.

Beginning with the 1973 Summer Session, the College returned to the semester system.

In September 1973, the College adopted a 4-1-4 calendar which provides for a 13-week fall semester, a one-month winter term, and a 13-week spring semester.

Semester units can be converted to quarter units by multiplying by 1-1/2 (4 semester units x 1-1/2 = 6 quarter units).

Quarter units are converted to semester units by multiplying by 2/3 (9 quarter units x 2/3 = 6 semester units).
SUMMER SESSION AND EXTENDED EDUCATION

The California State University and Colleges regards its Extended Education credit-bearing programs as integral parts of the institution. These programs are viewed as extensions of the institution's educational services and are in concert with the institution's overall mission and purpose. The programs and courses in Extended Education are expected to meet the standards of quality which the institution sets for its other programs and courses, in terms of resources, faculty, level of instruction, evaluation, and support services.

The College offers summer session programs each year with courses available in most of the major areas of the curriculum. The programs offered enable students to complete degree requirements more rapidly than would otherwise be possible. The summer session also allows students the opportunity to acquire depth in academic fields, to complete credential requirements, and to advance their professional competencies. Summer session is the first term of the academic year. A summer session bulletin is issued annually.

The College offers a program of extension courses. Extension credit may be considered by the Admissions and Records Office toward a degree only if requested by a student.

During the regular academic year, non-matriculated students may, on a space-available basis, enroll in regular upper division courses through extension. Students may obtain registration forms from the Office of Extended Education.

Summer session and extension students planning to complete the College's degree or credential programs should seek admission to the College.

THE STOCKTON CENTER

The College operates an off-campus center in Stockton to serve students living in San Joaquin County who find it difficult to commute to campus. Through the Stockton Center, the College offers resident credit courses leading to degrees. Classes are offered on the San Joaquin Delta College campus, 5151 Pacific Avenue, and at the State of California Building, 209 N. El Dorado in Stockton.

Persons considering enrolling in classes offered in Stockton should contact the Stockton Office of California State College, Stanislaus at 209 N. El Dorado, Stockton, or call 948-7594.

Currently the following degree programs are offered through the Stockton Center: Bachelor of Arts in Anthropology; Business Administration; Child Development; Liberal Studies; Political Science; Sociology, with concentrations in Human Services and Social Justice; and Social Sciences, with concentrations in Anthropology, Communication Studies, Economics, Ethnic Studies, Geography, History, Political Science, Psychology, and Sociology; and Master's degrees in Business Administration and Public Administration.
General Information

THE FACILITIES

Facilities at California State College, Stanislaus are strikingly modern and blend in well with the pastoral charm of the countryside. The 230-acre campus provides ample room for growth as enrollment dictates and assures that buildings can be erected only a short walk apart while maintaining the spacious atmosphere of the surrounding area.

The Library/Administration Building and the Classroom Building were the first buildings constructed on the permanent campus and were opened in 1965. These two facilities are the hub of the campus and serve a variety of purposes as well as providing space for most faculty and administrative offices.

The Performing Arts Complex, which opened in the Fall of 1970, is a multibuilding project which houses the departments of art, drama, and music. The modern and very comfortable 300-seat Mainstage Theatre is the site of most drama productions and a number of recitals and concerts, plus being the platform for numerous visiting lecturers. A concert hall that can seat up to 200 persons is a feature of the music facilities in the Performing Arts Complex while the art facilities are highlighted by spacious and functional rooms that provide up-to-date equipment for practically all the art media.

The Science Building, completed and put into use in 1972, is one of the most modern science facilities of its kind in the California State University and Colleges system. With much traditional and space-age equipment, including an electron microscope, the Science Building offers a multitude of laboratories and classroom paraphernalia for science and mathematics students.

A Dining Hall opened in the Fall of 1975 and has become the center of attention for students during their leisure hours. The main dining room can seat nearly 700 for lunch or for special programs. A snack bar, which is open evenings, features entertainment on a regular basis.

The Physical Education facility, which was completed in 1977, is capable of serving the needs of the many indoor physical education courses. Seating for over 2,000 persons is also available. A 25-meter by 25-yard, L-shaped pool was constructed during the 1978-79 academic year.

A College Union/Book Store was completed in early 1978. In addition to a modern well-equipped bookstore, the building includes student lounges, conference rooms, and offices for student government.

The Campus Health Center was added in Spring 1981.

FACILITY RESERVATION

Reservations of campus facilities, except for regularly scheduled classes, must be made through the Master Calendar Coordinator. Chartered student clubs, the ASCSCS, and other recognized College groups may use the facilities, as well as off-campus groups, provided arrangements are made with the Master Calendar Coordinator in compliance with "Use of Campus Facilities" and the "Policy on Special Events."
General Information

LIBRARY

The Library provides the recorded knowledge and cultural materials that students and faculty need for study and research. These materials are freely available in an attractive and comfortable building staffed by paraprofessional library assistants and by professionally trained librarian-scholars who organize, analyze, and interpret those materials. Professional reference service and reader advisory service are available most hours the library is open. The librarians also aid students in acquiring the principles of independent library research by formal courses and individual instruction.

The Library occupies the second floor of the Library Building. It seats 274 readers in a variety of seating patterns.

The general collection of the Library has been selected to meet the needs of the curriculum. It contains over 200,000 volumes of books and about 3,500 periodicals. Backfiles of most of these periodicals are available. The Library is also a selective depository of United States government publications and California State publications.

The Library has a Curriculum Library and Children's Collection. Courses of study, curriculum guides, and units of work are available on microfiche. A model collection of about 2,600 of the best children's books comprise the Children's Collection.

Books and other library materials that are not locally available are obtained quickly on loan from other libraries in the region.

INSTRUCTIONAL MEDIA CENTER

The College provides centralized audiovisual services which are designed to enrich classroom instruction by providing access to the latest equipment and materials available. The media library on campus lists 350 film titles and nearly 50 videocassette tapes which are used extensively by the faculty and students. About 500 filmstrips are also available.

Extensive bookings of films and other off-campus materials are available through rentals from major film libraries throughout the United States. Instructional resource reference materials are kept current.

Television, reel-to-reel, and videocassette recorders are available through the Instructional Media Center for students and faculty use in course-connected activities. The College maintains a television dynamics laboratory with remote controlled cameras in a closed circuit system. The Division of Education and the Nursing Department maintain videotape recorders for evaluation and improvement of student performance, and the English Department uses videodiscs for the study of film technique.

The Center provides professional assistance to faculty for the design and implementation of innovative instructional development. Utilization of sophisticated technological advances in the delivery of various teaching strategies is made possible through emphasis on the latest teaching and learning techniques in higher education.

Preparation of instructional materials includes lamination, transparency-making, high speed copying of audio cassette tapes,
General Information

duplication of video tapes and off-the-air copying of programs which are broadcast by network and public broadcasting. Qualified personnel are available to provide assistance in the production of original software for use in classroom presentations.

INSTITUTIONAL AND FINANCIAL ASSISTANCE

The following information concerning student financial assistance may be obtained from the Director of Financial Aids, Room L-107, telephone 667-3336:

1. Student financial assistance programs available to students who enroll at California State College, Stanislaus;
2. The method by which such assistance is distributed among student recipients who enroll at California State College, Stanislaus;
3. The means, including forms, by which application for student financial assistance is made and requirements for accurately preparing such applications;
4. The rights and responsibilities of students receiving financial assistance; and
5. The standards which the student must maintain in order 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 California State College, Stanislaus is available from the Student Services Office, Room L-102, telephone 667-3177:

1. Fees and tuition (where applicable);
2. Estimated costs of books and supplies;
3. Estimates of typical student room and board costs or typical commuting costs; and
4. Any additional costs of the program in which the student is enrolled or expresses a specific interest.

Information concerning the refund policy of California State College, Stanislaus for the return of unearned tuition and fees or other refundable portions of costs is available from the Admissions and Records Office, Room L-104, telephone 667-3151.

Information concerning the academic programs of California State College, Stanislaus may be obtained from the Vice President for Academic Affairs, Room L-163, telephone 667-3203. The information 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 California State College, 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 College's accreditation, approval, or licensing.

Information regarding special facilities and services available to handicapped students may be obtained from the Student Services Office, Room L-102, telephone 667-3177.

INSTITUTES AND CENTERS

INSTITUTE FOR ARCHAEOLOGICAL RESEARCH

The Institute for Archaeological Research, founded in 1974, is organized to study archaeological and cultural resources in California, Nevada, Montana, Central Australia, and Africa. Major projects include sponsorship of archaeological expeditions, short-term field trips in California and Nevada, and interdisciplinary projects such as obsidian trace-element analysis. The Institute contributes to numerous publications on archaeological, cultural resource management investigations. For further information, contact the Department of Anthropology and Geography.

CLINICAL-COUNSELING CENTER

The Center is designed to: (1) provide an internship experience or field work placement for selected students from the discipline of psychology; (2) provide for the professional growth of the staff, students, and the staff of the cooperating community agencies; (3) provide professional psychological services to the community in keeping with the training needs of students and the professional qualifications of the staff. For further information, contact the Department of Psychology.

INSTITUTE FOR CULTURAL RESOURCES

The Institute for Cultural Resources (I.C.R.), established in 1974, has the purpose of serving as a resource center or repository for information and materials pertaining to cultural heritage groups in the regional community served by the College. Such information and certain materials are made available to individuals and groups of the College and local communities and school districts. For further information, contact the Department of Anthropology and Geography.
General Information

INSTITUTE FOR ECOLOGICAL RESEARCH

The primary focus of the Institute for Ecological Research is to gather data important to an understanding of ecosystem functioning, and to make such information available to decision making processes in both the public and private sectors. For further information, contact the Department of Biological Sciences.

INSTITUTE FOR INDONESIAN STUDIES

The Institute for Indonesian Studies facilitates studies of the developing world using Indonesia as its representative area and training ground. Cooperative projects between California State College, Stanislaus and institutes and colleges in Indonesia provide opportunities for students from both countries to participate in guided multidisciplinary field training and research. Major projects include the Indonesian American Field Semester and a field center experimenting with appropriate technology for the developing world. A wide variety of multidisciplinary short-term projects are also sponsored by the Institute on campus. For further information, contact the Department of Anthropology and Geography.

CENTER FOR INTERNATIONAL STUDIES

The Center for International Studies was created to assist in the promotion of non-American Studies. The specific activities include the sponsorship of guest lecturers, development of conferences and workshops, and special research projects. Over the past several years the efforts of the Center have resulted in a series of guest speakers from overseas, two conferences on International Policies, and a number of studies conducted by various faculty members. The Center is an interdisciplinary organization that includes faculty from all areas of the institution. It is funded in part through grants received from outside the institution. For further information, contact the Department of Politics and Public Administration.

INSTITUTE OF PUBLIC AND GOVERNMENTAL AFFAIRS

Since its establishment in 1973, the Institute of Public and Governmental Affairs (IPGA) has fostered a close working relationship with public officials and community groups in the College's six-county service area. The Institute has sponsored workshops, seminars, and forums on topics ranging from the energy crisis to the electoral process in California. It also has published a directory of public agencies in the region, conducted local surveys, offered a special course on energy use, and initiated a monograph series. For further information about the Institute, contact the Department of Politics and Public Administration.
ADMISSION TO THE COLLEGE

The College admits qualified high school graduates, transfer students from two-year colleges and four-year institutions, and graduate students for specific course work and programs leading to baccalaureate degrees, advanced degrees, school service credentials, and several professions.

Admission Requirements

Requirements for admission to the College are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Administrative Code. Prospective applicants who are unsure of their status under these requirements are encouraged to consult a school or college counselor, or the College Admissions and Records Office.

ADMISSION AS A FIRST-TIME FRESHMAN

An applicant who has completed no college work after high school graduation will be considered for admission as a first-time freshman under one of the provisions in this section. Submission of the results of the American College Test (ACT) or the College Board Scholastic Aptitude Test (SAT) is normally required to establish eligibility.

Overall excellence of performance in high school subjects and evidence of academic potential provide the basis for admission at the College. While no course pattern is required, the applicant, to be properly prepared to undertake a full program of studies and particularly to pursue the required program in general education, is strongly encouraged to include the following subjects as minimally adequate background for college work:

1. College preparatory English, 4 years
2. Foreign language, 2 years in one language
3. College preparatory mathematics, 2 years
4. College preparatory laboratory science, 1 year in 11th or 12th grade
5. College preparatory history and/or social sciences, 2 years
6. Study in speech, music, art, and other subjects contributing to general academic background.

Below is a more specific listing of high school subjects specially recommended for students who intend to pursue majors offered by the College.

ANTHROPOLOGY: Social Sciences, 4 years preferred.

ART: Drawing, painting, printmaking, ceramics, photography, and sculpture, as much high school and independent work in these fields as possible.
Admission to the College

BIOLOGICAL SCIENCES: Mathematics, through trigonometry; foreign languages, 2 years (French or German preferred); biology, preferably 2 years; chemistry, 1 year; physics, 1 year.

BUSINESS ADMINISTRATION: Mathematics, 4 years; English, 4 years.

CHEMISTRY: Mathematics, 4 years (through trigonometry); chemistry, 1 year; physics, 1 year.

CHILD DEVELOPMENT: Biology; English, 4 years; mathematics, 4 years preferred (through trigonometry); social sciences, 4 years preferred.

DRAMA: English, 4 years; as much high school and independent drama experience as possible.

ECONOMICS: Social Sciences, 4 years preferred; mathematics, 4 years preferred.

ENGLISH: English, 4 years; foreign language, 4 years.

FRENCH: Foreign language, 2 to 4 years French preferred.

GEOGRAPHY: Biology and physical sciences, 2 years.

HISTORY: History and/or social sciences, 4 years preferred.

LIBERAL STUDIES: A broad selection of elective courses.

MATHEMATICS: Mathematics, 4 years (through trigonometry); physics, 1 year.

MUSIC: As much private music study as possible, as much participation in both vocal and instrumental music as possible, at least 1 year of music theory if offered, and 2 years French or German for voice majors.

PRE-NURSING: Biology, 1 year; chemistry, 1 year; physics, 1 year; English, 4 years.

PHYSICAL EDUCATION: Biology; English, 4 years, social sciences, 4 years; as much participation in high school athletic and/or intramural programs as possible.

PHYSICAL SCIENCES: Physics, 1 year; chemistry, 1 year; mathematics, 4 years (through trigonometry).

PHYSICS: Physics, 1 year; chemistry, 1 year; mathematics, 4 years (through trigonometry).

POLITICAL SCIENCE: History and/or social sciences, 4 years preferred; English, 4 years.
Admission to the College

PSYCHOLOGY: Biology; mathematics, 4 years (through trigonometry); English, 4 years; social sciences, 4 years preferred.

SOCIAL SCIENCES: Social Sciences, 4 years preferred.

SOCIOLOGY: History and/or social sciences, 4 years preferred.

SPANISH: Foreign language, 2 to 4 years Spanish preferred.

SPEECH: Courses in speech and/or speech activities; English, 4 years; social sciences, 4 years preferred.

CALIFORNIA HIGH SCHOOL GRADUATES AND LEGAL RESIDENTS, An applicant who is a graduate of a California high school or a legal resident of California for tuition purposes must have a grade point average and composite ACT or total SAT score which provides an eligibility index placing him among the upper one-third of California high school graduates. The minimum eligibility index is 741 for the ACT or 3072 for the SAT. It is computed by multiplying grade point average by 200 and adding it to ten times the composite ACT score or by multiplying grade point average by 800 and adding it to the total SAT score. The grade point average is based upon all high school work taken, excluding work completed in the freshman year as well as any courses in physical education or military science. For admission eligibility purposes, the College accepts the best ACT or SAT score for tests taken prior to high school graduation. The table on the next page provides the test scores needed with a given grade point average to be eligible for admission.

California residents who are military service personnel or veterans may be considered under special admission requirements.

NONRESIDENTS GRADUATING FROM HIGH SCHOOLS IN OTHER STATES OR POSSESSIONS, Applicants who are nonresidents for tuition purposes and who are graduates of a high school in another state or a U.S. possession must have an eligibility index which would place them among the upper one-sixth of California high school graduates. The minimum required eligibility index is 826 for the ACT, or 3402 for the SAT, and is calculated as in the previous section.

GRADUATES OF SECONDARY SCHOOLS IN A FOREIGN COUNTRY, Applicants who are graduates of a foreign secondary school must have preparation equivalent to that required of eligible California high school graduates. The College will carefully review the previous record of all such applicants and only those with promise of academic success equivalent to that of eligible California high school graduates will be admitted. Such applicants are not required to take the ACT or SAT except when requested to do so; special requirements may apply. Unless specifically exempted, the College Board Test of English as a Foreign Language (TOEFL) is required.

NONHIGH SCHOOL GRADUATES, An applicant who is over 18 years of age, but who has not graduated from high school will be considered for admission only when preparation in all other ways is such that the College believes promise for academic success is equivalent to that of eligible California high school graduates.
## Admission to the College

### ADMISSION ELIGIBILITY FOR CALIFORNIA HIGH SCHOOL GRADUATES

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</tr>
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</table>
HIGH SCHOOL STUDENTS ENTERING ADVANCED PLACEMENT PROGRAM. Students still enrolled in high school will be considered for enrollment in the College's Advanced Placement Program if they are recommended by their principal and preparation is equivalent to that required of eligible California high school graduates. Such admission is only for specific course work and does not constitute the right to continued enrollment. Submission of a special application form each term is a prerequisite for continued enrollment. Such applicants are not required to take the ACT or SAT. Regular application procedures are not applicable; regular registration fees are required.

The College Advanced Placement Program is intended to supplement the curriculum available to qualified high school students by opening college courses to them, to provide these students with the opportunity for a gradual transition to college, and to extend qualified students to the utmost limits of their intellectual capacities at as young an age as is practicable. A high school student admitted to this program may enroll in any lower division course on a space available basis, providing all course prerequisites are satisfied. Regular college credit will be awarded. Inquiries should be addressed to the Director of Admissions, who is responsible for approving these applications.

ADMISSION AS AN UNDERGRADUATE TRANSFER

An applicant for admission to the College as an undergraduate transfer who is in good standing at the last college attended will be considered for admission under one of the following provisions. California residents who are military service personnel or veterans may be considered under special admission requirements. Transferable courses are defined as those officially certified as baccalaureate-level by the regionally accredited college at which the courses were taken. California Community College transfers should consult their college counselor for information on transferability of courses.

APPLICANTS WITH FEWER THAN 56 TRANSFERABLE SEMESTER UNITS,

Applicants who have completed fewer than 56 transferable semester units are eligible for admission if they meet the current first-time freshman requirements and have earned a grade point average of at least 2.0 (C) for all transferable college units attempted. Either ACT or SAT results are required of a transfer applicant with fewer than 56 transferable semester units.

APPLICANTS WITH 56 OR MORE TRANSFERABLE SEMESTER UNITS,

Applicants who have completed 56 or more transferable semester units are eligible for admission if they have earned a grade point average of at least 2.0 (C) for all transferable college units attempted. A nonresident applicant must have a grade point average of at least 2.4 (C+).

ADMISSION AS AN INTERNATIONAL STUDENT. The admission of an international (foreign) student with college credit is governed by separate requirements. Prospective applicants from abroad should
Admission to the College

consult the College Admissions and Records Office for additional instructions. Unless specifically exempted, the College Board Test of English as a Foreign Language (TOEFL) is required.

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

ADMISSION AS A POSTBACCALAUREATE OR GRADUATE STUDENT

POSTBACCALAUREATE STANDING: UNCLASSIFIED. For admission to unclassified postbaccalaureate standing, a student must: (a) hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation as determined by an appropriate campus authority; (b) have attained a grade point of at least 2.5 (C+) in the last 60 semester units attempted; and, (c) have been in good standing at the last college attended. Admission to the College with postbaccalaureate unclassified standing does not constitute admission to graduate degree curricula.

POSTBACCALAUREATE STANDING: CLASSIFIED. A student who is eligible for admission to the College in Unclassified standing may be admitted to Classified postbaccalaureate standing for the purpose of enrolling in a particular postbaccalaureate credential or certificate program; provided, that such additional professional, personal, scholastic, and other standards, including qualifying examinations, as may be prescribed for the particular program by the appropriate campus authority are satisfied. Program Coordinator approval is required.

GRADUATE STANDING: CONDITIONALLY CLASSIFIED. A student who is eligible for admission to the College under Unclassified postbaccalaureate standard above, but who has deficiencies in prerequisite preparation which in the opinion of the appropriate campus authority can be met by specified additional preparation, including qualifying examinations, may be admitted to an authorized graduate degree curriculum with Conditionally Classified Graduate Standing. Program Coordinator approval is required.

GRADUATE STANDING: CLASSIFIED. Students who are eligible for admission to the College in Unclassified or Conditionally Classified Standing may be admitted to an authorized graduate degree curriculum of the campus as a classified graduate student if they satisfactorily meet the professional, personal, scholastic, or other standards for admission to the graduate degree curriculum,
including qualifying examinations, as the appropriate campus authority may prescribe. Only those applicants who show promise of success and fitness will be admitted to graduate degree curricula, and only those who continue to demonstrate a satisfactory level of scholastic competence and fitness shall be eligible to proceed in such curricula. Program Coordinator approval is required.

STUDENTS FORMERLY ENROLLED

Students formerly enrolled at the College who after an absence of one or more semesters desire to return may be readmitted by formally applying for readmission. Formerly enrolled students are subject to the regular application procedure and filing dates.

CSUC VISITORS PROGRAM

Any student entitled to continued enrollment at one of the other 18 campuses of The California State University and Colleges system may enroll at the College as a visiting student for a term by following a simplified application procedure. Concurrent enrollment at two CSUC campuses may similarly be approved. Students at the College also may apply for visitor status at another CSUC campus. CSUC Visitor Status and Concurrent Enrollment application forms are available on request from the College Admissions and Records Office and must be filed before instruction begins.

CALIFORNIA RESIDENCY CLASSIFICATION

The campus Admissions Office determines the residence status of all new and returning students for nonresident tuition purposes. Responses to items 30-45 on the Application for Admission and, if necessary, other evidence furnished by the student is used in making this determination. A student may not enroll in classes until complete responses to those items are on file in the Admissions Office.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by The California State University and Colleges is found in Education Code Sections 68000-68090, 90403, 89705-89707.5, 68124, and 68121, and in Title 5 of the California Administrative Code, Article 4 (commencing with Section 41900) of Subchapter 5 of Chapter 1, Part V. A copy of the statutes and regulations is available for inspection at the campus Admissions 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. An intention to establish and maintain California residence can be shown by registering to vote and voting in elections in California; filing resident California 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
Admission to the College

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 California if one is in the military service, etc.

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 California.

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

A man or a woman may establish his or her residence; marriage is not a governing factor.

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 resident determination date is set for each academic term and is the date from which residence is determined for that term. The residence determination dates for 1981-82 academic year are:

Quarter Term Campuses Semester Term Campuses
Fall September 20 Fall September 20
Winter January 5 Winter (Stanislaus Only) January 5
Spring April 1 Spring January 25
Summer July 1

Questions regarding residence determination dates should be directed to the campus Admissions Office. They can give you the residence determination date for the term for which you are registering.

There are several exceptions from nonresident tuition, including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues for one year to enable the student to qualify as a resident student.

2. Persons below the age of 19 who have been present in California 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, 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. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year. The
Admission to the College

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. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.

6. A student who is an adult alien is entitled to residence classification if the student has been lawfully admitted to the United States for permanent residence in accordance with all applicable provisions of the laws of the United States; provided, however, that the student has had residence in California for more than one year after such admission prior to the residence determination date. A student who is a minor alien shall be entitled to residence classification if both the student and the parent from whom residence is derived have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the parent has had residence in California for more than one year after acquiring such permanent residence prior to the residence determination date of the term for which the student proposes to attend the University.

7. Certain credentialed, full-time employees of school districts.

8. Full-time State University and Colleges employees and their children and spouses. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.


10. 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.

11. A person in continuous full-time attendance at an institution who had resident classification on May 1, 1973, shall not lose such classification as a result of adoption of the uniform student residency law on which this statement is based, until the attainment of the degree for which currently enrolled.

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

The California State University and Colleges
Office of General Counsel
400 Golden Shore
Long Beach, California 90802

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
Admission to the College

campus for further review. Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subject to discipline pursuant to Section 41301 of Title 5 of the California Administrative Code. Resident students who become nonresidents, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions Office. Applications for a change in classification with respect to a previous term are not accepted.

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

HONORS AT ENTRANCE

Honors at Entrance is awarded an admitted undergraduate student whose past record indicates promise of superior academic achievement at the College.

Admission Application Procedures

UNDERGRADUATE APPLICATION PROCEDURES

All prospective undergraduates must file a complete application for admission and a $25 nonrefundable application fee. Applications may be obtained from any campus of the system or high school and community college counselors, and should be filed with the campus of first choice. Alternative choice campuses and majors may be indicated on the application.

POSTBACCALAUREATE APPLICATIONS

All applicants for any type of postbaccalaureate status (e.g., master's degree applicants, those seeking credentials, and those interested in taking courses for personal or professional growth, etc.) must file a complete application within the appropriate filing period. A complete application for postbaccalaureate status includes all materials required for undergraduate applicants plus the supplementary admissions application and all required departmental program admission materials. Postbaccalaureate applicants who were enrolled as undergraduate students at the College in the term immediately preceding the term for which they now wish to apply are also required to complete the submit admission application forms and remit the $25 nonrefundable application fee.
Admission to the College.

Since applicants for postbaccalaureate programs will be limited to the choice of a single campus on each application, re-direction to alternative campuses or later changes of campus choice will be minimal. In the event that a postbaccalaureate applicant wishes to be assured of initial consideration by more than one campus, it will be necessary to submit a separate application and fee to each.

Application materials may be obtained from the Admissions Office or the Graduate Studies Office of any campus within the system. Direct applicant contact with the graduate program department is advisable.

WHO NEED APPLY

An Application for Admission or Readmission form must be filed by any person who plans to enroll at the College for a fall, winter, or spring term and who either was not enrolled for residence credit or audit courses, or who withdrew from the College, during the semester preceding the term of intended enrollment. A student enrolled at the College who qualifies for a baccalaureate degree must apply for readmission with postbaccalaureate standing and declare a new educational objective so that continued enrollment may be considered. Enrollment in summer session or extension courses does not exempt a person from the above admission application procedures.

STUDENTS SEEKING PART-TIME ENROLLMENT. Students seeking to enroll in a fall, winter, or spring term for a part-time or evening program of courses also must complete the admission procedure and are subject to the admission requirements stated above.

STUDENTS SEEKING ENROLLMENT AS AUDITORS WITHOUT CREDIT. Students seeking only to audit courses without credit must complete the admission procedure. If admitted to the College, these students must pay the same registration fees as other students. (See Auditors)

STUDENTS SEEKING SUMMER SESSION OR EXTENSION ENROLLMENT. Students seeking to enroll only for summer session or extension courses are not subject to the admission requirements stated above and are not required to comply with the admission procedure or to matriculate unless they intend to complete the College's degree or credential requirements. For Summer Session and Extension, special enrollment procedures will apply. Summer session students and extension students who will be enrolling in residence credit courses to complete the College's degree or credential requirements may qualify for existing degree or credential requirements and secure assignment to a major adviser by completing the admission procedure and satisfying admission requirements.
## APPLICATION FILING PERIODS

Applications for admission are accepted according to the following schedule:

<table>
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<tr>
<th>TERM</th>
<th>FIRST MONTH OF FILING PERIOD</th>
<th>STUDENT NOTIFICATION BEGINS</th>
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<tr>
<td>Summer Quarter</td>
<td>the previous February</td>
<td>March</td>
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<tr>
<td>Fall Quarter/Semester</td>
<td>the previous November</td>
<td>December</td>
</tr>
<tr>
<td>Winter Quarter/Term*</td>
<td>the previous June</td>
<td>July</td>
</tr>
<tr>
<td>Spring Quarter/Semester</td>
<td>the previous August</td>
<td>September</td>
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<table>
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<tr>
<th>SEMESTER CALENDAR CAMPUSES</th>
<th>QUARTER CALENDAR CAMPUSES</th>
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<tr>
<td>Chico</td>
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<td>Fresno</td>
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<tr>
<td>Fullerton</td>
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<td>Sonoma</td>
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Each campus accepts applications until program quotas are reached. Most campuses accept applications up to a month prior to the opening day of the term. Campuses will close individual programs as they reach capacity.

All applications postmarked or received during the first month of the filing period will receive consideration within the campuses' established enrollment categories and quotas. There is no advantage in filing before the filing period.

### LOCALLY AND SYSTEMWIDE IMPACTED PROGRAMS

Impacted programs are undergraduate programs in which the number of applications received in the first month of the filing period exceed the total spaces available, either locally (at individual campuses) or systemwide. You must make application for an impacted program during the first month of the filing period and may file more than one application and fee. Nonresidents, foreign or domestic, usually are not considered for admission to impacted programs. High school and community college counselors are advised before the opening of the fall filing period which programs will be impacted.

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Effective with the Fall 1980 filing period campuses were authorized to use a freshman applicant's ranking on the eligibility index, the transfer applicant's overall

*The Stanislaus campus is on a modified semester system known as the 4-1-4 calendar with an early fall semester concluding before the Christmas break, a winter term of one month in January, and a spring semester ending in May.
Admission to the College

GPA, or a combination of campus-developed supplementary criteria in selecting those to be admitted. If you are a freshman applicant and plan to apply to an impacted program, you should take the ACT or SAT test at the earliest date. Your test scores (received by the campus no later than the end of the first month of the filing period) and your grades earned in the final three years of high school will be used to compute the eligibility index. The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the Counselor's Digest 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.

SPACE RESERVATIONS

Applicants who can be accommodated within enrollment quotas will receive confirmation of space reservation. A space reservation notice is not admission to a campus; it is a commitment on the part of the campus to admit a student once eligibility has been determined. When students receive a space reservation notice, they should initiate action to have transcripts of any college and high school work sent to the campus where space has been reserved. The campus will inform them of the number of copies of transcripts required, dates for submittal, and where they should be sent. The student should not request that transcripts be sent until requested to do so by the campus where space has been reserved.

Each campus has established procedures to consider qualified applicants who would be faced with an extreme hardship if not admitted. Prospective hardship petitioners should contact the concerned campus regarding specific policies governing hardship admission.

APPLICATION FEE

A fee of twenty-five dollars ($25) is charged for processing of applications for admission to the College. This fee is nonrefundable, nontransferable to a different term, and applies to (1) all persons not regularly enrolled at the College during any of the three terms immediately preceding, (2) former students who subsequently registered in another college for residence, summer, extension, or correspondence courses, and (3) all applicants for first-time postbaccalaureate student status. Students seeking summer session or extension registration only are exempt from this requirement.

TRANSCRIPTS REQUIRED

An undergraduate applicant must request two sets of complete official transcripts from (1) the last high school he attended and (2) each college and university at which he registered, to be sent directly to the Admissions and Records Office. Transcripts presented by students cannot be accepted.
Admission to the College

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.

All transcripts and supporting admission documents are due in the Admissions and Records Office three weeks after the date requested or the following dates, whichever is later: March 1 for the fall semester, October 1 for the winter term, and December 1 for the spring semester.

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 College and cannot be returned to the applicant or duplicated.

APPLICANTS WITH COURSES IN PROGRESS. An applicant who is in attendance at a school or college on the date transcripts are requested must file a transcript which includes verification of the subjects in which 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.

POSTBACCALAUREATE AND GRADUATE STUDENTS. Applicants who hold a baccalaureate degree from an accredited institution and who are not seeking a degree or credential from the College need only to verify their baccalaureate degree to the Admissions and Records Office by filing when requested to do so, two official transcripts from the institution at which the degree was earned. A graduate who is seeking admission to a degree, credential or certificate program must request that two copies of complete official college transcripts be sent directly to the Admissions and Records Office from each college (other than Stanislaus) and university at which registered.

FORMER STUDENTS. Former students of the college 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 since the date of last enrollment at the College. A former postbaccalaureate student who is not planning to complete the College'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 transcripts unless they plan to complete the College's requirements for a degree, credential or certificate.

ADMISSION EXAMINATION

Students who will be entering the College with fewer than 56 transferable semester units completed at regionally accredited colleges are required to take the American College Test (ACT) or the College Entrance Examination Board of Scholastic Aptitude Test (SAT). All other undergraduate applicants, particularly transfers who have mediocre college grade point averages, are urged to take one of these tests if they do not file the results of another recent college entrance aptitude examination with the Admissions and Records Office. Test results will be used as a basis for admission. Applicants are expected to request the testing service to forward score reports directly to the College. Applicants for admission should take the ACT or SAT not later than March for fall admission, October for winter admission, and December for spring admission.

Registration forms for either test may be obtained from high school and college counselors, or directly from the office of the testing service. American College Test registration arrangements are made by writing ACT Registration Unit, P.O. Box 168, Iowa City, Iowa 52240. The ACT will be given on the following dates:

Saturday, June 13, 1981  Saturday, February 20, 1982
Saturday, October 17, 1981  Saturday, April 3, 1982
Saturday, December 12, 1981  Saturday, June 12, 1982

The Scholastic Aptitude Test (SAT) may be taken at the College or other testing centers throughout the world on the dates listed below:

Saturday, June 6, 1981  Saturday, January 23, 1982
Saturday, October 10, 1981  Saturday, March 27, 1982
Saturday, November 7, 1981  Saturday, May 1, 1982
Saturday, December 5, 1981  Saturday, June 5, 1982

Applications and fees should be sent directly to the College Board, Box 592, Princeton, New Jersey 08540, in time to be received not later than four weeks and preferably six weeks prior to the test date selected.

Special institutional administrations of the SAT on additional dates to be announced will be arranged exclusively for applicants to the College. Interested applicants should contact the College Testing Office regarding special institutional administrations.

ENGLISH PLACEMENT TEST (EPT)

The CSUC English Placement Test (EPT) is required of all students who:

1. enter the College with fewer than 56 transferable units and are subject to 1977-78 or subsequent catalog graduation requirements; or
2. have not satisfied the freshman-level English composition General Education course requirement.
Admission to the College

The results of the EPT will not affect admissions eligibility. However, failure to take the EPT at the earliest opportunity after admission may lead to administrative probation which, according to Section 41300.1 of Title 5, California Administrative Code, and CSUC Executive Order 186, may lead to disqualification from further attendance.

Information bulletins and registration materials for the EPT will be mailed to students subject to these requirements. Alternatively, the materials may be obtained from the Admissions and Records Office. Information on currently available ways to meet the EPT requirement may be obtained from the College Test Office.

Students whose EPT essay score is 5 or less must see the Director of Composition before enrolling in ENGL 1003, English Composition (2 units). Students who have not satisfied the EPT requirement will not be permitted to enroll in ENGL 1003.

ADVANCED WRITING COMPETENCY REQUIREMENT

All students subject to degree requirements of 1977-78 and subsequent catalogs must demonstrate upper division-level competency in writing skills as a requirement for a degree. English Placement Test (EPT) results can help entering students determine how best to prepare for meeting this graduation requirement. Satisfactory completion of ENGL 3000, Advanced Composition (1 unit), and one companion two-unit subject-based advanced composition course will satisfy the graduation requirement. (See "Writing Competency" under the English, Foreign Languages, and Philosophy section of this Catalog.)

HEALTH HISTORY STATEMENT AND EXAMINATION

All admitted students must submit a health history statement. Appropriate forms will be provided all admitted students for submission prior to registration.

CAREER PLACEMENT INFORMATION

The campus may furnish, upon request, information concerning the subsequent employment of students who graduate from programs or courses of study which have the purpose of preparing students for a particular career field. This information includes data concerning average starting salary and the percentage of previously enrolled students who obtained employment. The information provided may include data collected from either graduates of the campus or graduates of all campuses in the California State University and Colleges. Interested prospective students may request copies of the published information from the Student Services Office.

Evaluation and Acceptance of Credit

The Admissions and Records Office will evaluate previous college work in terms of its relationship to the requirements of the College. 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
Admission to the College

objective. The evaluation remains valid as long as the student matriculates at the date 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 a result of changes in the California Administrative Code.

Because of these regulations, the student should notify the Admissions and Records Office immediately if he changes the degree objective specified in his evaluation. (See Declaration or Change of Degree Objectives.)

While students may follow the specific catalog year degree requirements on which their Evaluation of Transfer Credit 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 AND CREDIT BY EXAMINATION

The College participates in the Advanced Placement Program of the College Board. Advanced placement in sequential courses and six semester units of course credit may be awarded to entering students for scores of 3, 4 and 5 on a CB Advanced Placement examination. Advanced placement and unit credit also may be awarded for satisfactory scores on the College Level Examination Program (CLEP) General and Subject examinations and the CSUC Equivalency Tests in English, general mathematics, algebra-trigonometry, calculus, statistics, general biology, or general chemistry.

Course credit earned through the College's on-campus Advanced Placement Program for High School Students or from early entrance programs at other colleges will be recognized by the College the same as is regular credit. (See Admission as a First-time Freshman.)

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 upper division credit may be allowed from a two-year college, nor may credit be allowed for professional courses in education.

Credit from two-year colleges is allowed up to a maximum of 70 semester units. Additional lower division courses may be completed at a four-year college for full credit, even after 70 units have been earned. Completion of General Education requirements is not required for admission with upper division status.

It is greatly advantageous and frequently imperative to begin some upper division course work, especially that which is applicable to major requirements, soon after 56 semester units are earned. Postponement of transfer usually results in the expense of postponed graduation because a minimum of two years of study is normally required from whichever date upper division course work is started. Simultaneous enrollment at the College for upper division course work and at a two-year college may be approved for any student by the assigned major adviser.
Admission to the College

CREDIT FROM NON-ACCREDITED COLLEGES

Courses from institutions of higher learning which are not accredited to offer work leading to the baccalaureate degree by a regional accrediting agency recognized by the U.S. Office of Education and courses from those which are accredited as a "specialized institution" may be accepted for credit toward advanced standing and fulfillment of graduation requirements only if appropriate in purpose, scope, and depth for a baccalaureate degree. Credit allowed from these institutions will be designated as provisional. Regular credit may be granted upon adviser recommendation, department endorsement, and completion of 24 semester units at the College with a 2.0 (C) grade point average or better.

Students with a degree from such an institution may have their educational experience recognized by the College as equivalent to the completion of a baccalaureate degree from a regionally accredited institution upon adviser recommendation, department endorsement, and completion of 12 units at the College with a grade point average of 3.0 (B) or better or completion of 24 units with at least a 2.5 (C+) grade point average.

COURSE WORK COMPLETED TEN YEARS BEFORE ENROLLMENT

Course work completed ten years before enrollment at the College is designated provisional credit, primarily to alert the student and assigned 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 College.

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 a credential sequence and will not be applied toward the General Education, major, or minor requirements of the College. Such credit may be applied toward a bachelor's degree only as elective units.

Workshops at the College numbered 4920 to 4929 are open to both undergraduate and postbaccalaureate students. Those numbered 5920 to 5929 and 6920 to 6929 are planned for postbaccalaureate students only. However, when an exception to this enrollment prerequisite is allowed by the instructor for a 6920 to 6929 workshop, elective credit toward a bachelor's degree will be allowed.

CREDIT FOR MILITARY SERVICE

Undergraduate students who have one year of active duty of military service will receive six semester units of credit toward admission and a baccalaureate degree. Courses taken at military service schools if appropriate in purpose, scope, and depth for a baccalaureate degree may also yield credit. Military experience
Admission to the College

will be evaluated only upon request. Separation papers (DD 214) or form DD 295 verifying such experience must be filed with the Admissions and Records Office before credit will be allowed.

Academic Advisement

Upon admission students are referred to an adviser in their declared major field of study or to a general adviser if they are undeclared or are without a Cal State Stanislaus degree objective. Undeclared majors must declare a degree major or another specific educational objective prior to their junior year. Any selection or change of major or minor after admission must be accompanied by an official declaration form. (See Declaration or Change of Degree Objectives.) Students who are uncertain as to a choice of major and/or its related vocational goal are encouraged to seek assistance at the Counseling/Career Development Center.

Although the adviser assists the students in planning their entire educational program, students are considered to be responsible for meeting all course prerequisites and all requirements for their degree or credential. Specific days for academic advising are designated each semester in the Academic Calendar to provide a time for students to consult with their adviser in determining a program of courses for the approaching term. At this conference the student completes a Registration Request form which is a part of the registration process.

Students are prepared for their first advising conference only after they have reviewed appropriate sections of the College catalog, examined course offerings in the Class Schedule, and prepared a Trial Study List including alternatives (found in the Class Schedule). If an Evaluation of Credit form has not yet been issued, any catalog(s) of former college(s) attended and any transcripts not on file at CSCS must also be brought to the conference.

A student intending to enter any of the professions listed below may obtain information about CSCS preprofessional programs from the following sources.

PREPARATION FOR PREPROFESSIONAL STUDIES

The plan of undergraduate study at California State College, 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 most soundly meets the requirements set by the profession they wish to enter.

PREPROFESSIONAL PROGRAM: MEDICINE, VETERINARY MEDICINE, OPTOMETRY, DENTISTRY, PHARMACY, AND MEDICAL TECHNOLOGY, AND OTHER MEDICALLY RELATED AREAS. The majority of students entering medical and dental schools in the United States do so after having acquired 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.
Admission to the College

Most undergraduate majors are appropriate for a preprofessional student as long as certain basic subject areas are included in the program. For specific requirements of professional schools, the student is urged to consult such special sources as "Medical School Admission Requirements" (a publication of the Association of American Medical Colleges), and the College's Health Sciences Advisory Committee.

Students interested in the health sciences should register with the Health Sciences Advisory Committee as soon as admission to the College is granted. A committee member will then prepare a suggested basic program to supplement advisement by the major adviser. The committee will also compile data on each student and prepare a letter of evaluation to be sent at the student's request in support of an application to professional schools. Registration with the committee does not commit the student to any particular program or career. (See catalog section titled Health Sciences.)

PREPROFESSIONAL PROGRAM: LAW, 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. There is no single "prelaw" major required, or in most instances recommended, since the successful study of law is more often related to the ability to grasp and solve difficult intellectual problems and to employ disciplined work habits, than it is to any narrow, specialized 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 (economics, English, history, philosophy, political science, and sociology to name a few). For additional information, the student should consult with the prelaw adviser.

For additional information, a student should see the bulletins or catalogs of various law schools or the official "Prelaw Handbook," current edition, prepared by the Law School Admission Test Council and the Association of American Law Schools. This handbook may be obtained at most college bookstores or ordered from Educational Testing Services, Princeton, N.J. 08540.

Internships

Many academic departments at the College 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.
Admission to the College

Registration

Registration is the final step in the matriculation process. When a student has been admitted to the College and has determined which subjects to take, the student should make an appointment to see the adviser during the Academic Advising Period to prepare for registration and obtain the necessary registration forms and instructions. A Class Schedule listing courses offered is available before the Academic Advising Period for each term.

Under the present Computer-Assisted Registration system, students may register in person or by mail. It is to the advantage of the student to register as early as possible in the registration period as noted in the Academic Calendar. All students are subject to the priority in effect at the time they submit their registration forms and pay their fees. (See Academic Calendar for information about priority.) Late registrants may find themselves handicapped in arranging their programs and must pay a $5.00 late registration fee, as required by State law.

If a student unofficially drops a course or leaves the College without first reporting to the Admissions and Records Office to make the change official, the student may receive grades of U, F, or NC. If the student attends a course without officially adding it, the student will receive no credit for the course.

Students who do not attend the regularly scheduled class meetings during the first week of class after registration may be refused entrance to the class by the instructor. Students are responsible for dropping such classes.
The credential programs of the College are administered by the Dean for Credentials and Graduate Programs. The Commission for Teacher Preparation and Licensing (CTPL) has approved the College's programs leading to the credentials listed below:

<table>
<thead>
<tr>
<th>Credential</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Multiple Subject</td>
<td>Education</td>
</tr>
<tr>
<td>2. Multiple Subject with Bilingual/Cross Cultural Emphasis*</td>
<td>Education</td>
</tr>
<tr>
<td>3. Single Subject</td>
<td>Education</td>
</tr>
<tr>
<td>4. Administrative Services</td>
<td>Education</td>
</tr>
<tr>
<td>5. Reading Specialist</td>
<td>Education</td>
</tr>
<tr>
<td>6. Learning Handicapped Specialist</td>
<td>Education</td>
</tr>
<tr>
<td>7. Pupil Personnel Services: School Counseling</td>
<td>Education</td>
</tr>
<tr>
<td>8. School Psychologist (program fulfills Pupil Personnel Services requirement)</td>
<td>Psychology</td>
</tr>
<tr>
<td>9. Clinical-Rehabilitative Services: Language, Speech and Hearing Services</td>
<td>Communication Studies</td>
</tr>
</tbody>
</table>

Students seeking information about the above-listed credential programs should contact the departments listed and read the departmental catalog sections.

Students seeking Multiple Subjects or Single Subject credentials are urged to pay particular attention to the application deadlines and criteria for admission to programs detailed in the Education section of this Catalog. Application materials may be obtained from the Education Office.

Students needing to complete requirements for the clear Multiple Subjects or Single Subject credential need to make an appointment in the Education Office for "Fifth Year" programming.

*See the Catalog for the Bilingual/Cross Cultural Liberal Studies program.
ACADEMIC STANDARDS

HONOR LIST OF STUDENTS

Each semester the College publishes a list of undergraduate honor students. To qualify for the list, a student during the semester under consideration must (1) register for and earn a minimum of 10 units of graded course work at the College, and (2) achieve a 3.5 (B+) grade point average for all course work attempted at the College.

GRADING SYSTEM

ACADEMIC GRADES

A - Excellent . . . Student has demonstrated a high level of competence in meeting course objectives. Four (4) grade points per unit of credit are awarded; affects progress points in same manner.

B - Good . . . Student has demonstrated a more than satisfactory level of competence in meeting course objectives. Three (3) grade points per unit of credit are awarded; affects progress points in same manner.

C - Satisfactory . . . Student has demonstrated a satisfactory level of competence in meeting course objectives. Two (2) grade points per unit of credit are awarded; affects progress points in same manner.

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 (1) grade point per unit of credit is awarded; affects progress points in same manner.

F - Failure . . . Student has not demonstrated a minimally passing competence in meeting course objectives. Credit is not merited. Affects both progress points and grade point calculations; zero progress points and grade points 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. Two (2) progress points per unit of credit are awarded (three [3] per unit of credit in graduate courses); grade points are not affected.
Academic Standards

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 but affects progress points calculations; zero progress points assigned.

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 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 and progress point 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 and, in any case, 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, 2, 3, 4, and 6; and to a grade of F for grading option 5. (See Grading Options below.) An extension of time may be granted via approved petition. Not used in grade point average or progress points calculation.

RD - Report Delayed . . . No grade reported by the instructor. The RD symbol may be used in those cases where a delay in reporting of a grade is due to circumstances beyond the control of the student. Symbol will be replaced by an appropriate academic grade as soon as possible. Not used in grade point average or progress points calculation.

W - Withdrawn from Course . . . Indicates that the student was permitted to drop the course after the 20th day of instruction with the approval of the instructor and the Coordinator of Academic Advising. It carries no connotation of quality of student performance and is not used in calculating grade point average or progress points. (See Withdrawal from College 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
Academic Standards

more than one term to complete (e.g., master's thesis). SP grades shall be removed within one year after issuance of the grade except for graduate degree theses for which the time may be up to two years. If the SP is not removed within these time limits, the grade will revert to NC for grading options 1, 2, 3, 4, and 6, and to a grade of F for grading option 5. An extension of time may only be granted via approved petition. Not used in grade point average or progress points calculation.

AU - Audit . . . Enrollment in a class for purposes of instruction only. No credit. Not used in grade point average or progress points calculation.

Prior to Fall Semester 1973, the following grades were also used:

WS - Withdrawn, Satisfactory . . . No effect on units earned or grade point average.
MU - Withdrawn, Unsatisfactory . . . 0 grade points (equivalent to grade of F).
IS - Incomplete, Satisfactory . . . No effect on grade point average.
IU - Incomplete, Unsatisfactory . . . 0 grade points.
P - Passing . . . No effect on grade point average; indicates achievement of a sufficient portion of course objectives to justify the awarding of unit credit.
H - Audit . . . No effect on grade point average.
IP - In Progress . . . No effect on grade point average.
NR - No Report . . . No grade reported by the instructor. No effect on grade point average.

GRADING OPTIONS

1. Courses graded exclusively Credit/No Credit.
2. Courses graded A, B, C/No Credit--without the student's option to receive a Credit or No Credit grade.
3. Courses graded A, B, C/No Credit--with the student's option to receive a Credit or No Credit grade.
4. Courses graded A, B, C, D, F--with the student's option to receive a Credit or No Credit grade.
5. Courses graded A, B, C, D, F.
6. Courses graded Credit/No Credit--with the student's option to receive a letter grade.

PROGRESS POINTS

Progress points are for the purpose of determining probation and disqualification at the College and are based on the computation as noted under Grading System above and under the Grade Point-Progress Point Computation below.
GRADE POINT-PROGRESS POINT COMPUTATION

Grade point averages are computed by multiplying grade points in courses graded A, B, C, D, F and U (each unit of A=4, B=3, C=2, D=1, F=0, U=0) and dividing the total number of grade points by the number of graded units attempted. CR (Credit) and NC (No Credit) enrollments are not included in this calculation.

Progress points are computed the same as grade points except that grades of CR (Credit) and NC (No Credit) are included. Credits (CR) are calculated as C's (B's for graduate courses) and No Credits (NC) as F's. Progress points are computed each semester and are not cumulative.

CREDIT/NO CREDIT GRADING

Any student may elect to be graded on a Credit/No Credit (CR/NC) basis in any course approved for credit grading. Courses approved for CR/NC are indicated as such in the Class Schedule.

Student must notify the course instructor in writing of election of the credit grading system by the Last Day to Drop a Course unless the instructor agrees to establish a later date for an individual class. Request forms are available from instructors or the Admissions and Records Office during the first week of class.

The Credit (CR) grade is earned for C work or better (B or better in graduate courses) as judged by the instructor concerned. Credit and No Credit (NC) grades will have no effect on grade point average but will affect progress points. Each department determines the maximum number of CR/NC courses applicable to degree requirements, but in no case shall more than one-third of the required upper division or graduate units or courses in a degree program be graded CR/NC. No more than 40 semester units graded on a CR/NC basis, including Winter Term courses but excluding credit from challenge examinations, may be applied toward a baccalaureate degree.

SCHOLARSHIP STANDARDS*

For the purpose of determining eligibility for a bachelor's degree, a student must earn and maintain a grade point average of at least 2.0 (C) for his entire college record in all courses at California State College, Stanislaus. Failure to maintain standards of minimum competency will result in either Probation or Disqualification. (See Grade Point-Progress Point Computation.)

GOOD STANDING

A student is in good standing when he is eligible to continue enrollment and is free from academic disqualification and disciplinary suspension and expulsion.

* The student may also be subject to expulsion, suspension, and/or probation for other causes. See Student Conduct, Rights, and Responsibility in Student Services section of this Catalog.
Academic Standards

For the purpose of determining a student's eligibility to remain at California State College, Stanislaus (Good Standing), both the quality of performance and progress toward his academic objective shall be considered. Such eligibility shall be determined by means of a Progress Point Scale based on the grade and progress point values of grades mentioned under Grading System.

PROBATION

A student shall be placed on probation if, in any fall or spring semester, he fails to earn twice as many progress points as all units attempted during that term. Each student on probation will be expected to meet with his major adviser to formulate a plan to rectify his academic deficiencies and maintain progress toward a degree.

DISQUALIFICATION

A student shall be disqualified and lose good standing if, while on probation in a fall or spring semester, he fails to earn twice as many progress points as all units attempted during that term or is admitted or readmitted on probation and fails to meet the conditions established at the time of admission.

Any student may also be disqualified if, during any semester, fewer cumulative grade points are earned than cumulative units attempted, and the cumulative grade point deficiency is so great that in view of the student's overall educational record it seems unlikely that the deficiency will be removed within a reasonable period.

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.

SPECIAL ADMINISTRATIVE ACTION

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

1. Withdrawal in two successive terms or in any three terms from more than half of the units 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, 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.).

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:
Academic Standards

1. The conditions for removal of administrative-academic probation are not met within the period specified, or
2. The student becomes subject to academic probation while on administrative-academic probation, or
3. The student becomes subject to administrative-academic probation for the same or a similar reason for which the student has been placed on administrative-academic probation previously, although not currently in such status.

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 Coordinator of Academic Advising. However, reinstatement is generally not approved for the semester immediately following disqualification.

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

To be reinstated and readmitted, a student must provide before the specified dates listed in the college catalog evidence that future academic performance will be satisfactory.

Reinstated students will be readmitted only if admission quotas permit. 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 unit credit and grade points. This option is not available to postbaccalaureate and graduate students. This policy is effective only for courses repeated during or since Summer 1973. The original enrollment and the repeated effort need not be at the same college if it can be established after faculty consultation, as appropriate, that the courses are equivalent in terms of content and emphases. This provision for repetition is not applicable when a course may be taken additional times for credit.

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

At admission to the College, the repeated course actions and policies of former institutions will be honored.

ACADEMIC RENEWAL

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

1. At least five calendar years have elapsed since the course work was attempted.

2. The student is an undergraduate and has completed at CSCS 15 semester units with a 3.0 (B) grade point average, or 30 semester units with a 2.5 (C+), or 45 semester units with a 2.0 (C).

3. A maximum of one academic year of course work may be disregarded and when such action is taken all work attempted during those terms must be disregarded; similar actions by other institutions would be counted in determining the one-year limit.

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 his request were not approved.

5. The permanent academic record will be annotated so that a record of all work remains legible, ensuring a true and complete academic history.

This policy is retroactive. A student must initiate such action using an appropriate petition form; upon approval of the faculty adviser, Coordinator of Academic Advising, and the Vice President for Academic Affairs, Admission personnel will implement the policy.

Upon admission to the College, the academic renewal actions and policies of former institutions will be honored.
NOTE: Students are held individually responsible for knowing and complying with these regulations.

GENERAL EDUCATION CREDIT

The Class Schedule, the Winter Term Bulletin, and this Catalog designate the courses offered during 1981-82 at the College 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 college activities which the student is obligated to attend. In such cases, the instructor may give the student opportunity to make up the work missed.

Students who do not attend the regularly scheduled class meetings during the first week of class after registration may be refused entrance to the class by the instructor. Students are responsible for dropping such classes.

AUDITORS

Admitted students may register in courses as auditors without credit with permission of the instructor. 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 Card at the Admissions and Records Office window. An auditor must pay the same registration fees as other students and may not change his 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 a student's permanent academic record unless he has formally registered for the course and, in the opinion of his instructor, has attended a substantial number of class meetings.

CONCURRENT ENROLLMENT

Any matriculated student pursuing a degree or credential at the College who desires to enroll for a course at another institution or in an extension course at the College must secure prior
Policies and Procedures

approval from his major adviser if credit is to be accepted. Acceptance of credit, however, depends on policies set forth in the catalog section on Evaluation and Acceptance of Credit, and it is the responsibility of the student to find out whether a course taken in concurrent enrollment will be accepted. Application forms are available at the rack across the hall from the Admissions and Records Office.

OFFICIAL PROGRAM LIMITS

A student who wishes to register in excess of 16 units during a fall or spring semester must obtain the approval of the major Department Chair at the time of registration. Four units is the maximum for which a student may enroll during a winter term.

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.

CREDIT BY EXAMINATION

Any student who possesses or through independent study can acquire the ideas and concepts of a course at CSCS can accelerate progress through the College by means of a Challenge Examination. Credit earned in this manner is not treated as part of the student's work load during the regular term and therefore does not require a petition for excess study load.

Credit earned by Challenge Examinations will not be counted toward fulfillment of the College's residence requirement and may not be counted toward the completion of major, minor, and credential requirements except with the express approval of the Major and/or Minor adviser and the appropriate Department Chair. However, both subject and unit credit (unless otherwise specified) will be granted and units counted toward the College's 124 semester unit graduation requirement.

All credit allowed through Challenge Examinations will be ungraded and will be documented in the student's academic record file.

There are presently two types of courses at the College for which a student may receive credit by Challenge Examinations. These examinations are prepared, approved, administered, and evaluated by the appropriate academic department.

CSCS Courses Regularly Offered by Examination

Special course sections for credit by examination may be offered in the Class Schedule by a department. Credit may be earned in these courses by:
Policies and Procedures

1. Enrolling in the course for Credit by Examination during a regular registration period.
2. 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.

CSCS Catalog Courses

A currently enrolled or formally admitted student who has had special preparation in a given subject and who feels that he has covered the necessary course work may challenge by examination any course currently listed in the CSCS catalog under the following conditions:

1. The student must secure a Request for Credit by Challenge Examination from the Admissions and Records Office, obtain the necessary departmental approvals, pay an examination fee of $3 per semester unit or fraction thereof to a maximum of $10 per course challenge, and file all copies of the completed request with the Director of Testing. Instructions for completing and processing the request are contained in the form.
2. The student must take the Challenge Examination at the time and place specified and pass 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 College.
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 of $6 and file all copies of the completed request with the Director of Testing.
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.

CB-AP, CLEP, and CSUC Equivalency Test Programs

Credit by examination may also be secured through the College Board Advanced Placement (CB-AP) Program, as well
Policies and Procedures

as by passing appropriate sections of the College Level Examination Program (CLEP) General and Subject Examinations. In addition, students seeking General Education credit in English, General Mathematics, Algebra-Trigonometry, Calculus, Statistics, General Biology, or General Chemistry may take the California State University and Colleges (CSUC) Equivalency Tests administered in April or May each year. Six semester units of credit are awarded for successfully passing the English test, and three units are awarded for each of the science and mathematics tests.

In individual cases, a limit may be imposed on the number of units of credit which can be earned through Challenge Exams. Further information concerning these options may be obtained from the Admissions and Records Office or the Office of Testing Services.

INDIVIDUAL STUDY COURSES

Individual study courses are available in certain fields to a student who has demonstrated capacity for independent study and superior ability in regular course work in those fields at the College. A total of nine units of individual study credit earned at this College, excluding course work taken in Winter Terms, 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 a course already part of the College's regular program of instruction even though the course may not be offered every term.

A student seeking to enroll for an Individual Study course must at registration file the original copy of an approved Request for Course by Individual Study form. The second copy is to be filed with the department concerned. Request forms are available at the Admissions and Records Office forms rack. The request for individual study must be approved by the student's individual study instructor, major adviser, and the department chair concerned who will retain a copy of approved requests. Approvals should be obtained during the advising for registration period indicated in the Academic Calendar.

SEQUENCE COURSES

No student will be able to take a sequence course for credit which is below the level of a course for which credit was received in the past.

UNDERGRADUATE ENROLLMENT IN GRADUATE COURSES

Courses numbered 5000 through 6999 are graduate or professional postbaccalaureate courses and may not be taken by undergraduate students except for seniors within 9 semester units of graduation. Students must file a Request for Postbaccalaureate Credit form with the Admissions and Records Office.
POSTBACCALAUREATE CREDIT

All courses taken during the term in which a student earns his degree that are not needed to fulfill degree requirements will, upon the approval of the Request for Postbaccalaureate Credit form, be indicated on his permanent academic record as acceptable postbaccalaureate credit. Students graduating Spring Semester may also request to have the preceding Winter Term course included as postbaccalaureate credit if not used for degree requirements. Students graduating Winter Term may also request to have any Fall Semester courses included as postbaccalaureate credit if not used for degree requirements. 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 the College after admission must file a Declaration or Change of Degree Objective form with the Admissions and Records Office. To officially change and/or declare a degree objective, all appropriate signatures must be obtained on the form. Students admitted to a credential program will have their names submitted to the Admissions and Records Office by the Division of Education. Juniors and seniors must officially declare a degree major at the College or other specific educational objective.

ADDING AND DROPPING COURSES

No courses may be added or dropped unless submitted on official forms, properly signed and accepted at the Admissions and Records Office during the regular add or drop period. Unauthorized dropping of a course will result in a final grade of U, F, or NC.

A student may not drop a course during the term except as subject to the following regulations:

1. A course may be dropped if an approved Program Change card is filed in the Admissions and Records Office on or before the last day to drop a course as shown in the Academic Calendar.

2. A student may not drop a course after the 20th day of instruction (third day of instruction during Winter Term) as shown in the Academic Calendar except when approved by the Coordinator of Academic Advising for serious or compelling reasons, i.e., accident or serious illness where the cause of withdrawal is shown to be clearly beyond the student's control. Permission to drop a course after this deadline requires the following statements and approval on the "Request to Drop Course with W Grade" form.

   a. A statement of the serious or compelling reasons with supporting evidence.

   b. Report of the course instructor on the student's academic performance to date and recommendation.
Policies and Procedures

c. Notification of the student's adviser, allowing the opportunity to provide pertinent information, if any, concerning the student's dropping a course.
d. Approval of the Coordinator of Academic Advising.

Students may add courses by filing an approved Program Change card in the Admissions and Records Office not later than the last day to add a course, as shown in the Academic Calendar.

LEAVE OF ABSENCE

A student withdrawing from the College who will not be registered for any of the terms of an entire academic year may for reasons beyond his control (i.e., compulsory military duty, medical, pregnancy, etc.) request a "leave of absence" to protect the right to degree or credential requirements which were fixed at the time of admission to the College or admission to a degree or credential program. 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 College nor exempt him for the regular application for readmission procedure and filing dates.

PLANNED STUDENT LEAVES

A Planned Student Leave is an interruption of a student's formal education in which he voluntarily ceases his enrollment at the College to pursue other educationally related activities to complete or enrich his academic program or to clarify his educational goals. The intent of this program is to make it possible for a student to suspend his academic work, leave the campus, and later resume his studies with a minimum of procedural difficulty. It is not intended for a student who only wishes 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 a 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 and college, or between community college and four-year college enrollment.

2. Requests for Approval

a. Each Planned Student Leave request must include a stated intent to reenroll at the College 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 (Peace Corps, Vista), study, or other specific plans which will contribute to the student's educational objectives.
Policies and Procedures

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 chairman, and the Registrar.

c. Educational leaves may begin at any time. However, if a student chooses to begin a leave while he has course work 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 his leave prior to its termination. Under no circumstances shall successive leaves exceed two calendar years.

4. Return Responsibilities and Benefits

A student returning from an approved educational leave is 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. A returning student must specify on his application that he is 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 his normal registration priority and rights to prior graduation requirements provided leave terms are fully met and proper return procedures are followed.

5. Student Record Entry

Each student enrolled in this program will have an entry made in his records indicating that he is on a Planned Student Leave. The dates of the beginning and conclusion of the leave will also be recorded.

6. 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 COLLEGE

A student may withdraw from the College through the 20th day of instruction (through the 3rd day for Winter Term) without having any administrative symbol recording by filing an approved Withdrawal Card in the Admissions and Records Office. A student who withdraws from the College is deemed to be fully responsible for such action and is not eligible for readmission to the College prior to the beginning of the next term. An Application for Readmission must be filed in order to register for a future term. A student who takes unauthorized leave may receive a final grade of U, F, or NC in each course for which he was registered.
Policies and Procedures

Students who officially withdraw by the last day to file for a partial refund of fees will have their refunds automatically mailed to the address indicated on the Withdrawal Card. (See Refund Regulations.)

Withdrawals after the 20th day of instruction (3rd day for Winter Term) are permissible only for serious and compelling reasons, i.e., reasons clearly beyond the student's control. Permission to withdraw during this period requires the following statements and approval on the "Request to Drop Course with W Grade" form:

a. A statement of the serious and compelling reasons with supporting evidence.
b. Report of the course instructor on the student's academic performance to date and recommendations.
c. Notification of the student's adviser, allowing the opportunity to provide pertinent information, if any, concerning the student's withdrawal.
d. Approval of the Coordinator of Academic Advising.

Upon approval, a "W" will be assigned. The "W" carries no connotation of quality of student performance and is not used in grade point average or progress points calculation.

Withdrawals shall not be permitted during the final three weeks of instruction 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. Written approval is required by the Coordinator of Academic Advising.

INCOMPLETE WORK

An incomplete (I) signifies that a portion of required course work has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons beyond the student's control and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements which must be satisfied to remove the incomplete. 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.

An incomplete must be made up within the time limit set by the instructor and, 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, 2, 3, 4, and 6, and to a grade of F for grading option 5. (See Class Schedule 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 Coordinator of Academic Advising. Students may not be permitted to graduate until all incompletes are removed. A student is not to reregister in a course in which he has 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. Cumulative enrollment in units attempted may not exceed the total number applicable to the student's educational objective.

SP grades shall be removed within one year after issuance of the grade except for graduate degree theses for which the time may be up to two years. If the SP is not removed within these time limits, the grade will revert to NC for grading options 1, 2, 3, 4, and 6, and to a grade of F for grading option 5. An extension of time may only be granted via appropriate petition to the Coordinator of Academic Advising for undergraduates or the Graduate Dean for graduate students.

STUDENT CLASSIFICATIONS

Class level:

- Freshman ... 0-29½ acceptable completed semester units
- Sophomore ... 30-59½ acceptable completed semester units
- Junior ... 60-89½ acceptable completed semester units
- Senior ... 90 or more acceptable completed semester units
- Graduate ... Possesses acceptable baccalaureate or advanced degree

Admission status:

- General ... Met all admission requirements
- Probational ... Admitted with scholastic deficiency
- Conditional ... Permitted to register pending official verification of admission status
- Extension ... Permitted to register for extension course work only
- Summer ... Permitted to register for summer session course work only
- Visitor ... Permitted to register for a single term only

Registration status:

- Continuing ... Student enrolled in last semester
- Former ... Returning student who registered in a previous term but not the last semester
- New ... Student who is registering in a regular term for the first time
### Policies and Procedures

#### Full- and part-time students:

**Undergraduate Classification**

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Fall/Spring Units</th>
<th>Winter Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>10.0 or more*</td>
<td>3.0 or more*</td>
</tr>
<tr>
<td>3/4</td>
<td>7.0 - 9.5</td>
<td>2.0 - 2.5</td>
</tr>
<tr>
<td>1/2</td>
<td>5.0 - 6.5</td>
<td>1.5</td>
</tr>
<tr>
<td>1/4</td>
<td>4.0 - 4.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Less than 1/4</td>
<td>.5 - 3.5</td>
<td>.5</td>
</tr>
</tbody>
</table>

Note: 1. During the Fall and Spring semesters these classifications also apply to postbaccalaureate students enrolled for less than 4 units 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.

**Graduate Classification**

Postbaccalaureate students enrolled for 4 or more units of course work applicable to a graduate program are classified as full- 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.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Fall/Spring Units</th>
<th>Winter Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>7.0 or more*</td>
<td>2.0 or more*</td>
</tr>
<tr>
<td>3/4</td>
<td>5.5 - 6.5</td>
<td>NA</td>
</tr>
<tr>
<td>1/2</td>
<td>4.0 - 5.0</td>
<td>NA</td>
</tr>
<tr>
<td>1/4</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Less than 1/4</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

#### GRADE REPORTS TO STUDENTS

A report of final grades in all courses will be sent to the mailing address of a student after the conclusion of each semester, term, and summer session. Units may not in all cases reflect exact totals, i.e., grade changes, clearance of incompletes, repeated courses, etc.

*Other agencies (i.e., U.S. Immigration Office, etc.) have the prerogative to define full-time to meet their particular requirements.

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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 registration information, grades, correspondence, and other such material reach the student without unnecessary delay. The United States postal service also should be immediately notified of any change in mailing address.

TRANSCRIPTS

Official transcripts of courses attempted at the College are issued only with the written permission of the student concerned. Partial transcripts are not issued. A fee of $2 for each transcript issued must be received before the record can be forwarded. Transcripts from other institutions which have been presented for admission or evaluation become a part of the student's permanent academic file and are not returned or copied for distribution. Students desiring transcripts covering work attempted elsewhere should request them from the institutions concerned.

PETITIONS

Students may petition for waiver of certain college-wide academic requirements or for review of decisions affecting their academic status. Petition forms and information concerning regulations may be secured from the Admissions and Records Office, the Advising Center, and/or the Graduate Studies Office. All such petitions must be reviewed and signed by student's major adviser and/or instructor, as appropriate, before being filed. Undergraduate students will file petitions with the Advising Center, and postbaccalaureate students will file petitions with the Graduate Studies Office.

A petition concerning a departmental major, minor, or other requirement should be directed to the appropriate department.

Petitions concerning reinstatement after disqualification are to be filed directly with the major adviser for a recommendation before being filed with the Admissions and Records Office.

GRADE APPEAL PROCEDURE

Detailed procedures are included in the Faculty Handbook. They are also contained in the pamphlet "A-Z," available in the Student Services Office. Further explanation regarding these procedures is available from the Graduate Studies Office.
FEES AND REFUNDS

Fees are established in accordance with State laws and the regulations of The Trustees of The California State University and Colleges and are subject to change as prescribed by law, without prior notice. Auditors must pay the same fees as students enrolled for credit.

Total registration fees for California residents are approximately $212.00 per academic year ($93.00 per semester; $26.00 for Winter Term). Total registration fees and tuition for nonresidents are approximately $2,372.00 per academic year ($1,029.00 per semester; $314.00 for Winter Term).

REGISTRATION FEES

Payable at time of registration. No individual can be admitted to class prior to payment of all required fees.

STUDENT SERVICES FEES:
6.0 units or less ........................................ $68.00
6.1 units or more ........................................ 83.00
Winter Term .................................................. 23.00

ASSOCIATED STUDENT'S FEES:
Regular Students (6.1 units or more)
Regular Students--Fall Semester .......................... 9.00
Winter Term .................................................. 2.00
Spring Semester ............................................. 9.00

Limited Students (6.0 units or less)
Fall Semester ................................................ 4.50
Winter Term ................................................ 2.00
Spring Semester ............................................. 4.50

Summer Session .............................................. 2.00

Except that no student shall be required to pay an aggregate amount in excess of $20 for the entire year

STANISLAUS UNION FEES:
Regular Students--Each Semester .......................... 9.00
Limited Students--Each Semester .......................... 4.50
Winter Term .................................................. 2.00
Summer Session .............................................. 4.00

HEALTH FACILITY FEE--Each Semester ........................ 2.50
Winter Term .................................................. 1.00

INSTRUCTIONALLY RELATED ACTIVITY (IRA) FEE:
Fall Semester .................................................. 4.50
Winter Term .................................................. 1.00
Spring Semester ............................................. 4.50
Fees and Refunds

**OTHER FEES AND CHARGES (in addition to registration fees)**

Nonresident tuition including foreign nonresident:
- For the first 12 units (per unit or fraction of unit) $ 78.00
- For the 13th unit and over (maximum) per semester $1014.00
  (The total amount of nonresident tuition charged shall not exceed $2,340 per academic year.)

Application Fee (nontransferable and nonrefundable) $25.00
Late Registration Fee (nonrefundable) $5.00
Graduation Fee $10.00
Check returned from bank for any cause $10.00
Transcript of Record $2.00
Failure to meet administratively required appointment or time limit $2.00
Replacement of equipment or materials lost or damaged $78.00
Library books or materials lost or damaged $101.00
Summer Session—per unit $48.00
Extension Courses—per unit:
- Lecture and Discussion Courses $44.50

Parking Fees
- Nonreserved spaces, autos: Regular students, per semester $18.00
- Winter Term $9.00
- Reserved spaces, per month or major fraction thereof $12.00
- Two-wheeled, self-propelled vehicles licensed by State Department of Motor Vehicles, per semester 25% of above

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.

**NONRESIDENT STUDENTS**

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 resident 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 College 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 College's legal adviser indicates that a student is a legal resident.

For more detailed information on residency determination and exceptions to tuition, refer to California Residency Classification under the Admissions section of this Catalog.
Fees and Refunds

REFUND REGULATIONS

Fees may be refunded only as authorized by Sections 41803 (parking fees), 41913 (nonresident tuition), 42019 (housing charges), and 41802 (all other fees) of Title 5, California Administrative Code. 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 (for example, death, disability, compulsory military service), the number of days of instruction which have elapsed before application for refund is made (for example, requests for refund of student services fees, student body organization fees, and student body center fees must be made no later than 14 days following the commencement of instruction, and requests for refund of extension course tuition fees must be made prior to the fourth meeting of the class), 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 Withdrawal Card available from the Admissions and Records Office. To receive a partial refund, the completed Withdrawal Card must be received in the Admissions and Records Office not later than the 14th calendar day following the first day of instruction.

Fees which may not be refunded include: a) late registration fee; and b) student body fee, IRA fee, SUB fee -- except upon complete withdrawal from CSCS.

Fees which may be refunded include: a) fee collected in error; b) student services fee (except for $5); c) difference between semester full-time and part-time student services fees (less $5) for change to part-time fee status within 14 days of the first day of instruction; d) any fee for student unable to continue enrollment because of campus rule, death, physical disability, or compulsory military service; e) admissions application fees upon proof applicant was unable to attend because of death, physical disability, or compulsory military service; f) all or part of a fee other than a registration fee, not earned by CSCS, in which case the Business Office must certify the amount not earned; and g) special session or extension fees in accordance with Title 5 formulas.

Upon official withdrawal from the College by the stated refund deadline, the State will refund the total fees paid less $5.00.

For each unit of nonresident fee charged, the State will refund the entire fee charged during the first week of each semester; thereafter 90% will be refunded the second week, 70% the third week, 50% the fourth week, 30% the fifth week, and 20% the sixth week. There will be no refund after the sixth week.
Fees and Refunds

STUDENT SERVICES FEE

A Student Services Fee was established by the Board of Trustees of The California State University and Colleges in January 1975. Previously, this fee was known as the Materials and Service Fee. The student services fee provides financing for the following student services programs not covered by state funding:

1. Social and Cultural Development Activities: provides for the coordination of various student activities, student organizations, student government, and cultural programs.
2. Counseling: includes the cost of counselors' salaries and clerical support plus operating expenses and equipment.
3. Testing: covers the cost of test officers, psychometrists, clerical support, operating expenses, and equipment.
4. Placement: provides career information to students and faculty for academic program planning and employment information to graduates and students.
5. Financial Aids Administration: includes the cost of the counseling and business services provided in connection with the financial aids programs.
6. Health Services: provides health services to students and covers the cost of salaries of medical officers and nurses plus related clerical and technical personnel as well as operating expenses and equipment.
7. Housing: includes the cost of personnel providing student housing information and monitoring housing services.
8. Student Services Administration: covers 50% of the cost of the Dean of Students Office which has responsibility for the overall administration of student services.

PROCEDURE FOR THE ESTABLISHMENT OF A STUDENT BODY FEE

The law governing the California State University and Colleges 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 California State College, Stanislaus, by student referendum on February 28, 1975. 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. (Education Code, Section 89300). The level of the fee is set by the Chancellor upon recommendation by the campus. Student body fees support a variety of cultural and recreational programs, child care center, and special student support programs.

CREDIT CARDS

In the event a student desires to pay any fees by use of BankAmericard, VISA, or Master Charge, he/she should contact the Business Office. If the student's bank does not have a check service program through the campus, the student may obtain a cash advance at a local bank.
Fees and Refunds

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 or College, according to the Alan Pattee Scholarship Act, Education Code, Section 68121. Students qualifying for these benefits are known as Alan Pattee scholars. For further information contact the Admissions/Registrar's Office, which determines eligibility.

DEBTS OWED TO THE INSTITUTION

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

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

The 19 campuses and the Chancellor's Office of The California State University and Colleges are financed primarily through funding provided by the taxpayers of California. Including capital outlay, the CSUC 1980/81 budget totals approximately $1.1 billion. Approximately $1.074 billion of the $1.1 billion total has been budgeted to provide support for a projected 230,750 full-time equivalent (FTE*) students. Thus, excluding costs which relate to capital outlay and the Energy and Resources Fund (e.g., building amortization), the average cost per FTE student is $4,652 per year. Of this amount, the average student pays $387. Included in this average student payment calculation is the amount paid by non-resident students. The remaining $4,265 in costs is funded by state and federal taxes.

Averages do not fit all students alike or even any specific student. To arrive at an average figure that is meaningful, the costs outlined above exclude "user fees" for living expenses, housing, and parking as well as costs for extension and summer session work. Computations are based on full-time equivalent students, not individuals, and costs are prorated by system totals, not by campus. The average costs for a full-time equivalent student in the system are depicted in the following chart:
## Fees and Refunds

### TOTAL 1980/81 CSUC BUDGET
(PROJECTED ENROLLMENT: 230,750 FTE)

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
<th>Average Cost Per Student (FTE)*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Approp. (Support)</td>
<td>$ 929,137,926</td>
<td>$4,026</td>
<td>86.6%</td>
</tr>
<tr>
<td>Student Charges</td>
<td>89,303,075</td>
<td>387**</td>
<td>8.3%</td>
</tr>
<tr>
<td>Federal (Financial Aids)</td>
<td>55,094,386</td>
<td>239</td>
<td>5.1%</td>
</tr>
<tr>
<td>State Funding (Capital Outlay and Energy and Resources Fund)</td>
<td>25,553,233</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,099,088,620</strong></td>
<td><strong>$4,652</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*For budgetary purposes, full-time equivalent (FTE) translates total head count into total academic student load. The term assumes that a full-time student in The California State University and Colleges is enrolled for 15 units of academic credit. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

**The average costs paid by a student include the student services fee, health facilities fee, college union fee, student body fee, and the nonresident tuition. This amount is derived by taking the total of all student fees and dividing by the total full-time equivalent student enrollment. Individual students may pay more or less than $387 depending on whether they are part-time, full-time, resident, or nonresident students.

***Not included in the Average Cost Per Student (FTE), and Percentage columns. The estimated replacement cost of all the system's permanent facilities and equipment on the 19 campuses is currently valued at $3.12 billion, excluding the cost of land.
STUDENT SERVICES

The Student Services Office is established to meet student needs and offer assistance so that all students may fully benefit from the educational program. Specific services are listed on the following pages and completely described in the Student Handbook.

ACADEMIC ADVISING AND ORIENTATION

New students at California State College, Stanislaus are invited to select from five different orientation dates during the summer months which provide an opportunity for the students to obtain academic advising from the professional staff and to learn about the many services, activities, and special programs that are available.

ADULT REENTRY PROGRAMS

These programs are a general advisory service for adults who have been out of school for an extended time and wish to return in order to continue their education. These programs have as their objectives the provision of such services as orientation to the college environment, preadmission academic advising and assessment, counseling and testing services, assistance with admission procedures, career-planning, and continuing support and encouragement.

CAMPUS INFORMATION LINE

The information line staff provides information on current campus events and assistance in contacting campus personnel. If you are unable to locate the phone number you need in the telephone directory, try the campus information line. The information line is open 7:30 a.m. to 10:00 p.m., Monday through Thursday; 7:30 a.m. to 5:00 p.m., Friday; 9:00 a.m. to 5:00 p.m., Saturday; and 1:00 p.m. to 9:00 p.m., Sunday.

CAREER PLANNING AND PLACEMENT

A career decision may require considerable individual effort expended over a long period of time. Therefore, freshman and sophomore students are encouraged to use the facilities of the Career Development Center, located in the Library Building, Room 101. Interest inventories, ability, personality testing, and counseling are among the techniques available to students who wish assistance in evaluating their strengths and weaknesses. A career library provides information about potential career choices. In
Student Services

addition, staff members are glad to assist with job search procedures, including development of resumes and placement files.

The Career Development Center serves as liaison with employers throughout the area who seek full-time personnel. A number of such employers schedule on-campus interviews during the year and others are willing to see prospective employees at their plant or office. In addition, the Career Development Center maintains local and statewide announcements of openings in teaching, business, and government. The complete list of these openings is available in the career library. Special announcements and current career information of interest to all students are publicized in the student newspaper, The Signal, the weekly Campus Digest, and the Career Development Center bulletin board which is adjacent to the Career Development Center. Announcements are also sent to academic departments, as appropriate.

In order to utilize effectively the services available in the Career Development Center, students are encouraged to visit the center regularly.

EDUCATIONAL OPPORTUNITY PROGRAM

The Educational Opportunity Program offers special assistance to students designated "bonafide" upon admission to the college. The services provided are designed to maximize a student's chances for success in college. These services include, but are not limited to, counseling, academic advising, tutoring, study skills assistance, and special courses. There is grant money available through Financial Aid for established bonafide EOP students who qualify based on financial aid rules and regulations.

To be eligible for these services, students should come from a disadvantaged background, be of low income or have an educational disadvantage that makes transition into college potentially difficult. Those who feel that they may qualify should contact the EOP Office.

FINANCIAL AIDS

The Financial Aid Office administers federal and state financial aid programs available to eligible students to help them meet their educational expenses. New students should review the Financial Aid Information for 1981-82 which is contained in the Common Admission Application. All applicants must complete the Student Aid Application for California (SAAC) which may be obtained from high school counselors and college financial aid offices. Upon receipt of the SAAC the Financial Aid Office will request additional information. Application deadlines are observed, and students are encouraged to complete their applications as soon as possible since available funds are limited.

Financial Aid programs available to qualified students are:

NATIONAL DIRECT STUDENT LOAN (NDSL) - The NDSL is a federal program providing long-term, low-interest loans in amounts governed by
established eligibility and availability of funds. Four percent simple interest and repayment begins six months after the date the borrower ceases to maintain at least half-time enrollment. In some cases deferment of payment or full cancellation of the loan and interest may be possible.

CALIFORNIA GUARANTEED STUDENT LOAN PROGRAM (CGSLP) - Loans are made available to full-time students through private lending institutions such as banks, savings and loans, or credit unions. Repayment of loans and nine percent simple interest is deferred until six months after the date the borrower ceases to maintain at least half-time enrollment. Further information and application materials are available at the Financial Aid Office.

COLLEGE 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.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG) - These awards are federally funded and are granted to undergraduate students who demonstrate financial need. It is awarded as part of the financial need.

BASIC EDUCATIONAL OPPORTUNITY GRANT (BEOG) - The Basic Grant Program is a federally funded program available to qualified undergraduate students. Students who have received eight semesters (or its equivalent) may now be eligible for additional assistance. Applications are available from high school counselors and college financial aid offices.

STATE EDUCATIONAL OPPORTUNITY PROGRAM GRANT - Students admitted to the college through the Educational Opportunity Program and have financial need may be funded under this state program.

SCHOLARSHIPS - A limited number of scholarships are available to undergraduate and graduate students attending CSCS. Eligibility is based on academic merit. Applications may be obtained from the Financial Aid Office.

STUDENT ASSISTANT 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 $50 may be borrowed with repayment in sixty days.

Students interested in more information regarding financial aid programs or application procedures should inquire directly to the Financial Aid Office, Room L-107, California State College, Stanislaus.
HEALTH SERVICES

All admitted students must submit a health history statement. It is not mandatory, but strongly recommended that all admitted students obtain a complete physical examination prior to entrance, particularly those who will be involved in intercollegiate athletics.

The College maintains a Health Center in Room 117 of the Classroom Building, which is staffed by a full-time family nurse practitioner under the direction of a physician who is the medical director, two nurses, and a pharmacist. The outpatient facility provides care and treatment normally performed in a physician's office, diagnosis, treatment of ambulatory illness and injury, appropriate referral, on-campus emergency calls, birth control, venereal disease information and treatment, T.B. tests, immunizations, blood bank, allergy injections, pharmacy, laboratory, and x-ray.

The new Health Center should be completed for occupancy sometime during the 1981-82 academic year and will include an emergency room, a lab, physical therapy room, recovery room, 6 exam rooms, counseling facilities, and a medical library.

SUPPLEMENTAL HEALTH INSURANCE - The Health Center coverage described above should be supplemented by an individual policy of the student or student's parents. The College does offer a group policy which is available on the student's request. The cost is nominal and provision can be made for dependents.

HOUSING

There is a wide variety of housing including an on-campus co-educational residence hall, 700 private apartments within one block of the campus, and various homes for rent and "live-ins." The residence hall includes lounges for study and TV, a cafeteria, a swimming pool, volleyball and a basketball court. The Housing Office located in Room L-102 lists all available housing and also can arrange for roommates if needed. The Housing Office also handles complaints for students who are having problems with deposits, rental rates, conflicts with managers, etc.

INTERNATIONAL PROGRAMS

The California State University and Colleges (CSUC) offers opportunities for students to pursue their studies at a distinguished foreign university or special program center. Under the auspices of the CSUC Office of International Programs, participants in this program are concurrently enrolled at their home CSUC campus, where they earn full academic credit for their overseas studies.
Cooperating universities abroad include the University of Sao Paulo, Brazil; the University of Copenhagen, Denmark (through Denmark's International Studies Program); the Université de Provence, France; the Universities of Hamburg, Heidelberg; and Tübingen, Germany; the Hebrew University of Jerusalem, Israel; the University of Florence, Italy; Waseda University, Japan; the Universidad Ibero-Americana, Mexico; Massey University and Lincoln University College, New Zealand; the Universidad Católica, Peru; the Universities of Quebec (Canada); National Chengchi University, the Republic of China (Taiwan); the Universities of Madrid and Granada, Spain; and the University of Uppsala, Sweden.

Eligibility for application is limited to those students who will have upper division or graduate standing by September, 1982 at a CSUC campus, who possess a cumulative grade point average of 2.75 for all college level work completed at the time of application (some programs require a 3.0 cumulative grade point average), and who will have completed required language study where applicable. (Brazil, France, Germany, Mexico, Peru, Quebec francophone universities, and Spain currently require language study.) Selection is competitive and is based on home campus recommendations and the applicant's academic record. Final selection is made by the Office of International Programs in consultation with a statewide faculty selection committee. Applicants to the programs in Israel, Japan, New Zealand, and Quebec must also be accepted by the respective cooperating universities.

The International Programs supports all tuition and other academic and administrative costs overseas for each of its participants to the same extent that such funds would be expended to support similar costs in California. Students assume costs for pre-departure orientation, insurance, transportation, housing, and meals. Home campus registration and other fees and personal incidental expenses or vacation travel costs while abroad are also paid by the student. Nonresident students are subject to nonresident fees. The Office of International Programs collects and administers funds for those items which the program must arrange or can negotiate more effectively, such as home campus fees, orientation costs, insurance, outbound transportation, and, in some centers, housing. International Programs participants may apply for any financial aid available at their home campuses, except for campus work-study.

Applications for the 1982-83 academic year must be submitted by February 9, 1982, except for the program in New Zealand for which applications must be submitted by May 15, 1982 for participation during calendar year 1983. The academic year in New Zealand begins in February and ends in October.

Detailed information and application materials may be obtained from Dr. Jerome J. Beamish, Room L-102; further information may also be obtained by writing to The California State University and Colleges International Programs, 400 Golden Shore, Suite 300, Long Beach, California 90802.
Student Services

INTERNATIONAL PROGRAMS COURSES

Students enrolled at California State College, Stanislaus, under the California State University and Colleges International Study Programs register concurrently at Cal State Stanislaus and at the host institution abroad. Credit for work taken abroad is in terms of Stanislaus courses. If students studying abroad find no counterpart courses at Stanislaus, the students should register for one of the courses listed below:

INST 2930. Projects in Study Abroad: (Subject) No maximum number of units. Open only to students in California State University and Colleges International Study Program.

INST 4930. Projects in Study Abroad: (Subject) No maximum number of units. Open only to students in California State University and Colleges International Study Program.

INST 5930. Projects in Study Abroad: (Subject) No maximum number of units. Open only to students in California State University and Colleges International Study Program.

INTERNATIONAL (FOREIGN) STUDENT PROGRAM

The International (Foreign) Student Program serves the personal, administrative, and educational needs of a small number of students from other lands. The foreign student adviser represents international students, helps to establish and promote intercultural and personal relationships, and interprets as well as helps international students to 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 college and community environments.

INTRAMURAL LEISURE AND SPORT ACTIVITIES

The Activities Office of the Associated Students offers an extensive selection of intramural sports and activities for all men and women at CSCS. In a recreational atmosphere, students may participate in organized events such as: badminton, basketball, frisbee, horseshoes, self-defense, swimming, table tennis, track, volleyball, weight-lifting, football, softball, bowling, etc. Free usage of physical education facilities are also available which include open gym, weight room, and the Olympic pool.

INTERCOLLEGIATE ATHLETICS

The College participates in fourteen intercollegiate sports: baseball, basketball (male and female), cross country (male and female), golf, softball (female), soccer, tennis (male and female), track (male and female), volleyball, and wrestling. The men participate in the Far Western Conference of the NCAA and the women in the Golden State Athletic Conference. Cal State Stanislaus was
was the NCAA Division III National Champions in baseball for the years 1976 and 1977, and golf champions for the years 1976 through 1980. Fifty-one college athletes have been honored as All-American.

PERSONAL COUNSELING

Counseling services assist students with concerns related to interpersonal relationships (including marriage and family), emotional well-being, career and life planning, drug related problems and other concerns of a personal nature. In addition, students may receive assistance with study skills to improve their academic ability and increase their confidence. Skilled counselors are available to talk with students on a voluntary and confidential basis, without charge.

Students may drop in and make an appointment in the Student Services Office, Room L-101.

SERVICES TO STUDENTS WITH DISABILITIES

The objective of this program is to make specialized assistance and resources available to physically handicapped students, enabling them to achieve their educational and vocational goals. Individualized services are designed to fulfill each student's unique needs in terms of achieving and maximizing independence. Program services may include assistance with registration, special parking privileges, and orientation to the campus. Assistance is offered when required in securing housing, transportation, tutors and/or notetakers, and in maintaining liaison between the student and other college offices and/or community agencies.

STUDENT ACTIVITIES

Recreational, social, and cultural programs for the campus originate from the Student Activities Office, and the Associated Students Recreation Commission, located in the Student Union Building, Room 14. Assistance is provided to individual students, clubs, and organizations in planning, scheduling, and presenting activities for the enjoyment of all students who wish to participate.

Social and cultural programs consist of Mom's Coffee House program, films, school dances, excursion trips, vocational classes, recreational classes, forum speakers, concerts, outdoor recreation programs, outdoor rental shop, and a very extensive intramurals program. These activities are complementary to the academic programs of the College and are open to all members of the campus community.

The Student Activities Office is also responsible for administering the Cheerleader/Pep Band programs, and Warrior Day.
Student Services

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 Administrative Code. These sections are as follows:

Article 1.1, Title 5, California Administrative Code

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 of knowingly furnishing false information to a campus.
(c) Misrepresentation of oneself or of an organization to be an agent of a campus.
(d) Obstruction or disruption, on or off campus property, of the campus educational process, administrative process, or other campus function.
(e) Physical abuse on or off campus property of the person or property of any member of the campus community or of members of his or her family or the threat of such physical abuse.
(f) Theft, of, or non-accidental damage to, campus property, or property in the possession of, or owned by, a member of the campus community.
(g) Unauthorized entry into, unauthorized use of, or misuse of campus property.
(h) On campus property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes, except when lawfully prescribed pursuant to medical or dental care, or when lawfully permitted for the purpose of research, instruction, or analysis.
(i) Knowing possession or use of explosives, dangerous chemicals, or deadly weapons on campus property or at a campus function without prior authorization of the campus president.
(j) Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function.
(k) Abusive behavior directed toward, or hazing of, a member of the campus community.
(l) Violation of any order of a campus president, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.
Subject to this defined:

Student Services

(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 and Colleges Trustees, academic, non-academic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.

2. The term "campus property" includes:
   A. real or personal property in the possession of, or under the control of, the Board of Trustees of The California State University and Colleges, and
   B. all campus feeding, retail, or residence facilities whether operated by a campus or by a campus auxiliary organization.

3. The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, sling shot, billy, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.

4. The term "behavior" includes conduct and expression.

5. The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.

(o) This Section is not adopted pursuant to Education Code Section 89031.

(p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immediately prior to such effective date.

41302. Expulsion, Suspension, or Probation of Students; Fees and Notification. 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. In the event that a student who has not reached his or her eighteenth birthday and who is a dependent of his or her
parent(s) as defined in Section 152 of the Internal Revenue Code of 1954 is suspended or expelled, the President shall notify his or her parent or guardian of the action by registered mail to the last known address, return receipt requested.

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 and Colleges, other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

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

41304. Student Disciplinary Procedures for The California State University and Colleges. The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for The California State University and Colleges. 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 his actions taken under this section.
STUDENT EMPLOYMENT SERVICE

The Student Employment Service offers a program designed to provide full assistance to students seeking part-time and temporary employment. Staff members assist students with completing applications and notify students of appropriate openings. Students may apply for employment in the Student Services Office, Room L-102. Current openings are posted on the bulletin board just outside the Student Services Office.

STUDENT GOVERNMENT

The Associated Students of California State College, Stanislaus (ASCSCS), which is the official organization for student government, is a non-profit corporation, and is designed to provide students with essential services not included in the regular instructional program of the College. By paying the activity fee each semester, all students are members of the Associated Students and may use such programs and services as leisure and recreation services, legal referral, typing facilities, The Signal newspaper, KCSS radio, performing arts, or participate in the events offered by the over thirty student organizations funded by the Associated Students.

The executive and legislative branches of student government are responsible respectively for the management of and allocation of funds to Associate Student programs and student organizations. Elected members in these branches include the President, Vice-President, Financial Officer, and eleven commissioners representing Finance, Activities, Publications, Radio Station, Elections, Academic Affairs, and Inter-Club Council. The Judicial Court is responsible for matters pertaining to student conduct and any violation of Associated Student or College regulations by the Associated Students or its programs. Elections are held yearly and all students, if qualified, may run for any of the student government offices.

STUDENT SPECIAL SERVICES

Student Special Services is a federally funded program which offers assistance to qualified students who meet the low income criteria established by the U.S. Commissioner of Education, or who are physically disabled to have limited English-speaking ability and who are accepted to or already enrolled at California State College, Stanislaus.

Special Services assists eligible students to achieve their post-secondary academic ambitions and, whenever practical, encourages them not only to complete their undergraduate studies but also to go on to graduate or professional educational programs. Services provided include tutoring, academic advisement, peer counseling, and career exploration. Other services can be provided
Student Services

on a need basis. Interested persons should contact the Student Special Services Office.

TESTING SERVICES

The Testing Office provides a comprehensive program of services for students, faculty, and staff. Tests of aptitude, academic achievement, reading proficiency and study habits, vocational interests, and temperament/personality are available to students to assist them in making educational, vocational, and personal decisions. A program of "Credit by Examination" is also administered by this office, enabling students to obtain academic credit for prior college-level training either formal or informal, and to challenge established college courses under certain circumstances. Information concerning all national testing programs such as Graduate Record Examinations, Medical College Admission tests, and National Teacher Examinations is available. Assistance with test selection, test construction, and the analysis and improvement of evaluation techniques is provided on request to faculty, staff, and students.

TUTORIAL SERVICES

A program of tutorial services is coordinated by the Student Services Office. These services are designed to assist students with difficulties which they may be having in specific courses.

Students requiring tutorial assistance are matched, whenever possible, with either a student tutor (usually an upper division major in the discipline) or a faculty member in the appropriate department. The student (tutee) assumes the responsibility for working out mutually satisfactory meeting arrangements (time and place) with the tutor, and for paying the cost of tutoring.

VETERANS AFFAIRS

The Office of Veterans Affairs (OVA) offers assistance in securing veterans benefits, transitional problems and procedures when first enrolling at the College, tutoring, job placement, and 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 Office of Veterans Affairs. The Office of Veterans Affairs forwards all applications and necessary VA forms to the Veterans Administration for final claim determination.

ELIGIBILITY - For Veterans Administration purposes, a veteran is eligible for ten years after the date of his separation if he served for a continuous period of 181 days or more or was discharged or released because of a service-connected disability.
UNIT LOAD REQUIREMENTS - Veterans and eligible persons should refer to the section of the Catalog entitled "Student Classifications" for listing of units required for full- and part-time enrollment status. This is the schedule that the VA uses in determining pay status.

INFORMATION - Veterans or dependents of veterans should contact the Office of Veterans Affairs for information regarding VA or Cal-Vet benefits, application procedures, or other related services.
GENERAL REQUIREMENTS FOR DEGREES

4-1-4

The 4-1-4 academic calendar inaugurated at California State College, Stanislaus in 1973-74 is a modified semester system. On a yearly basis, the 4-1-4 program requires the same instructional weeks, the same academic credits, and the same fee costs as in a traditional quarter or semester system. The 4-1-4 calendar makes no changes in the basic requirements for a baccalaureate degree. Total units required for graduation, general education requirements, the work required for academic credit—all remain essentially the same.

WINTER TERM

As an integral part of the 4-1-4 program at Stanislaus, winter term courses are required for graduation. Normally, students matriculating as freshmen must complete three winter terms, students entering as sophomores or juniors must complete two winter terms, and senior transfers must complete one winter term. (See Residence Requirements.)

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 will normally not be accepted as meeting a Winter Term requirement.

If a student is unable to complete a winter term course due to illness or other circumstances beyond control and thus is unable to fulfill the winter term requirement for graduation, the student may petition for an alternative—as is the case with most college requirements.

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.

DEGREES OFFERED

The College grants the Bachelor of Arts, Bachelor of Science, Bachelor of Vocational Education, Master of Arts, Master of Science, Master of Business Administration, and Master of Public Administration degrees.

ELECTION OF REGULATIONS

A matriculated student who has been in continuous enrollment pursuing a degree may elect to meet baccalaureate graduation requirements in effect either at the time of first entering a California community college or CSUC campus, or at the time of graduation. Program admission and completion requirements for a
General Requirements for Degrees

credential or additional degree or major will be established by the catalog applicable at the time of subsequent program admission. (See Evaluation and Acceptance of Credit.)

APPLICATION FOR GRADUATION

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. In any case, a student should not apply later than the date indicated in the Academic Calendar.

FACULTY APPROVAL

Approval of the major adviser and the department concerned is required before the College 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 California State College Stanislaus grade point averages achieved in their undergraduate work, as follows:

<table>
<thead>
<tr>
<th>Honors</th>
<th>GPA Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cum Laude</td>
<td>3.40 - 3.59</td>
</tr>
<tr>
<td>Magna Cum Laude</td>
<td>3.60 - 3.79</td>
</tr>
<tr>
<td>Summa Cum Laude</td>
<td>3.80 - 4.00</td>
</tr>
</tbody>
</table>

REQUIREMENTS FOR A BACCALAUREATE DEGREE

To qualify for a baccalaureate degree, a student must satisfy the specific requirements in the following areas:

UNITs

A minimum of 124 semester units is required. At least 40 units must be in courses recognized for upper division credit.

RESIDENCE

A student must complete a minimum of 30 semester units at the College. 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.

Credit in summer 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.

In addition, students must complete winter terms as follows (also see section on Winter Term):
General Requirements for Degrees

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.

SCHOLARSHIP

Each student must complete with a grade point average of 2.0 (C) or better: 1) all acceptable college units attempted, 2) all units attempted in a major field of study, and 3) all residence credit units attempted at the College.

WRITING SKILLS

A demonstration of writing skills competency is a requirement for a bachelor's degree. Satisfactory completion of ENGL 3000, Advanced Composition, 1 unit, and one companion 2-unit subject-based advanced composition course, or ENGL 3007, will satisfy this graduation requirement. (See "Writing Competency" under the English, Foreign Languages, and Philosophy section of this Catalog.)

GENERAL EDUCATION-BREADTH REQUIREMENTS

As prescribed by Title 5, California Administrative Code, Section 40405, the College's General Education requirements total a minimum of 51 semester units as described below, including at least 9 upper division level units. At least 9 of these 51 semester units shall be earned at the College. 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 upper division writing competency graduation requirement, which optionally may be satisfied by demonstrating competency, is not applicable to this 51-unit General Education program. The College accepts certification of General Education breadth requirements by a California community college or a CSUC campus, according to CSUC regulations. Upon request, the College will certify completion of these requirements to another CSUC campus.
General Requirements for Degrees

A. COMMUNICATION SKILLS

A minimum of 9 units is required in the communication skills course work below.

1. ENGL 1003. English Composition I, 2 units, and
   PHIL 1001. Logic in Writing, 1 unit, taken concurrently

2. ENGL 1004. English Composition II, 2 units, and
   DRAM 1001. Spoken Communication, 1 unit, taken concurrently

   The prerequisite for ENGL 1004 is completion of ENGL 1003 with a grade of "C" or better.

3. One course selected from the following:
   DRAM 2500. Acting, 3 units
   PHIL 1000. Reasoning, 3 units
   PHIL 1100. Logic, 3 units
   SPCH 2002. Public Speaking, 3 units
   SPCH 2102. Group Discussion Processes, 3 units
   SPCH 2400. Oral Interpretation, 3 units

B. NATURAL SCIENCES AND MATHEMATICS

A minimum of 9 units is required, to include at least one course from each of the 3 groups of courses listed below. This must include a laboratory course from either group 1 or 2.

1. PHYSICAL SCIENCES
   ASTR 2100, 2110. Descriptive Astronomy (lab optional)
   Lecture, 3 units; lab, 1 unit
   CHEM 1000. Chemistry in the Modern World, Lecture, 3 units
   CHEM 1001. Chemistry in the Modern World, Lab, 1 unit
   CHEM 1100. Principles of Chemistry I (lab), 5 units
   CHEM 1110. Principles of Chemistry II (lab), 5 units
   CHEM 1200. The Consumer and Chemistry, 2 units (no lab credit)
   CHEM 2400. Science of Winemaking, 4 units (no lab credit)
   GEOL 2001. Regional Geology of California, 2 units (no lab credit)
   GEOL 2100. Principles of Geology (lab), 4 units
   GEOL 2101. Basic Principles of Geology, 3 units (no lab credit)
   PHSC 1000. Solar Energy Today, 3 units (no lab credit)
   PHSC 1300. Environmental Pollution, 3 units (no lab credit)
   PHSC 2100. Atmosphere, Weather, and Climate, 3 units (no lab credit)
   PHYS 1100. Basic Physics I (lab), 5 units
   PHYS 1110. Basic Physics II (lab), 5 units
   PHYS 1500, 1501. Energy and Matter (lab optional) Lecture, 3 units; lab, 1 unit
   PHYS 2250, 2350. General Physics I (lab optional) Lecture/discussion, 4 units; lab, 1 unit
General Requirements for Degrees

2. BIOLOGICAL SCIENCES

BIOL 1010. Principles of Biology, 3 units (no lab credit)
BIOL 1020-1029. Special Laboratory Studies, Lab, 1 unit, taken concurrently with BIOL 1010
BIOL 2310. Human Genetics, 2 units (no lab credit)
BIOL 2400. Biology and the Sea, 2 units (no lab credit)
BIOL 2650. Environmental Biology, 2 units (no lab credit)
BOTY 1050. Introduction to Botany (lab), 4 units
ZOOL 1050. Introduction to Zoology (lab) 4 units

3. MATHEMATICS

MATH 1000. Math for Liberal Arts Students, 3 units
MATH 1030. Elementary Foundations of Mathematics I, 3 units
MATH 1050. Basic College Algebra, 3 units
MATH 1100. Precalculus, 3 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

A minimum of 9 units is required, to 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 2400. Art History Survey - Ancient, 3 units
ART 2410. Art History Survey - Modern, 3 units
ART 2420. Art History Survey - Nonwestern, 3 units
DRAM 1010. Introduction to Theatre, 3 units
DRAM 1112. Playgoing I, Amateur Theatre, 2 units
DRAM 1113. Playgoing II, Professional Theatre, 2 units
DRAM 1114. Playgoing Laboratory, 1 unit
DRAM 2302. Play Production I, 2 units
MUS 1000. Introduction to Music, 3 units
MUS 2000. Music of World Cultures, 3 units
MUS 2401-2402. Orchestra, 1-2 units
MUS 2410. Chorale, 1 unit
MUS 2420. College Choir, 1 unit
MUS 2430. Chamber Singers, 1 unit
MUS 2440. Symphonic Wind Ensemble, 1 unit
General Requirements for Degrees

2. LITERATURE/PHILOSOPHY

ENGL 1010. Introduction to Literature, 3 units
ENGL 1011. Introduction to American Literature, 3 units
HUM 2000. Introduction to the Humanities, 3 units
PHIL 1010. Introduction to Philosophy, 3 units
PHIL 2200. Ancient Greek Philosophy, 3 units
PHIL 2230. 17th and 18th Century Philosophy, 3 units

3. FOREIGN LANGUAGE

Any language or literature course taught in a foreign language. Credit is not applicable to the upper division General Education requirement.

D. HUMAN SOCIAL, ECONOMIC, AND POLITICAL INSTITUTIONS AND HUMAN BEHAVIOR

A minimum of 12 units is required, including the subject requirements specified below.

1. United States History and Constitution/California State and Local Government

The California Administrative Code, 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 one 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 requirement):

HIST 2600. Problems in U.S. History, 3 units
HIST 3610. Colonial America, 3 units
HIST 3620. Ante-Bellum 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
General Requirements for Degrees

2. A minimum of one from each group is required:

(a) Human Institutions: Structures and Processes

ECON 2500. Principles of Economics I, 4 units
ECON 2510. Principles of Economics II, 4 units
HIST 1010. Western Civilization I, 3 units
HIST 1020. Western Civilization II, 3 units
HIST 2051. Third World I, 4 units
HIST 2060. Third World II, 4 units
PSCI 2020. Politics and Society, 3 units
SOCL 1010. Introduction to Sociology, 3 units
SPCH 2011. Approaches to Human Communication, 4 units

(b) Society and Culture

ANTH 2060. Introduction to Cultural Anthropology, 3 units
ANTH 2080. Introduction to Physical Anthropology, 3 units
ANTH 2091. Exploring Our Ancient Past, 3 units
ETHS 2000. Contemporary Black Studies, 3 units
ETHS 2100. Contemporary Chicano Studies, 3 units
ETHS 2200. Contemporary Asian American Studies, 3 units
ETHS 2300. Contemporary Native American Studies, 3 units
GEOG 2000. Interaction: Man and the Earth, 3 units
GEOG 2010. Introduction to Physical Environment, 3 units
GEOG 2020. Introduction to Cultural Geography, 3 units
GEOG 2500. Eurasia and Africa, Lands and Cultures, 3 units
GEOG 2510. New World Lands and Cultures, 3 units
PSYC 2010. Introduction to Psychology, 3 units

E. INDIVIDUAL RESOURCES FOR MODERN LIVING

A minimum of 3 units is required, to include one course from each group of courses:

1. HLTH 1000. Health in Today's Society, 2 units
   NURS 2040. Better Health with Self Care, 2 units
   PSYC 2030. Psychology of Adjustment, 2 units
   SOCL 2000. Intergenerational Experiences and Life Course Developments, 2 units

2. MDIS 1010. The Computer Experience, 1 unit
   MDIS 2000. Library Resources, 2 units
   PHED 1010-1999. Physical Education Activities, 1 unit
General Requirements for Degrees

F. UPPER DIVISION GENERAL EDUCATION REQUIREMENTS

Each student is to complete a minimum of 9 units of upper division level General Education course work; this must include 3 units from each of the following areas:

1. Natural Sciences and Mathematics
2. Humanities
3. Social Sciences

These courses may be taken no sooner than the term in which upper division status (completion of 60 semester units) is attained. Students should consult their academic advisers for specific information regarding course work which meets upper division requirements.

a Subject and/or unit requirements may be fulfilled by the College's credit-by-examination procedure described under the Policies and Procedures section of the current catalog.

b Requirement partially may be satisfied by acceptable score on the CSUC English Equivalency Examination.

c Requirements may be satisfied by acceptable scores on the CLEP Natural Sciences General Examination or CSUC science tests.

d Requirement may be satisfied by acceptable score on the CLEP Mathematics General Examination or a CSUC mathematics test.

e Requirement partially may be satisfied by acceptable scores on the CLEP Humanities General Examination.

f 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.

g Requirements may be satisfied by acceptable scores on the CLEP Social Sciences General Examination.

h Requirement may be satisfied by MDIS 1010, challenge examination or by completion of any computer course.
General Requirements for Degrees

MAJOR

The major consists of a pattern of upper division courses which are prescribed by the department or school concerned, are exclusive of General Education requirements, and must be preceded by specified prerequisites in the major field of study and in supporting 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.

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

- Anthropology
  - Ethnology
  - Physical Anthropology
  - Prehistoric Archaeology
- Art
  - Painting
  - Printmaking
  - Sculpture
- Biological Sciences
  - Botany
  - Entomology
  - Environmental Sciences
  - Marine Biology
  - Zoology
- Business Administration
  - Accounting
  - Finance
  - Management Information Systems
  - Marketing
  - Operations Administration
  - Personnel Administration
- Chemistry
  - Environmental Sciences
- Child Development
- Drama
- Economics
- English
- French
- Geography
  - Applied Geography
  - Human Geography
  - Physical Geography
- History
- History of Religions
- Liberal Studies
  - Applied Studies Track
  - Bilingual/Cross-Cultural Emphasis
- Mathematics
  - Computer Science
  - Operations Research
  - Statistics
- Music
  - Nursing*
- Physical Education
  - Recreation
- Physical Sciences
  - Applied Physics
  - Earth & Space Sciences
  - Environmental Sciences
- Physics
  - Environmental Sciences
  - Political Science
  - Public Administration
- Psychology
  - Developmental Psychology
  - Experimental Psychology
- Social Sciences
  - Interdepartmental Program
  - International Studies
  - Urban & Community Studies
- Sociology
  - Human Services
  - Social Justice: Corrections
  - Social Justice: Policing
- Spanish
- Special Major
  - Speech Communication
  - Communication Disorders
  - Organizational Communications
- Vocational Education

*Upper Division Program - Open to RN's only.

NOTE: Students seeking teaching credentials are advised to consult a credential adviser. (See Division of Education.)
General Requirements for Degrees

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

SPECIAL MAJOR

Special academic programs leading to a degree not accommodated by existing standard degree programs are available for strongly motivated students at the College. A program as designed jointly with a volunteer committee of faculty advisers may be submitted for approval on a Request for Special Major Program form. This committee must consist of three professors from at least two disciplines. A student interested in a Special Major program may search out a volunteer faculty advisory committee on his own.

Permission of the Coordinator of Academic Advising will be required in all cases. For meritorious programs, the College is prepared to suspend normal College rules (but not State laws nor Trustee regulations) governing majors, minors, general studies, and the like. The proposal may be for a special major only or for a comprehensive program covering the student's undergraduate experience at the College. The applicant must have at least 30 semester units remaining to complete minimum requirements for a baccalaureate degree at the College before permission may be granted for a Special Major.

MINOR

Completion of a minor is a requirement for a baccalaureate degree when required by the department of the major. 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.

A minor for the baccalaureate degree, if required, may be selected from the listing below:

<table>
<thead>
<tr>
<th>Field</th>
<th>Field</th>
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</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Ethnic Studies</td>
</tr>
<tr>
<td>Art</td>
<td>Exceptional Children &amp; Youth</td>
</tr>
<tr>
<td>Art History (Modern)</td>
<td>French</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>Geography</td>
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<tr>
<td>Black Studies</td>
<td>German</td>
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<tr>
<td>Business</td>
<td>Gerontology</td>
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<tr>
<td>Administration</td>
<td>History</td>
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<tr>
<td>Chemistry</td>
<td>History of Religions</td>
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<tr>
<td>Chicano Studies</td>
<td>Journalism</td>
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<tr>
<td>Computer Science</td>
<td>Latin American Studies</td>
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<td>Earth Sciences</td>
<td>Mathematics</td>
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<td>Economics</td>
<td>Music</td>
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<tr>
<td>English</td>
<td></td>
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</tbody>
</table>

As the College grows, new minors will be added. Freshmen may also claim any additional minors developed and offered by the time they reach upper division standing.
General Requirements for Degrees

DEPARTMENTAL REQUIREMENTS

All requirements of the department of the major must be completed to qualify for a baccalaureate degree.

ALL COLLEGE REGULATIONS

Compliance with all regulations prescribed by the College is a requirement for graduation with a baccalaureate degree.

REQUIREMENTS FOR AN ADDITIONAL BACCALAUREATE DEGREE

To qualify for an additional baccalaureate degree at the College, students must:

1. Complete a minimum of 30 semester units in residence at the College including at least 24 upper division units, after requirements for their last degree have been fulfilled; at least 12 of these 30 units must be in the subject field of the student's current major; at least one winter term is required; and at least 9 units must be applicable to General Education-Breadth requirements.

2. Comply with all graduation requirements of the College including the General Education requirements and approval by the major adviser, department of the major, and the faculty.

3. Maintain at least a 2.0 (C) grade point average for all Stanislaus residence course work taken while pursuing the additional degree.

4. 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, if preferred, complete only requirements for an additional major. Such a program must be completed under the supervision of an academic department and is certified only through the Admissions and Records Office.
The College offers Master of Arts programs in Education, English, History, Psychology, and Speech Communication; Master of Business Administration; Master of Public Administration; Master of Science, Marine Science and Psychology; and Master of Arts and Master of Science, Special Major. Specific requirements within these degree programs will be found in the catalog sections of the departments concerned.

SPECIAL MAJOR

The M.A. and M.S. Special Major are offered to accommodate students whose educational interests and needs are multidisciplinary. Each Special Major is a specially designed course of study, involving two or more disciplines, that relates to coherent academic and professional aims. The major provides an opportunity for individual students to develop concentrations or specializations outside the framework of existing majors. Students should contact the Graduate Studies Office to obtain a copy of the guidelines and conditions which govern the program.

GRADUATE APPLICATION PROCEDURES

All applicants for any type of postbaccalaureate status (e.g., master's degree aspirants, those seeking credentials, and those interested in taking courses for professional growth, etc.) must file a complete application packet for admission to postbaccalaureate status within the appropriate filing period. A complete application packet for admission to postbaccalaureate status includes an "Application for Admission/Readmission," a "Supplemental Application for Postbaccalaureate/Graduate Admission," and the $25 non-refundable application fee. Postbaccalaureate applicants who were enrolled as undergraduate students at Cal State Stanislaus in the term immediately preceding the term for which they now wish to apply are also required to complete and submit an application packet and remit the $25 non-refundable application fee. Applicants seeking financial aid should also complete and submit with the application material specified above, an "Application for Financial Aid."

Since applicants for postbaccalaureate programs will be limited to the choice of a single campus on each application, redirection to alternative campuses will be minimal. In the event that a postbaccalaureate applicant wishes to be considered by more than one campus, it will be necessary to submit a separate application (and fee) to each.

Application materials may be obtained from the Admissions Office or the Graduate Studies Office of any campus within the California State University and Colleges system. Applicants must contact the department for instructions regarding specific departmental admission procedures.
A graduate who is seeking admission to postbaccalaureate study, a graduate program, or a credential program must request that two copies of complete official college transcripts be sent directly to the Admissions and Records Office from each college (other than Stanislaus) and university at which the student registered.

CONTINUING BACCALAUREATE STUDENTS

A student who holds a baccalaureate degree from this College and plans to continue postbaccalaureate or graduate study must apply for readmission. Such students must meet program admission criteria and are subject to the same enrollment quotas and application fees as are new applicants.

ADMISSION TO POSTBACCALAUREATE STANDING: UNCLASSIFIED

A student not having a graduate degree or credential objective may be admitted to Unclassified Postbaccalaureate standing. Such admission requires an acceptable baccalaureate degree or equivalent academic preparation as determined by the College, and good standing in the last college attended.

Students admitted in this category are those having declared undergraduate objectives (e.g., a second bachelor's degree) or students seeking to enroll in specific courses for personal or professional growth.

ADMISSION TO GRADUATE STANDING: CONDITIONALLY CLASSIFIED

Students seeking admission to a specific graduate degree program who have deficiencies in prerequisite preparation may be admitted to the program with conditionally classified standing. Students admitted on conditionally classified status will be informed by their departments of deficiencies to be made up in order to have their conditional standing removed.

ADMISSION TO GRADUATE STANDING: CLASSIFIED

Graduate classified standing is awarded to an applicant for admission to a degree program who meets all the criteria for admission specified by the College and the department(s) offering the program.

ADVANCEMENT TO MASTER'S DEGREE CANDIDACY

Classified graduate standing gives a student permission to work toward qualifying for candidacy. Advancement to candidacy gives a student permission to proceed toward qualifying for the degree. Requirements for advancement to candidacy include the following:

1. Classified graduate standing, including satisfactory performance on any required test.
Graduate Programs

2. Completion of any undergraduate prerequisites which the adviser specifies.

3. A minimum grade point average of 3.0 (both overall and at the College) on all upper division and graduate course work from the date of embarking on the first course of the proposed master's degree program.

4. Satisfactory completion of the foreign language requirements for those programs having such a requirement.

5. Approval by the appropriate departmental graduate committee.

6. As soon as possible after the completion of Steps 1 through 5, submission to the department of a properly signed petition for advancement to candidacy, including a departmentally approved program of graduate study for the master's degree.

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 find it necessary 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. Only graduate courses (5000 series) and approved upper division courses are acceptable in the unit requirement. Other courses are counted in calculating the student's study load, but cannot be counted toward the unit requirement for the master's degree. The total program must include the following:

1. At least 21 units of the program must be Stanislaus residence credit, 6 units of which must have been taken at Stanislaus prior to enrolling for the thesis or project or for an alternative to the thesis.

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 Graduate Dean. 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 Graduate Dean to be particularly relevant to the individual student's program.

3. A senior-level student, within 9 units of earning a baccalaureate degree, may enroll in upper division or graduate level course(s) and apply it to an advanced credential or master's degree objective by filing a Request for Postbaccalaureate Credit form with the Admissions Office. Approval of the departmental graduate adviser is required. This action must be taken at the time of registration; retroactive authorization will not be granted.
Graduate Programs

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 coursework.

5. Appropriate coursework 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, when permitted, an alternative.

It is the student's responsibility to complete the specified courses included in the degree program. 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 Graduate Dean.

Writing Proficiency Requirement

All graduate students subject to degree requirements of 1977-78 and subsequent catalogs must demonstrate competency in writing skills as a requirement for a master's degree. A candidate for an advanced degree can satisfy the CSUC 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

Foreign language is not a general college requirement for admission to or completion of the master's degree program at the College. However, for advancement to candidacy, demonstration of competence, usually equivalent to that achieved through two years of collegiate study of one foreign language, is required in specified majors in which upper division and graduate courses demand such competence.

Ordinarily, the requirement calls for demonstration of the ability to read materials of the major in one appropriate foreign language.

Grade Requirements

1. All graduate students will be held to the scholarship standards listed under Academic Standards.

2. No course with a grade below C may apply on a master's degree program.

3. To be eligible for advancement to candidacy, a student must have earned a B average on all upper division and graduate course work completed after the date of embarking on the first course to be included in the master's degree program.

To be eligible for the granting of the degree, a student must have maintained a B average. Any grade earned in a course on the program continues to be computed in the grade point average, even if that course is for any reason later dropped from the program.
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 on the program for the master's degree or on all upper division and graduate work subsequent to the bachelor's degree.

**Graded Unit Requirement**

Each individual master's degree program has established the number or percentage of units which can be taken CR/NC. Consult the appropriate department for specific details.

**Election of Curricular Requirements**

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. Substitution for discontinued courses will be authorized by the major adviser and approved by the Graduate Dean.

**Workshop, Extension, and Institute Course Work**

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

**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 recommendation of his major adviser and the approval of a petition to the Graduate Council.

**Graduate Credit for Undergraduate Courses**

Instructors should expect a higher level of performance from graduate students enrolled in undergraduate courses. Additional reading, writing, and/or oral presentation are often employed for this purpose.

**Examinations**

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

QUALIFYING EXAMINATIONS

Among the qualifying examinations used by some departments are the Aptitude Test and the Advanced 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 College Test Office. The College Test Office administers the test on the College campus. For information about dates, fees, and application procedures, consult the Test 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.

EXTENSION OF TIME

A period of seven years is allowed for the completion of all requirements for the master's degree. A student whose program has been interrupted by military service should consult the Graduate Dean about provisions for military extensions. Otherwise, time may be extended only by the substitution of recent courses for outdated ones or by the passing of comprehensive examinations in the relevant courses or subject field.

THESIS, PROJECT, AND THESIS ALTERNATIVE

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

1. A thesis is the systematic study of a significant problem. The problem, its major assumptions, its significance, the methods and sources for gathering data, the analysis of data, and the conclusions and recommendations are clearly stated.

2. A project may take either of the two following forms:
The systematic development of a plan for, or the critical evaluation of, a significant undertaking, or
A creative work such as a novel, a musical composition, or a group of paintings.
In either type of project criteria employed in developing the plan, or in making the evaluation of the task, the details of the plan or evaluation, the methods used, and the supporting data are clearly stated.

3. A thesis alternative is a specifically designed study designated by a department as acceptable in lieu of the thesis.
No academic distinction is made between a thesis and a project. Either one 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 stylebook authorized by the department. The student must consult with the department and the Graduate Office concerning these matters before beginning work on the thesis.

1. Registration for thesis 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 in regular semester attendance must be readmitted to the College.

2. A student whose thesis is planned to extend over more than the term of first enrollment in 5990 may receive a Satisfactory Progress (SP) grade. The SP converts to an NC after two years have expired.

3. Before a thesis is officially accepted by the Master's Committee, it must meet the above criteria on matters of format, documentation, and quality of writing.

4. Four copies signed by the thesis chair and ready for binding, together with the departmental clearance form, must be submitted to the Graduate Studies Office no later than the last day to submit approved master's degree theses as specified in the current Catalog for the semester or term in which the student seeks to graduate. Three bound copies of the thesis are retained by the College—two go to the Library and one to the student's department. All three College copies are to be submitted to the Graduate Office for distribution. Binding expenses for copies retained by the College are the student's responsibility. The Registrar will record no grade other than Incomplete for the thesis until all requirements in this paragraph are completed.

5. A student may arrange to have the thesis published in microfilm form, with an abstract of the thesis published in the quarterly periodical, Masters Abstracts. This form of publication is encouraged by the College. Further details of the microfilming and copyright procedure may be obtained from the College Librarian.
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. Dates for filing applications are listed in the Academic Calendar. Diplomas for those completing degree requirements during summer session and at midyear will be awarded at the following June commencement exercises.

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.

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 year of the student's last CSCS registration, no application fee is required; the student simply files a "Declaration or Change of Degree Objective" form with the Admissions Office. A student seeking a second degree is urged to contact the department for additional information.
ANNOUNCEMENT OF COURSES

COURSE NUMBERING SYSTEM

DEPARTMENTAL REQUIREMENTS

COURSE DESCRIPTIONS
COURSE NUMBERING SYSTEM

COURSE LEVEL IDENTIFICATION

0001-0999 Subcollegiate
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.
6000-6999 Professional postbaccalaureate courses.
8000-8999 Courses not applicable to baccalaureate or advanced degrees. These courses are often unique in format, experimental in content, and provide opportunities to pursue intellectual, civic, and cultural interests. Includes non-credit courses.

During Spring 1963 to Spring 1967, appearance of the letter "C" following a course title on a student's permanent academic record indicates graduate-level credit in courses recommended by the College as applicable to advanced degree programs.

SPECIAL COURSE NUMBERS

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

4920, 5920, and 6920 ............... Workshops
4940, 5940, and 6940 ............... Internship/Field Work
2950, 4950, and 5950 ............... Selected Topics
4960 .................................. Senior Seminars
2970, 4970, 5970, 6970 ............... Offered only Winter Term
4980, 5980, and 6980 ............... Individual Study
4990 and 5990 .......................... Thesis

EXPLANATION OF COURSE NOTATIONS

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

1. The figure in parentheses following the course title indicates the number of semester units for the course. Courses offered for varying units are indicated as (2-4), (1-5), etc.

2. A notation such as (Formerly 4500), at the end of a course description indicates the course was previously numbered 4500.

3. Winter Term courses are not described in this catalog but are described in a Winter Term bulletin.
Anthropology

Leon S. Pitman, Ph.D., Associate Professor, Chair
Joel S. Canby, Ph.D., Professor
Thomas E. Durbin, Ph.D., Professor
Lewis K. Napton, Ph.D., Professor
Carol P. Carson, Ph.D., Assistant Professor

The Department of Anthropology and Geography offers the Bachelor of Arts, Anthropology. The Anthropology major offers basic preparation for careers requiring cross-cultural understanding in the contemporary world and awareness of mankind's cultural heritage. The major is also designed for students seeking a career in teaching of the social and biological sciences, and for students preparing for graduate work in anthropology and the various geographical area and interdisciplinary specializations such as African Studies, Asian Studies, Latin American Studies, etc.

Anthropology may also be selected as a field for the degree Bachelor of Arts, Social Sciences (for further information, see Social Sciences) and as an area of concentration for the degree Bachelor of Arts, Liberal Studies.

REQUIREMENTS FOR THE BACHELOR OF ARTS, ANTHROPOLOGY

Anthropology majors are to:

1. Complete requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 30 upper division units as approved by the major adviser; of these no more than 8 units of CR-graded course work may apply toward the major.
   Completion of a minor is not required.

DEGREE MAJOR IN ANTHROPOLOGY

Prerequisites to the Major:

1. ANTH 2060. Introduction to Cultural Anthropology, 3 units
   ANTH 2080. Introduction to Physical Anthropology, 3 units
   ANTH 2091. Exploring Our Ancient Past, 3 units

2. 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 in Anthropology should include a course in statistics and at least one foreign language.
Anthropology

The Major

A minimum of 30 upper division units distributed as follows:

- Ethnography ........................................ 6
- Ethnology ........................................... 6
- Physical Anthropology and
  Prehistoric Archaeology
  (to include minimally 3 units in
  each category) .................................. 9
- Elective upper division units in Anthropology .... 9

Total .................................................... 30

CONCENTRATION

Concentrations are obtained by completing the above program and taking all 9 upper division electives in either Ethnology, Physical Anthropology, or Prehistoric Archaeology. Such concentrations will be recorded on the student's transcripts.

DEGREE MINOR IN ANTHROPOLOGY

The minor consists of 21 units, including at least 12 units of upper division courses in anthropology approved by the minor adviser. Students wishing to specialize in one area of anthropology for the minor may do so. No more than 8 units of CR graded course work may apply toward the minor.

TEACHING CREDENTIALS

Majors in Anthropology interested in a Social Sciences waiver for a single subject credential should review Plan II of the Social Sciences waiver described in the Social Sciences section of the catalog. Please refer to the Education section of the catalog for a description of other requirements to be completed for the single subject credential.

LIBERAL STUDIES CONCENTRATION IN ANTHROPOLOGY

1. ETHNOLOGY (recommended for Teaching Candidates)
   ANTH 2060. Introduction to Cultural Anthropology .. 3
   (if used as credit toward completion of
   Liberal Studies Area A (Social Sciences),
   then GEOG 2020, Introduction to Cultural
   Geography, must be taken in addition.)
   Ethnography and/or Ethnology ........................ 17

   Total ............................................... 20
2. ARCHAEOLOGY

ANTH 2091. Exploring Our Ancient Past ............ 3
Prehistoric Archaeology ............................. 17

Total ............................................... 20

3. PHYSICAL ANTHROPOLOGY

ANTH 2080. Introduction to Physical Anthropology .. 3
Physical Anthropology ................................. 17

Total ............................................... 20

ANTHROPOLOGY SUB-AREAS

Lower Division

ANTH 2060. Introduction to Cultural Anthropology, 3 units
ANTH 2080. Introduction to Physical Anthropology, 3 units
ANTH 2091. Exploring Our Ancient Past, 3 units
ANTH 2950. Selected Topics in Anthropology, 1-5 units
ANTH 2970. Selected Topics offered during Winter Term, 4 units

Upper Division

GENERAL ANTHROPOLOGY

ANTH 3001. The Anthropological Perspective, 3 units
ANTH 4500. Growth of Anthropology, 3 units

ETHNOGRAPHY

ANTH 3050. Cultures of the Middle East, 3 units
ANTH 3061. Pacific Islands and Australia, 3 units
ANTH 3070. Peoples of Africa, 3 units
ANTH 3100. East and South Asia, 3 units
ANTH 3111. Circumpolar People, 3 units
ANTH 3350. The North American Indian, 3 units
ANTH 3360. Indians of California and Western North America, 3 units
ANTH 3370. Native Peoples of Mexico, 3 units
ANTH 3400-3499. Modern Ethnographic Studies (topics vary), 1-4 units

ETHNOLOGY

ANTH 3900. Women: A Cross-Cultural View, 3 units
ANTH 4010. Culture and Personality, 3 units
ANTH 4050. Ethnographic Research Methods, 3-4 units
Anthropology

ANTH 4100-4199. Studies in Social Anthropology (topics vary), 1-4 units
ANTH 4200. Applied Anthropology and Social Change, 4 units
ANTH 4212. Cultural Change, 3 units
ANTH 4220. Folk Literature and Arts in Anthropological Perspective, 4 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 4601. Archaeological Field Methods, 3 units
ANTH 4620. Science in Archaeology, 3 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 (topics vary), 1-4 units

LINGUISTICS

ANTH 3800. Introduction to Linguistics, 3 units

SPECIAL STUDIES

ANTH 4900. Directed Field Research, 1-5 units
ANTH 4910. Directed Laboratory Research, 1-5 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 4970. Selected Topics offered during Winter Term, 4 units
ANTH 4980. Individual Study, 1-4 units
ANTH 4990. Senior Thesis, 3-5 units
ANTH 5900. Directed Field Research, 1-5 units
ANTH 5910. Directed Laboratory Research, 1-5 units
ANTH 5950. Selected Topics in Anthropology, 1-5 units
ANTH 5960. Graduate Project, 3-6 units
ANTH 5970. Selected Topics offered during Winter Term, 4 units
ANTH 5980. Individual Study, 1-4 units
ANTH 5990. Thesis, 3-6 units
ANTH 2060. Introduction to Cultural Anthropology (3)

Introduction to the study of human culture and social institutions, with special emphasis on tribal and peasant societies. Prerequisite: None.

ANTH 2080. Introduction to Physical Anthropology (3)

Introduction to physical (biological) anthropology; includes discussion of human and nonhuman primates, their behavior, evolutorial history, anatomy, and variation.

ANTH 2091. Exploring Our Ancient Past (3)

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. (Formerly 2090)

ANTH 2950. Selected Topics in Anthropology (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of anthropology. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

ANTH 2970. Selected Topics offered during Winter Term (4)

ANTH 3001. Anthropological Perspective: An Introduction (3)

Introduction to the study of anthropology and the viewpoint of the anthropologist concerning traditional and modern societies. Especially aimed at the teacher and future teacher and interested elective student. (Formerly 3000)

ANTH 3050. Cultures of the Middle East (3)

Investigates the historical and cultural background of the various contemporary societies of North Africa and Southwest Asia. Attention is given to the varied effects of Western culture on the indigenous populations of the Middle East. Prerequisite: ANTH 2060 or consent of instructor.
Anthropology

ANTH 3061. Pacific Islands & Australia (3)

Study of the settlement of Australia and the islands of the Pacific Ocean in prehistoric times and survey of the living indigenous cultural groups of the area. (Formerly 3060) Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3070. Peoples of Africa (3)

Study of African cultures, with emphasis on peoples of Sub-Saharan Africa. Considers traditional cultures and recent social changes. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3100. East and South Asia (3)

Investigates the cultural development of China, Japan, India, and the major offshore islands. Also considers the lifeways of various primitive and advanced cultures of this region today. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3111. Circumpolar People (3)

Explores the varied ecological adaptations of native peoples residing north of the 50th parallel. Preliterate societies of North America and Eurasia are used for comparative study. The interrelationships between ethnic groups and influences from their southerly neighbors will be discussed. (Formerly 3110) Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3350. The North American Indian (3)

A general survey course designed to acquaint students with the prehistoric and historic cultures of the Indians of North America. The course consists of investigations of various theories of the origin of the American Indian and the application of the culture-area concept to an understanding of the various cultures. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3360. Indians of California and Western North America (3)

Emphasis is given to the study of the Indians of California and adjacent areas with special reference to their historical and cultural backgrounds. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3370. Native Peoples of Mexico (3)

An ethnographic survey of the prehistoric and contemporary culture areas of Mexico and adjacent regions of Mesoamerica. The course focuses on traditional Amerindian societies, changing peasant villages, and their interaction with modern Mexican culture. Prerequisite: ANTH 2060 or consent of instructor.
ANTH 3400-3499. Modern Ethnographic Studies (1-4)

Studies in the ethnography of various areas of the contemporary world. Course content may vary from term to term. Typical courses include: Peoples of Europe, Latin American Society and Culture. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 3500-3599. Studies in World Prehistory (1-4)

Studies of various prehistoric archaeology cultures. Course content may vary from term to term. Typical courses include: Mesoamerican Archaeology, Old World Archaeology, North American Archaeology, Origins of Old World Civilizations, Archaeology and Society. Prerequisites: ANTH 2091 and consent of instructor.

ANTH 3600. Method and Theory in Archaeology (3)

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. (Formerly 3520) Prerequisite: ANTH 2091 or consent of instructor.

ANTH 3750. Human Evolution (3)

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 and consent of instructor. Recommended: ZOOL 1050.

ANTH 3760. Primates Past and Present (3)

Introduction to and description of modern primates, including 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. Recommended: ZOOL 1050.

ANTH 3780. Primate Social Behavior (3)

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. Prerequisites: ANTH 2080 and consent of instructor. Recommended: ZOOL 1050.
Anthropology

ANTH 3800. Introduction to Linguistics (3)

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)

Comparative study of traditional and changing roles of women in a wide range of contemporary cultures. Prerequisite: Sophomore standing.

ANTH 4000. Current Trends in Anthropology (1-2)

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 or consent of instructor.

ANTH 4010. Culture and Personality (3)

Individual and modal personalities in relation to culture background. Socialization in nonliterate and other non-European societies. National character studies, basic personality structure, acculturation, and cross cultural studies of abnormality. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 4030. Anthropology Through Film (1-4)

Introduction to audio-visual presentation of other cultures through ethnographic films. May be repeated for a maximum of 6 units. (Formerly 4020)

ANTH 4050. Ethnographic Research Methods (3-4)

An introduction to techniques employed by anthropologist in performing primary and secondary research. Both basic statistical and non-statistical methods of handling data are presented. Prerequisite: ANTH 2060 and consent of instructor.

ANTH 4100-4199. Studies in Social Anthropology (1-4)

Studies in various aspects of Social Anthropology. Course content may vary from term to term. Typical courses include: Medical Anthropology, Economic Anthropology, Religion in Anthropological Perspective, Urban Anthropology. Prerequisite: ANTH 2060 or consent of instructor.
ANTH 4200. Applied Anthropology and Social Change (4)

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 or consent of instructor.

ANTH 4212. Cultural Change (3)

Cultural conservation and change with reference to environments, innovation, invention, and technology. Consideration of cultural pluralism versus a trend toward the reduction in the number and variety of the world's 5000 cultural groups towards a "one world culture." (Formerly 4210) Prerequisite: ANTH 2060 or consent of instructor.

ANTH 4220. Folk Literature and Arts in Anthropological Perspective (4)

Survey of folk literature and traditional arts of small scale and peasant cultures from an anthropological perspective. Prerequisite: ANTH 2060 or consent of instructor.

ANTH 4500. Growth of Anthropology (3)

Study of the history of the development of anthropological methods and theories. (Formerly 3650) Prerequisite: ANTH 2060; ANTH 2080 and 2091 desirable.

ANTH 4601. Archaeological Field Methods (3)

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 6 units. (Formerly 4600) Prerequisite: ANTH 2091 or equivalent, or consent of instructor.

ANTH 4620. Science in Archaeology (3)

Survey of applications in archaeology of techniques and theories derived from the natural 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 4700-4799. Studies in Physical Anthropology (1-4)

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. Typical courses include: Seminar in Human Evolution, Human Skeletal Analysis, Laboratory in Primate Anatomy, Observing Primate Behavior, Seminar in Primate Behavior. Prerequisites: ANTH 2080 and consent of instructor.
Anthropology

ANTH 4900. Directed Field Research (1-5)

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. Directed Laboratory Research (1-5)

Laboratory 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 4940. Internship in Anthropology (1-6)

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)

Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ANTH 4960. Senior Seminar (1-4)

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 4970. Selected Topics offered during Winter Term (4)

ANTH 4980. Individual Study (1-4)

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)

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.
ANTH 5900. Directed Field Research (1-5)

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 5910. Directed Laboratory Research (1-5)

Laboratory research conducted in any subdiscipline of anthropology under the direction of a specific faculty member. May be repeated for a total of 6 units. Available only for postbaccalaureate credit. Prerequisite: Consent of instructor.

ANTH 5950. Selected Topics in Anthropology (1-5)

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)

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 5970. Selected Topics offered during Winter Term (4)

Available only for postbaccalaureate credit.

ANTH 5980. Individual Study (1-4)

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)

Prerequisite: Consent of instructor. Available only for postbaccalaureate credit.
Applied Studies
A track within the Liberal Studies Major

Louis A. Feldman, Ph.D., Professor of Mathematics
Coordinator

The Applied Studies* program is preparation for entry or advancement in a variety of 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 a type of academic work which will make them more valuable in a variety of careers.

Because rapid and significant change has become a preeminent feature of our civilization, there is a need for a new type of professional who is well qualified to deal with both the opportunities and the problems which are constantly arising from this 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/Information Systems; 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. In selecting their courses, students should consider the fact that many courses may not be offered in the evening more than once at any location during any three consecutive years.

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.

REQUIREMENTS FOR THE BACHELOR OF ARTS, LIBERAL STUDIES VIA THE APPLIED STUDIES TRACK

The degree Bachelor of Arts, Liberal Studies, via the Applied Studies track, requires completion of the following:

*This program is not intended for persons whose primary interest is Business Administration or Public Administration or those seeking a teaching credential. Persons with interests in these specific goals should consult an adviser in the appropriate area.
Applied Studies

1. A Liberal Studies major with the Applied Studies track including a minimum of 18 units in each of the four subject areas A, B, C, and D with a maximum of 40 units in any one area;
2. A physical education activity course for a person graduating before his/her twenty-fifth birthday;
3. The 24-unit concentration in Applied Studies;
4. Electives to bring the student's total number of units to at least 124 and total number of upper division units to at least 40, of which 9 applicable to the 4 subject areas must be completed at the College; and
5. A program of study approved by the student's Applied Studies adviser.

SUBJECT MATTER AREAS

AREA A. SOCIAL SCIENCES

Required are at least 18 units distributed as follows:

1. One course in United States History.
2. One course in the United States Constitution and California state and local government.
3. One of the following introductory economics courses:
   ECON 2500. Principles of Economics I, 4 units
   ECON 2510. Principles of Economics II, 4 units
4. Two of the following courses, selected from different disciplines, concerned with major world trends:
   ANTH 3900. Women: A Cross-Cultural View, 3 units
   ANTH 4212. Cultural Change, 3 units
   ETHS 4200. The Minority Experience, 3 units
   GEOG 3020. Human Ecology, 3 units
   GEOG 3070. Agricultural Geography, 3 units
   GEOG 3300. Economic Geography, 3 units
   PSCI 3600. International Relations, 3 units
   PSYC 3340. Environmental Psychology, 3 units
   PSYC 3660. Psychology of Women, 3 units
   SOCL 4850. The Community, 3 units
5. Elective courses in anthropology, economics, ethnic studies, geography, history, political science, psychology, or sociology (normally one course).

AREA B. MATHEMATICS-SCIENCE

Required are at least 18 units distributed as follows:

1. One course in mathematics.
2. One course in biology, botany, entomology, microbiology, or zoology.
3. One course in astronomy, chemistry, geology, physical science, or physics.
**Applied Studies**

4. One science laboratory section or course.

5. One of the following science courses concerned with the environment:
   - BIOL 2650. Environmental Biology, 2 units
   - GEOL 3000. Physical and Environmental Geology, 3 units
   - PHSC 1300. Environmental Pollution, 3 units
   - PHSC 3000. Physical Sciences of the Environment, 3 units
   - PHSC 3500. Solar and Other Alternative Energies, 4 units

6. Elective courses in astronomy, biology, botany, chemistry, entomology, geology, mathematics, microbiology, physical sciences, physics, or zoology (normally one or two courses).

**AREA C. ARTS-HUMANITIES**

Required are at least 18 units distributed as follows:

1. One course in literature, including foreign literature, or philosophy.

2. One course in art, drama, or music.

3. 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 3410. Contemporary Art, 3 units
   - ART 3430. The World of Art, 3 units
   - DRAM 3530. History of Theatre III (Contemporary Theatre), 3 units
   - MUS 3400. American Music, 3 units
   - PHIL 4401. Professional Ethics, 3 units

4. Elective courses in art, drama, French, German, music, philosophy, or Spanish (normally three courses).

**AREA D. ENGLISH-SPEECH**

Required are at least 18 units distributed as follows:

1. ENGL 1003 (2) and PHIL 1001 (1), taken concurrently; and ENGL 1004 (2) and DRAM 1001 (1), taken concurrently.

2. ENGL 3000 (1), taken concurrently with any 3999 companion course (2).

3. One of the following courses concerned with modern media:
   - ENGL 3500. Studies in Film, 3 units
   - ENGL 3512. Film/Video: Sources/Analyses, 3 units
   - ENGL 4960. Seminar: Problems in Mass Media, 3 units
   - JOUR 3022. Editing and Ethics, 3 units

4. One introductory course in public speaking or interpersonal communication, or
   - SPCH 2011. Approaches to Human Communication, 4 units

5. One of the following speech courses concerned with the communication of ideas in today's society and modern organizations:
Applied Studies

SPCH 3100. Dyadic and Interpersonal Communication, 3 units
SPCH 3122. Management Communication, 3 units
SPCH 4100. Group Communication, 3 units
SPCH 4122. Social Influence: Persuasion and Attitude Change, 3 units
SPCH 4200. Mass Communication Perspectives, 3 units

6. Elective courses in English or speech (if needed to total 18 English-Speech units.

AREA E. PHYSICAL EDUCATION

A person graduating before his/her twenty-fifth birthday must complete a physical education activity course.

AREA F. CONCENTRATION: APPLIED STUDIES

Required are at least 24 units distributed as follows:

I. CONTEMPORARY AND FUTURE TRENDS

a. The Major Trends in American Civilization--one of the following courses:
   ANTH 4142. Modern Urban Problems, 3 units
   ANTH 4200. Applied Anthropology and Social Change, 3 units
   GEOG 4350. Urban Geography, 3 units
   HIST 3640. Contemporary America, 3 units
   HIST 4620. American Civilization and the Future, 3 units
   MDIS 3100. Women in America, 3 units
   PSCI 4330. Urban Politics, 3 units
   SOCL 3430. Population, Resources, and the American Future, 3 units
   SOCL 4810. Urban Sociology, 3 units

b. Economic Trends--one of the following courses:
   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, 3 units
   ECON 4540. Public Finance and Fiscal Policy, 3 units
   ECON 4600. Urban Economics, 3 units
   PSCI 4350. Government, Business, and the Economy, 3 units

c. Trends in Science and Technology--one of the following courses:
   CHEM 3070. The Chemicals in Your Life, 3 units
   GEOG 4301. Geography and Environmental Planning, 3 units
   MDIS 3500. Technological Society, 3 units
MDIS 4960. Seminar in Technology and Society, 3 units
PHSC 3700. Solar Energy Conversion and Storage, 3 units
PHYS 4930. Lasers and Holography, 4 units

II. COMPUTER/INFORMATION SYSTEMS
Two of the following courses including at least one at the upper division level:
BUS 2000. Introduction to Computers, 3 units
BUS 2010. Computer Programming, 3 units
BUS 3730. Structured Programming, 3 units
BUS 3740. Computer Architecture, 3 units
BUS 4720. Data Base Systems Concepts, 3 units
BUS 4770. Systems Analysis and Design, 3 units
MATH 1151. Programming in BASIC, 3 units
MATH 2000. FORTRAN Programming, 3 units
MATH 2011. Computer Programming, 3 units
MATH 3100. Assembly Language Programming, 3 units
MATH 3150. Computers and Society, 3 units
MATH 3200. Computer Simulation Techniques, 3 units
MATH 4201. Data Structures and Algorithms, 3 units
PSCI 4345. Information Systems in Government and Business, 3 units

III. THE MODERN ORGANIZATION
Three of the following courses in two or more disciplines:
BUS 3010. Organization and Environment, 4 units
BUS 3310. The Administrative Process, 3 units
BUS 4360. Human Problems in Administration, 3 units
PSCI 3300. Introduction to Public Administration, 3 units
PSCI 4300. Organization Theory, 3 units
PSCI 4315. Public Policy Making, 3 units
SOCL 4600. Industrial Sociology, 3 units
SOCL 4800. Formal Organizations, 3 units
SPCH 4110. Organizational Communication, 3 units

Some of the courses listed under the requirements for this Applied Studies concentration can simultaneously satisfy a requirement for this concentration and be an elective in one of Areas A, B, or D; however, at most 9 units may be so used.

AREA G. 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 Applied Studies concentration. Students should give serious consideration to the 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 approved Winter Term courses; selected topics courses, etc.--may be used to fulfill these requirements with the consent of the student's Applied Studies adviser.

A STUDENT'S PROGRAM OF STUDY

Before beginning any academic work in this program, a student, together with his/her Applied Studies adviser, shall plan a program of study which includes all remaining courses and acceptable alternatives required for the degree so as to form a coherent academic program consistent with the student's career objectives. Changes in a student's program of study require the approval of his/her academic adviser.
Art

Hope B. Werness, Ph.D., Assistant Professor, Acting Chair
Martin L. Camarata, M.A., Professor
Winston E. McGee, M.A., Professor
James Piskoti, M.F.A., Professor
Ralf Parton, M.A., Professor

The Department of Art offers the degree, Bachelor of Arts, Art. Students may also elect to complete a minor in Modern Art History or concentration in painting, printmaking, or sculpture as a part of the degree objective. The program is designed to provide the student with a rich, well-balanced studio and art history program. The art courses and their structural sequence provide the student with mastery of significant skills, exploration of media, modes of expression, and the individual development of artistic performance. Excellent studio facilities play a major role in stimulating a positive approach to creativity.

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.

The art curriculum prepares students for additional academic programs such as graduate school, and teachers credential certification.

The lower division courses and special programs are well suited for students interested in Liberal Arts or the enrichment of their awareness of the creative process. All students are encouraged to participate in cultural activities offered by the campus and community.

REQUIREMENTS FOR BACHELOR OF ARTS, ART

Art majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the required lower division prerequisite art courses.
3. Complete the major core of not less than 33 upper division units (Including 9 units of electives or an optional 9-unit concentration in Studio Art).

Completion of the Art History Minor is optional. However, the department recommends that students intending to go on to graduate school complete the Art History Minor.

GENERAL REQUIREMENTS FOR ART MAJOR

1. Entering students and transfer students planning a major or minor in art should contact the Art Department to be assigned an adviser for department interview and evaluation of portfolio.
Art

2. Participation in an exhibition of works during the senior year is a requirement for graduation. The Department of Art reserves the right to retain any student art work and reproductions or slides of work for its permanent collection.

3. Art majors are encouraged to participate in departmental field trips, museums and gallery visits, and to take an active part in the gallery, the student Art Club, and the CSCS Arts Guild to serve the cultural needs of the campus and community.

4. Art majors are also encouraged to avail themselves of Winter Term innovative courses. The travel courses offered by the department are a splendid opportunity for majors to become aware of the historical, cultural, and artistic heritage of our own and other cultures.

DEGREE MAJOR IN ART

Prerequisites to the major:  

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<td>Drawing II</td>
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<td>Two-Dimensional Design</td>
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The Major

The major must complete upper division course work in all five areas: Drawing (3 units), Painting (6 units), Printmaking (6 units), Sculpture (6 units), and Art History (3 units) for a total of 24 units.

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
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<tr>
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Select one  

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<tr>
<td>ART 3010</td>
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<tr>
<td>ART 3020</td>
<td>Drawing IV</td>
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Select two  

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<td>ART 3200</td>
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<tr>
<td>ART 3210</td>
<td>Painting II</td>
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<tr>
<td>ART 3270</td>
<td>Watercolor</td>
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Select two  

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<tr>
<td>ART 3100</td>
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</tr>
<tr>
<td>ART 3110</td>
<td>Intaglio</td>
<td>3</td>
</tr>
<tr>
<td>ART 3120</td>
<td>Lithography</td>
<td>3</td>
</tr>
<tr>
<td>ART 3130</td>
<td>Serigraphy</td>
<td>3</td>
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</table>

<table>
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<tbody>
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</tr>
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</tbody>
</table>
Select two.

ART 3301. Figure Sculpture
ART 3310. Modeling
ART 3321. Carving

Select one.

ART 3400. Modern Art 1870-1945
ART 3410. Contemporary Art
ART 4420. Early Modern Art 1800-1870
ART 4430. American Art

Total

STUDIO CONCENTRATION
(OPTIONAL)

Students may choose an area of studio concentration in PAINTING, PRINTMAKING or SCULPTURE. A concentration consists of nine upper division units selected in consultation with the student's adviser. A student completing a concentration will have the area of concentration noted on his/her permanent record. Other courses may be included in these concentrations by advisement.

DEGREE MINOR IN STUDIO ART

Twenty-seven units as listed below:

Lower Division (Required)

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 2400. Art History Survey - Ancient, 3 units
ART 2410. Art History Survey - Modern, 3 units

Upper Division

All art minors must choose one course from each of the following areas:

Printmaking:
ART 3100. Relief Printmaking, 3 units
ART 3110. Intaglio, 3 units
ART 3120. Lithography, 4 units
ART 3130. Serigraphy, 4 units
ART 3140. Photo-Mechanical Techniques for Printmaking, 3 units

Painting:
ART 3200. Painting I, 3 units
ART 3210. Painting II, 3 units
ART 3220. Painting III, 3 units
Art

Sculpture:
ART 3301. Figure Sculpture, 3 units
ART 3311. Modeling, 3 units
ART 3321. Carving, 3 units
ART 3340. Ceramics, 3 units

PRINTMAKING CERTIFICATE PROGRAM

Admission Requirements:
1. B.A. degree with a major in art.
2. Minimum of two courses in printmaking at the undergraduate level.
3. Portfolio evaluation by faculty in the printmaking area.
4. Interest in the field and seriousness of endeavor.

Print courses for the program may be selected from department course offerings in consultation with the adviser.

Requirements for the Certificate:
1. Complete minimum of 14 units of studio electives in printmaking.
2. Submit a portfolio of prints to a faculty committee who shall evaluate the work.
3. Participate in a group print exhibition or a one-man exhibition of prints on campus or a place acceptable to both the student and faculty.

DEGREE MINOR IN MODERN ART HISTORY

Eighteen units, to include at least 12 units in upper division.

Lower Division
ART 2400. Art History Survey - Ancient, 3 units
ART 2410. Art History Survey - Modern, 3 units

Upper Division
ART 3400. Modern Art, 1870-1945, 3 units
ART 3410. Contemporary Art 1945 to the Present, 3 units
ART 4420. Early Modern Art 1800-1870, 3 units
ART 4430. American Art, 3 units
Electives in Art History as approved by the minor adviser.

TEACHING CREDENTIALS

The major requirements in Art for students interested in obtaining a single subject teaching credential are the same as those listed for the Art major. Please refer to the Education section of the Catalog for a description of other requirements to be completed in obtaining a single subject credential. Students must
plan their programming carefully with their adviser in order to complete the approved waiver program at the time of graduation.

**LIBERAL STUDIES CONCENTRATION IN ART**

**Lower Division**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1010. Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1020. Drawing II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Upper Division**

Select 15 elective upper division units ..... 15
Total ...................................... 21

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

**COURSE DESCRIPTIONS**

**Lower Division**

ART 1000. Introduction to Drawing (3)

Emphasis on introduction to drawing media and process as visual language for the general student. Prerequisite: None.

ART 1010. Drawing I (3)

Descriptive drawing by developing eye and hand control. Variety of media and techniques. Prerequisite: Consent of instructor.

ART 1020. Drawing II (3)

Continued exploration of drawing. Emphasis on spatial concepts and expressive content using a variety of media and techniques. Prerequisite: Art 1010, or consent of instructor.

ART 1100. Two-Dimensional Design (3)

Studio exploration of plastic elements as a basis for building a theoretical and practical vocabulary for two-dimensional design and composition in color. Prerequisite: None.

ART 1200. Three-Dimensional Design (3)

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. Prerequisite: None.
ART 1340. Introduction to Ceramics (3)

Study and exploration of basic materials and techniques of pottery and form construction. Studio practice in hand building skills, glazing and firing processes with emphasis on individual design, aesthetics, and self-expression. Introduction to potters' wheel will be included. Prerequisite: None.

ART 2400. Art History Survey - Ancient (3)

Survey of the major visual arts from prehistoric times to the renaissance. (Formerly 2100) Prerequisite: None.

ART 2410. Art History Survey - Modern (3)

Survey of the major visual arts from the renaissance era to important movements of the 20th century. (Formerly 2110) Prerequisite: None.

ART 2420. Art History Survey - Nonwestern (3)

Survey of the art of nonwestern cultures, concentrating on the sculpture, architecture, and crafts of the Orient, the Americas before Columbus, Africa, and Oceania. Prerequisite: None.

ART 2600. Basic Photography (3)

Introduction to photography as an art form. Basic photographic theory and black and white darkroom techniques. Emphasis on visual awareness and personalized seeing. Prerequisite: None.

ART 2610. Basic Photo Color Slides (3)

Designed for the student with or without photographic experience who is interested in color transparencies either for projection or for further positive-to-positive color printing. Transparencies will be considered as an art form, as a data retention system, as a documentation system for other art forms, as a diary, as an exposition system and/or as amusements. (Formerly 2700) Prerequisite: None.

ART 2950. Selected Topics in Art (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in art. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

ART 2970. Selected Topics offered during Winter Term (4)
ART 3010. Drawing III (3)

Emphasis on figure as compositional element. May be repeated for a total of 6 units. Prerequisite: ART 1020 or consent of instructor.

ART 3020. Drawing IV (3)

Development of expression, techniques, and media. Emphasis on independent student production. May be repeated for a total of 6 units. Prerequisite: ART 3010 or consent of instructor.

ART 3100. Relief Printmaking (3)

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; or consent of instructor.

ART 3110. Intaglio (3)

Techniques of intaglio printmaking. Exploration of hard and soft grounds, engraving, aquatint, collograph, color intaglio methods, and photo mechanical processes. Emphasis on techniques and their relation to the graphic image. May be repeated for a total of 6 units. Prerequisites: ART 1020, 1200; or consent of instructor.

ART 3120. Lithography (4)

Development of graphic images based on lithographic techniques and processes. Emphasis on the unique qualities of the lithographic print, including color and metal plate printing. May be repeated for advanced work. Prerequisites: ART 1020, 1200; or consent of instructor.

ART 3130. Serigraphy (4)

Fundamental theories and practices involved in silk-screen printing. Exploration of silk-screen processes using paper stencil, tusche, and glue block-out, stencil film, and photo-mechanical techniques. May be repeated for a total of 8 units. Prerequisites: ART 1020, 1200; or consent of instructor.

ART 3140. Photo-Mechanical Techniques for Printmaking (3)

Fundamental theories and practices involved in photo-mechanical applications to etching, lithography, and silk-screen. May be repeated for a total of 6 units. Prerequisites: ART 3110, 3120, 3150; or consent of instructor.
ART 3200. Painting I (3)

Form and content in painting. Painting structure and composition. Basic media, techniques, and concepts including oil, acrylic, and watercolor. May be repeated for a total of 6 units. Prerequisites: ART 1020, 1100; or consent of instructor.

ART 3210. Painting II (3)

Assignments will be given emphasizing the relation of craft to material and content to format. Continued development of spatial concepts, form, and color. May be repeated for a total of 6 units. Prerequisite: ART 3200 or consent of instructor.

ART 3220. Painting III (3)

Assignments with the goal of technical development of media. Emphasis on individual solutions of painting problems and development of critical sense. May be repeated for a total of 9 units. Prerequisite: ART 3210 or consent of instructor.

ART 3270. Watercolor (3)

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 or consent of instructor.

ART 3301. Figure Sculpture (3)

Assignments are geared to the imaginative use of the figure through clay, plaster, and wax. 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. (Formerly 3300) Prerequisite: ART 1200 or consent of instructor.

ART 3311. Modeling (3)

A series of assignments will be given in order to make the student consider the relationship of idea to structure. Welding, bronze, and aluminum casting will be the means. Critiques on assignments will be given. May be repeated for a total of 6 units. (Formerly 3310) Prerequisite: ART 3301 or consent of instructor.

ART 3321. Carving (3)

Development of sculpture through the subtractive process. Emphasizes tools and techniques of wood and stone carving. Prerequisite: ART 3301 or consent of instructor.
ART 3340. Ceramics (3)

Materials, techniques, and processes used in ceramic hand-built objects. Basic design principles applicable to three-dimensional art/ceramics/sculpture including instruction on potter's wheel. May be repeated for credit. Prerequisite: None.

ART 3400. Modern Art 1870-1945 (3)

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: None.

ART 3410. Contemporary Art (3)

Analysis of development of style trends in the visual arts from 1945 to the present. Prerequisite: None.

ART 3420. Art Appreciation for the Non-Art Major (3)

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.

ART 3430. The World of Art (3)

The study of art in today's society and its influence on our lives in humanistic terms in the urban environment, cultural institutions, and personal enrichment. Opening a new view to understanding the role of the artist and the creative process. Learning ways to enjoy, collect, and identify quality art, both contemporary and traditional. Practical sessions in the techniques of display and lighting, the art market, investing in art, and the appreciation of museum resources and private collections. Comparison of major styles of paintings, sculpture, and architecture. Prerequisite: None.

ART 3600. Film-Making and Animation (4)

An introductory course to basic approaches to film-making and animation. Technical and aesthetic exploration of the motion picture medium as a vehicle for communication and artistic expression. Students may choose to work in groups or individually on their film projects. May be repeated for a total of 8 units. (Formerly 3500) Prerequisite: None.
ART 3610. Film Animation (4)

A course in basic animation techniques. Practical experience in planning and producing a 16 mm animated film, covering the complete process from creation of the story board to the final editing of the film for the lab. Students may choose to work in groups or individually on their own film project. May be repeated for a total of 8 units. (Formerly 3510) Prerequisite: None.

ART 4020. Advanced Drawing (4)

Advanced problems and techniques in drawing. Emphasis placed on a professional attitude within a seminar framework. May be repeated for credit. Prerequisite: ART 3020 or consent of instructor.

ART 4100. Advanced Printmaking (4)

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, 3150; or consent of instructor.

ART 4200. Advanced Painting (4)

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 or consent of instructor.

ART 4300. Advanced Sculpture (4)

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 or consent of instructor.

ART 4420. Early Modern Art, 1800-1870 (3)

A study of the major trends and artists from Neo-Classicism up to Impressionism. An investigation of the relationship of artists and movements to the cultural and intellectual milieu. Prerequisite: None.

ART 4430. American Art (3)

A study of American art from colonial times to the present. American art is seen against its broad historical and cultural background. Prerequisite: None.
ART 4510. Gallery Management (1)

Preparation for gallery management. May be repeated for credit. Prerequisite: Consent of instructor.

ART 4941. Internship in Art Gallery (4)

An internship course designed to give a student fundamental knowledge and experiences of managing a commercial art enterprise. Economics and legal aspects of small business. Gallery owner's role and relationships with artists and art consumers. Prerequisites: Art major and consent of instructor.

ART 4942. Internship in Art Printshop (4)

Fundamental knowledge of edition printing. The economics of publishing prints. The marketing of prints. Experiences and various aspects of collaborating with galleries and artists. The management of print workshop as a small business. Prerequisites: Art major and consent of instructor.

ART 4950. Selected Topics in Art (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in art. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

ART 4960. Senior Seminar (3)

Study of the nature and problems confronting the contemporary American artist. Prerequisite: Senior standing in the major.

ART 4970. Selected Topics offered during Winter Term (4)

ART 4980. Individual Study (1-4)

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.

ART 5950. Selected Topics in Art (1-5)

Innovative advanced studio projects for the graduate student. Prerequisite: Consent of instructor.
Art

ART 5960. Graduate Projects (3-6)

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)

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 Project (3-6)

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.
Bilingual/Cross-Cultural Emphasis & Concentration

Within the Liberal Studies* Major

Leodoro Hernandez, Ed.D., Associate Professor of Education
Coordinator

The Spanish/English Bilingual/Cross-Cultural emphasis and concentration, in addition to providing the academic prerequisite for students who are planning to pursue credentials to teach in elementary schools, is designed to give graduates the language teaching skills and cultural background to teach limited and non-English speaking students.

SUMMARY OF PROGRAM REQUIREMENTS

I. Basic Liberal Studies Area Requirements
   A. Social Sciences ....................................... 18
   B. Mathematics-Science ................................ 18
   C. Arts-Humanities ..................................... 24
   D. English-Speech ....................................... 18

II. Physical Education .................................... 1

III. Bilingual/Cross-Cultural Concentration .............. 20
     (15 upper division)

IV. Upper division electives (may be education** courses, to obtain preliminary teaching credential) ................... 25

Total .................................................. 124

*Students wishing to pursue a Liberal Studies program without a Bilingual/Cross-Cultural emphasis and concentration should consult the Liberal Studies section of this Catalog.

**Students seeking a Multiple Subject Teaching Credential with a Bilingual/Cross-Cultural emphasis should consult the Education section of this Catalog for requirements. Students must pass language and cultural proficiency tests before being admitted to the Bilingual emphasis Multiple Subjects Credential courses.
### DETAILED PROGRAM REQUIREMENTS

#### I. Basic Liberal Studies Area Requirements

<table>
<thead>
<tr>
<th>A. SOCIAL SCIENCES (minimum of 18 semester units)</th>
<th>Units Required</th>
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<tbody>
<tr>
<td>1. PSCI 1201</td>
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<tr>
<td>2. History (one of the following)</td>
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<tr>
<td>HIST 2600, 3610, 3620, 3630, 3640, or a</td>
<td></td>
</tr>
<tr>
<td>comparable survey of U.S. History</td>
<td></td>
</tr>
<tr>
<td>3. Introductory psychology course</td>
<td>3</td>
</tr>
<tr>
<td>4. Introductory cross-cultural course</td>
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<tr>
<td>(one of the following)</td>
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<td>GEOG 2000, 2020, 2410</td>
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<td>5. Selected electives by advisement:</td>
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<td>studies courses</td>
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<td>b. One of the following courses</td>
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<th>B. MATHEMATICS-SCIENCE (minimum of 18 semester units)**</th>
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<tr>
<td>1. Two introductory mathematics courses ***</td>
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<tr>
<td>2. Introductory biology, botany, or zoology course,</td>
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<td>with lab.</td>
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<tr>
<td>3. Introductory chemistry course****</td>
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<tr>
<td>4. Introductory physics course****</td>
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<td>5. Electives from: astronomy, biology, chemistry,</td>
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<tr>
<td>geology, physics, or physical sciences.</td>
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<tr>
<td>Total</td>
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</tbody>
</table>

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*Required of Multiple Subject Credential applicants.

**At least 1 science course must have an environmental orientation
(courses which meet the environmental requirements include:
BIOL 1010 or 2650, CHEM 1000, PHSC 1000, or PHSC 1300).

***A student must not enroll in both MATH 1600 and 1610.

****Must include lab.

NOTE: 5 quarter units meet the 4 semester unit requirement above.
C. ARTS-HUMANITIES (minimum of 24 semester units)  

1. One art course from the following ....... 3  
   ART 1000, 1010, 3410  
2. One drama course from the following ....... 3  
   DRAM 1010, 1112 and 1114, 3020  
3. One music course from the following ....... 3  
   MUS 1190, 3340  
4. One course in philosophy ............ 3  
   Total .................................... 24  

D. ENGLISH-SPEECH (minimum of 18 semester units)  

1. ENGL 1003 and PHIL 1001, taken concurrently;  
   ENGL 1004 and DRAM 1001, taken concurrently;  
   and ENGL 3000, taken concurrently with any 3999  
   companion course ............................. 9  
2. SPCH 2002, 2011, 2102, 2400, 3010, 3020, or  
   3400  ......................................... 3  
3. One course in English literature  .......... 3  
4. One course from the following ............ 3  
   ENGL 3800, 3815; SPAN 3530, 3701; SPCH 3000  
   Total .................................... 18  

II. Physical Education activity course ......... 1  

III. Detailed Bilingual/Cross-Cultural Concentration  
     requirements ............................. 20  

The following courses comprise the Bilingual/Cross-Cultural  
concentration within the Liberal Studies major. Fifteen of  
the required 20 semester units must be upper division  
courses. Double counting of courses to satisfy Areas A-D and  
III is allowed within the restriction of 24 units in any one  
area, if the courses are listed below. Select courses with  
adviser's approval.  

*SPAN 1010 and 1020 are prerequisites to these courses. See the  
Spanish section of the Catalog for additional information or  
alternate courses. Proficiency examinations are provided by the  
Department of English, Foreign Language, and Philosophy.
Bilingual/Cross-Cultural

1. Cultural Component .......................... 9-12

ENGL 3800, 3815; ETHS 2100, 4900;
HIST 2950, 3680, 3710; PSCI 2020;
SOCL 3160, 3200, 3240;
SPAN 3610, 3900, 4600

2. Cross-Cultural Component ..................... 9-12

ANTH 3001, 3900, 4900 (related to Portuguese
or Indo-Chinese);

ETHS 4200; GEOG 3940, 4510, 4710
(related to Chicano, Portuguese, or Indo-Chinese)
EDUC 4200
MDIS 3000

Any history or cultural course related to Portuguese
or Indo-Chinese.
Biological Sciences

Walter Tordoff III, Ph.D., Associate Professor, Chair
Jay P. Christofferson, Ph.D., Professor
David M. Gotelli, Ph.D., Professor
Steve J. Grillos, Ph.D., Professor
Gienn A. Hackwell, Ph.D., Professor
James C. Hanson, Ph.D., Professor
Reuben Torch, Ph.D., Professor
Daniel F. Williams, Ph.D., Professor
Judith Brown, Ph.D., Associate Professor
Pete S. Mayol, Ph.D., Associate Professor
Wayne S. Pierce, Ph.D., Associate Professor
Pamela Roe, Ph.D., Associate Professor

The Department of Biological Sciences offers programs of study in the life sciences for students seeking either the Bachelor of Arts or the Bachelor of Science and a Master of Science in Marine Science. Students may also elect to complete a concentration in Botany, Entomology, Environmental Sciences, Marine Biology, or Zoology as part of either the Bachelor of Arts or the Bachelor of Science program. Completing a concentration is optional. Students should confer with their departmental adviser to determine which degree and what program is best suited to their career objective.

Students interested in marine biology and oceanography may elect course work at the Moss Landing Marine Laboratories for partial fulfillment of their in-resident major and degree requirements. Refer to the Marine Sciences section of the catalog for description of Moss Landing course offerings.

BACHELOR OF ARTS

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. Individuals preparing for careers in such areas as agriculture, industry and elementary or secondary teaching will find that this degree is adaptable to their career objective.

BACHELOR OF SCIENCE

The Bachelor of Science is designed to provide the comprehensive background in the sciences required for students planning to seek additional training in graduate or professional schools. The degree includes course work that is usually required for admission to schools of medicine, dentistry, veterinary medicine, lab technology, and for admission to graduate work in the biological sciences. Students planning to seek advanced or professional degrees should consult their departmental adviser early in their undergraduate program to determine what specific courses may be required.
Biological Sciences

REQUIREMENTS FOR THE BACHELOR OF ARTS, BIOLOGICAL SCIENCES

Biological sciences majors are to:
1. Complete the college requirements for the bachelor's degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 24 upper division units, including course requirements as specified for the major. No more than 8 units of CR graded course work may apply toward the major.

Completion of a minor is not required.
Completion of a concentration is not required.

BACHELOR OF ARTS DEGREE IN BIOLOGICAL SCIENCES

Prerequisites to the Major:

Required courses in the major field:

BOTY 1050. Introduction to Botany, 4 units
ZOOL 1050. Introduction to Zoology, 4 units

Required courses in supporting fields:

CHEM 1100, 1110. Principles of Chemistry I, II, 10 units
CHEM 3010, 3030. Organic Chemistry, 4-5 units
OR CHEM 2800. Survey of Organic Chemistry, 5 units

Elective courses in Chemistry, Mathematics, Physics or Physical Sciences, 6 units

The Major

<table>
<thead>
<tr>
<th>Course in Genetics.</th>
<th>Units</th>
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<tbody>
<tr>
<td>a. BIOL 3350. Introductory Genetics, 2 units</td>
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</tr>
<tr>
<td>b. One course from the following: BIOL 3820, 3830, 3940, or 3850, 2 units</td>
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</tbody>
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<tr>
<th>Courses in Animal and Plant Sciences</th>
<th>Units</th>
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Course in Ecology | 4

To be elected from the following:
BIOL 3630, 3650, 4630

Course in Physiology | 4

To be elected from the following:
BIOL 4220, BOTY 4200, ZOOL 4230
Biological Sciences

*Electives in the Biological Sciences .................................. 10
Total .............................................. 33

REQUIREMENTS FOR THE BACHELOR OF SCIENCE,
BIOLOGICAL SCIENCES

Biological sciences majors are to:
1. Complete the college requirements for the bachelor's degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 28 upper division units,
   including course requirements as specified for the major.
   No more than 8 units of CR graded course work may apply
   toward the major.
Completion of a minor is not required.
Completion of a concentration is not required.

BACHELOR OF SCIENCE DEGREE IN BIOLOGICAL SCIENCES

Prerequisites to the Major:

Required courses in the major field:
   BOTY 1050. Introduction to Botany, 4 units
   ZOOL 1050. Introduction to Zoology, 4 units

Required courses in supporting fields:
   CHEM 1100, 1110. Principles of Chemistry I, II, 10 units
   CHEM 3010, 3030. Organic Chemistry, 4-5 units
   OR CHEM 2800. Survey of Organic Chemistry, 5 units
   Mathematics (statistics or calculus), 3-4 units
   **Physics (one-year sequence), 8 units
      Elective course in Chemistry, Mathematics, Physics,
      or Physical Sciences (determined by professional
      goals of student), 3-4 units

The Major

BIOL 3310. Cellular and Molecular Biology ......................... 3
Courses in Genetics ................................................. 4
   a. BIOL 3350. Introductory Genetics, 2 units
   b. One of the following courses:
      BIOL 3820, 3830, 3840, or 3850, 2 units
Courses in Animal and Plant Sciences ................................ 8
   a. One course must be elected from Entomology
      or Zoology.
   b. One course must be elected from Botany or
      Microbiology.

*A maximum of 8 units may be satisfied by courses at lower
division level with the approval of the major adviser.

**A year sequence comparable to PHYS 1100, 1110 or PHYS 2250, 2260,
2350, 2360
c. 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.)

Course in Ecology ................................. 4
  To be elected from the following:
  BIOL 3630, 3650, 4630
Course in Physiology ............................. 4
  To be elected from the following:
  BIOL 4220, BOTY 4200, ZOOL 4230
*Electives in the Biological Sciences ............ 14

Total ............................................ 37

ELECTIVE CONCENTRATIONS IN THE MAJOR

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.

BOTANY CONCENTRATION

BOTY 3100. Survey of Lower Plants, 4 units
BOTY 3120. Morphology of Vascular Plants, 4 units
BOTY 4200. Plant Physiology, 4 units
  or BIOL 4220. General & Cellular Physiology, 4 units

ENTOMOLOGY CONCENTRATION

ENTO 3000. Principles of Entomology, 4 units
ENTO 3330. Medical Entomology, 3 units
ENTO 3740. Insect Classification, 4 units

ENVIRONMENTAL SCIENCES CONCENTRATION

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, 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.

*A maximum of 8 units may be satisfied by courses at lower division level with the approval of the major adviser.
Biological Sciences

MARINE BIOLOGY CONCENTRATION

ZOOl 4420. Invertebrate Zoology I, 4 units (or MSCl 3240)
ZOOl 4430. Invertebrate Zoology II, 4 units (or MSCl 3250)
BIOl 4630. Marine Biology, 4 units (or MSCl 3030)
BOTY 3100. Survey of Lower Plants, 4 units (or MSCl 3310)

One term of residence at Moss Landing Marine Laboratories or another marine station.

ZOOTOLOGY CONCENTRATION: At least one course from each of the following groups:

1. ZOOl 3610. General Vertebrate Zoology, 4 units
   ZOOl 4620. Herpetology, 4 units
   ZOOl 4630. Ornithology, 4 units
   ZOOl 4640. Mammalogy, 4 units

2. 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

3. ZOOl 4230. Animal Physiology, 4 units
   BIOl 4220. General & Cellular Physiology, 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, 3030; CHEM 302D, 3040; PHYS 1100; PHYS 1110; ZOOl 3130 and ZOOl 3150 or equivalent. Additional course work for specific professions will vary with the profession; i.e. for premedical students, BIOl 4220, CHEM 4010, CHEM 4020, CHEM 4400, CHEM 4410, and mathematics through calculus are recommended. (Additional information may be found in the Health Sciences section of this catalog.)

It is recommended that the student who intends to seek an advanced degree in graduate study select a minor in the physical sciences or mathematics and complete at least a college-level one-year 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 should also be completed and 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 BIOl 4310, CHEM 2010, MATH 1600, MATH 2000, MBIO 3010, and MBIO 3030 as part of their major.
Biological Sciences

DEGREE MINOR IN BIOLOGICAL SCIENCES

Twenty units, to include at least 12 units in upper division.

Lower Division

BOTY 1050. Introduction to Botany, 4 units
ZOOL 1050. Introduction to Zoology, 4 units
(equivalent courses may be substituted by minor adviser)

Upper Division

Courses as approved by minor adviser, 12 units

LIBERAL STUDIES CONCENTRATION IN BIOLOGY

Lower Division

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<tr>
<th>Course</th>
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<tr>
<td>*BOTY 1050. Introduction to Botany</td>
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<tr>
<td>or *ZOOL 1050. Introduction to Zoology</td>
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<tr>
<td>BIOL 2310. Human Genetics</td>
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Upper Division

1. One course dealing with the diversity of biological organisms .................................. 4
   (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.)

2. Biological sciences electives ............... 11
   (Students are encouraged to select courses dealing with the physiological and ecological aspects of biology.)

Total ............................................. 21

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 office of the Department of Biological Sciences for further information and for procedures for admission to this degree program.

*Either BOTY 1050 or ZOOL 1050 will satisfy the BIOL 1010 requirement in the Liberal Studies program.
TEACHING CREDENTIALS

Majors in Biological Sciences interested in multiple subject or single subject credentials are referred to the Education section of the Catalog for a description of teaching credential programs.

An approved single subject waiver is available for students who wish to declare Life Science as their subject matter teaching area. The major requirements in Life Science for students interested in obtaining a single subject teaching credential are the same as those listed for the Biological Sciences major. Please refer to the Education section of the Catalog for a description of other requirements to be completed in obtaining a single subject credential. Students must plan their academic programming carefully with their adviser in order to complete the approved waiver program at the time of graduation.

COURSE DESCRIPTIONS

BIOLOGY

Lower Division

BIOL 1010. Principles of Biology (3)

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) Prerequisite: Concurrent enrollment in one BIOL 1020-1029 lab.

BIOL 1020-1029. Special Laboratory Studies (Topics to be specified in Class Schedule) (1)

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: None.

BIOL 2310. Human Genetics (2)

Basic principles of heredity and evolution particularly as they apply to man. (NOTE: This course will not meet the upper division genetics requirement.) (Lecture, 2 hours) Prerequisite: None.

BIOL 2400. Biology and the Sea (2)

An introduction to oceans, some animals and plants that live in oceans, and various habitats and adaptations of animals and plants to these habitats within the oceans. (Lecture, 2 hours) Prerequisites: None.
BIOL 2650. Environmental Biology (2)

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, 2 hours; field trips) Prerequisite: None

BIOL 2950. Selected Topics in Biology (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of biology. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

BIOL 2970. Selected Topics offered during Winter Term (4)

Upper Division

BIOL 3310. Cellular and Molecular Biology (3)

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.

BIOL 3330. Introduction to Microscopy (3)

Theoretical basis and practical uses of various types of light and electron microscopes; what kinds of microscopes yield what kinds of information; how information is recorded. (Lecture, 3 hours) Prerequisite: One year college-level biology.

BIOL 3340. Techniques of Electron Microscopy (4)

Practical use of the electron microscope and supporting techniques. (Lecture, 1 hour; laboratory, 6 hours) (Formerly 4330) Prerequisite: BIOL 3330 or consent of instructor prior to registration.

BIOL 3350. Introductory Genetics (2)

Mechanisms of inheritance illustrating the role of genetics in modern biology. (Formerly 3320) Prerequisite: BOTY 1050, ZOOL 1050.

BIOL 3630. Ecology (4)

Basic interrelationships of plants and animals within their physical environments. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: BOTY 1050, ZOOL 1050, and CHEM 1100, 1110, or equivalent, and statistics or calculus. (Satisfies ecology elective for the major).
BIOL 3650. Aquatic Biology (4)

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 ecology elective for the major).

BIOL 3820. Cytogenetics (2)

Chromosome structure and behavior, structural changes in chromosomes, euploidy, and aneuploidy as related to genetic and heritable abnormalities. Prerequisite: BIOL 3350.

BIOL 3830. Evolution and Population Genetics (2)

Basic concepts of evolutionary theory and population genetics. Emphasis upon the processes and mechanisms of evolution through genetic changes in populations. (Formerly 3810) Prerequisite: BIOL 3350.

BIOL 3840. Molecular Genetics (2)

The nature of the gene and how it is replicated. The genetic code and control of protein syntheses. Genetics of viruses and bacteria and the regulation of gene function. Prerequisite: BIOL 3350.

BIOL 3850. Medical Genetics and Human Heredity (2)

Introduction to principles of medical genetics, including chromosomal, biochemical, molecular, and multifactorial genetics. Prerequisite: BIOL 3340. CHEM 1100 and 1110 are recommended.

BIOL 4220. General and Cellular Physiology (4)

Physico-chemical properties of protoplasm, permeability, metabolism, and nuclear-cytoplasm interaction. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: Two years of college-level biology, and CHEM 3010, 3030, or equivalent. (Satisfies physiology elective for the major).

BIOL 4310. Histological and Cytological Techniques (3)

Principles and practice of preparing tissues for microscopy study. (Lecture, 1 hour; laboratory, 6 hours) Prerequisite: Two years of college-level biology or equivalent.
BIOL 4630. Marine Biology (4)

Study of marine communities with emphasis on local communities. Ecology and natural history of plants and animals, and their adaptations 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)

BIOL 4940. Internship in Biology (2-4)

Supervised work in an agency or business related to the biological sciences. Eight hours per week. A weekly one-hour seminar will be held to discuss the work experience aspect of the course. Prerequisites: Junior or senior level biology major; approval of instructor.

BIOL 4950. Selected Topics in Biological Sciences (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of biological sciences. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

BIOL 4970. Selected Topics offered during Winter Term (4)

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.

BIOL 4980. Individual Study (1-4)

For qualified students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

BOTANY

Lower Division

BOTY 1050. Introduction to Botany (4)

Introduction to the fundamental aspects of plant biology; taxonomy, anatomy, morphology, physiology, and ecology. (Lecture, 3 hours; laboratory, 3 hours) Prerequisites: Grade of A or B in high school biology, satisfactory score on biology qualifying examination, or BIOL 1010.
BOTY 2050. Propagation of Horticultural Plants (3)

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: BIOL 1010 or BOTY 1050 or equivalent.

BOTY 2950. Selected Topics in Botany (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of botany. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

BOTY 2970. Selected Topics offered during Winter Term (4)

Upper Division

BOTY 3050. Plants, Agriculture, and Man (2)

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 Lower Plants (4)

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.

*BOTY 3120. Morphology of Vascular Plants (4)

Comparative study of structure, development, ecology, and evolutionary importance of club mosses, horsetails, ferns, and seed plants. (Lecture, 3 hours; laboratory, 3 hours, field trips) Prerequisite: BOTY 1050 or equivalent.

BOTY 3150. General Mycology (4)

Survey of the fungi with emphasis on their biology. The laboratory portion will concentrate on taxonomy of mushrooms and the culture of selected fungi. (Lecture, 3 hours; laboratory 3 hours; field trips) (Formerly 4150) Prerequisites: BOTY 1050 or equivalent.

BOTY 3200. Poisonous Plants in California (3)

Common native and cultivated poisonous plants found growing in California. Prerequisite: None

*This course will satisfy the diversity requirement.
Biological Sciences

BOTY 3400. Weeds and Weed Control (4)

Recognition, distribution, and control of native and introduced weeds of California. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisite: BOTY 1050 or equivalent.

BOTY 3500. Introductory Plant Pathology (4)

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)

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.

BOTY 4001. Plant Cytology and Tissue Development (3)

Structure and function of cell parts; growth and morphogenesis of cells and tissues. (Lecture, 3 hours) Prerequisite: BOTY 3120 or consent of instructor.

BOTY 4100. Anatomy of Seed Plants (4)

Microscopic study of structure and development of plant tissues with emphasis on tissues of seed plants. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: BOTY 3120 or consent of instructor.

BOTY 4200. Plant Physiology (4)

Selected topics pertaining to metabolism, nutrition, and growth of plants. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: (Satisfies physiology elective for the major)

BOTY 4950. Selected Topics in Botany (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of botany. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

BOTY 4970. Selected Topics offered during Winter Term (4)

*This course will satisfy the diversity requirement.

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ENTOMOLOGY
Upper Division.

*ENTO 3000. Principles of Entomology (4)
Classification, control, life history, structure, ecology, and basic physiology of insects. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 1050 or equivalent.

ENTO 3052. Beekeeping (2)
A survey of the principles of beekeeping, with instruction on the proper use of equipment in the management of an apiary.

ENTO 3330. Medical Entomology (3)
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) Prerequisite: ZOOL 1050 or equivalent.

*ENTO 3740. Insect Classification (4)
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.

ENTO 4950. Selected Topics in Entomology (Topics to be specified in Class Schedule) (1-5)
Development of a selected branch of entomology. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ENTO 4970. Selected Topics offered during Winter Term (4)

MICROBIOLOGY
Lower Division

MBIO 2970. Selected Topics offered during Winter Term (4)

*This course will satisfy the diversity requirement.
Biology Sciences

Upper Division

*Mbio 3010. Bacteriology (3)

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) (Formerly 2010) Prerequisites: One year of college-level biology or equivalent, and CHEM 1110 or equivalent.

*Mbio 3030. Bacteriology Laboratory (2)

Laboratory experiments and demonstrations to illustrate principles and techniques of bacteriology. (Laboratory, 6 hours) (Formerly 2030) Prerequisite: MBIO 3010 or concurrent enrollment.

*Mbio 3600. Food Microbiology (3)

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.

*Mbio 4950. Selected Topics in Microbiology (Topics to be specified in Class Schedule) (1-5)

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 4970. Selected Topics offered during Winter Term (4)

ZOOLOGY

Lower Division

Zool 1050. Introduction to Zoology (4)

Introduction to basic zoological 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 speciation. (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.

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*This course will satisfy the diversity requirement.
ZOOL 2230. Physiology (3)

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).

ZOOL 2240. Physiology Laboratory (1)

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.

ZOOL 2250. Human Anatomy (3)

Gross morphology and anatomy of the organ systems of the human body with emphasis on functional anatomy. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: None

ZOOL 2950. Selected Topics in Zoology (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of zoology. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ZOOL 2970. Selected Topics offered during Winter Term (4)

Upper Division

ZOOL 3130. Vertebrate Embryology (5)

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)

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)

A general survey of forms of animal behavior and methods of study. (Lecture, 3 hours) Prerequisite: BOTY 1050, ZOOL 1050, or consent of instructor.
Biological Sciences

*ZOOL 3610. General Vertebrate Zoology (4)

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 zoology.

ZOOL 3950-3960. Field Studies in Wildlife Ecology (4-12)

Theory and practical experience in techniques employed in wildlife ecology. Emphasis will be placed on habitat assessment and field studies of habitat use by wildlife. (Lecture, 2 hours; 10-12 weeks field work) Prerequisites: One year of college-level course work in the biological sciences and consent of instructor.

ZOOL 4230. Animal Physiology (4)

A physiological approach to the evolution of vertebrate organ systems. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: Two years of college-level biology or equivalent, and CHEM 3010, 3030, or equivalent. (Satisfies physiology elective for the major)

ZOOL 4250. Endocrinology (2)

A comparison of animal endocrine systems at the cell, tissue, and organ level. (Lecture, 2 hours) Prerequisites: BIOL 3310 and CHEM 3010, 3030, or equivalent.

*ZOOL 4420. Invertebrate Zoology I (4)

Structure, classification, distribution, and life histories of invertebrates. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BOTY 1050, ZOOL 1050, or equivalent.

*ZOOL 4430. Invertebrate Zoology II (4)

Continuation of ZOOL 4420. Structure and classification distribution, and life histories of invertebrates. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BOTY 1050, ZOOL 1050, or equivalent. ZOOL 4420 recommended.

ZOOL 4440. General Parasitology (3)

Parasitism with emphasis on parasites of man. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: Two years of college-level biology or equivalent.

*This course will satisfy the diversity requirement.

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*ZOOI 4620. Herpetology (4)

Anatomy, behavior, classification, distribution, ecology, evolution, and life histories of amphibians and reptiles. (Lecture, 2 hours; laboratory, 6 hours or one field trip per week) Prerequisite: ZOOL 3150 or ZOOL 3610 or equivalent. Offered alternate years.

*ZOOI 4630. Ornithology (4)

Behavior, classification, economic importance, evolution, life histories, migration, and special modifications of birds. Identification in field and laboratory. (Lecture, 2 hours; laboratory, 6 hours or one field trip per week) Prerequisite: ZOOL 3150 or ZOOL 3610 or equivalent. Offered alternate years.

*ZOOI 4640. Mammalogy (4)

Anatomy, behavior, classification, distribution, economic value, evolution, and life histories of mammals. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 3150 or ZOOL 3610 or equivalent. Offered alternate years.

ZOOI 4950. Selected Topics in Zoology (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of zoology. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ZOOI 4970. Selected Topics offered during Winter Term (4)

*This course will satisfy the diversity requirement.
Business Administration

Hime B. Kirshen, Ph.D., Professor, Chair
Thomas P. Barrett, M.A., Professor
Wayne R. Chapin, D.B.A., C.P.A., Professor
U. Rao Cherukuri, Ph.D., Professor
David O. Jenkins, D.B.A., C.P.A., Professor
Robert W. Lambright, D.B.A., Professor
Anthony L. Malo, Ph.D., Professor
Charles J. Rogers, Ph.D., Professor
Robert Van Regenmorter, Ph.D., Professor
Margaret B. Vaughan, Ph.D., Professor
Ellen K. Parisian, J.D., Associate Professor
Alfred G. Tsacle, M.A., M.S., Assistant Professor
Roger A. Lund, M.B.A., C.P.A., Visiting Lecturer
Dennis L. Williams, M.B.A., C.P.A., Visiting Lecturer
William J. Torrens, B.A., Visiting Lecturer
Thomas C. Watling, Ph.D., Coordinator of Advising and Internships

The Division of Business Administration has primary responsibility within the College for the preparation and continuing education of business administrators. The Division strives to meet this responsibility by offering a limited number of carefully selected courses of instruction and by engaging in continuing research and community effort in support of this instruction.

The Division offers two degree programs: one leading to the degree Bachelor of Arts, Business Administration; the second leading to the degree Master of Business Administration (MBA). Courses in the B.A. degree program are offered both during the daytime and the evening. Courses in the MBA program are offered during the evening. In addition to the regular on-campus course offerings, the Division schedules a number of upper division and graduate courses in the evening in Stockton. The Division also cooperates with the College's Office of Extended Education in offering a growing number of courses in business and administration designed to meet specific needs of the local community.

THE BACHELOR OF ARTS, BUSINESS ADMINISTRATION

This program is intended to provide a basic preparation for careers in business administration.

DEGREE OBJECTIVES

This program is designed to help each student acquire:

1. A broad, liberal education.
2. A basic understanding of the operation of a business enterprise.
Business Administration

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.
5. A degree of specialized training in a selected area of concentration.

PROGRAM STRUCTURE

Business Administration has three principal components: (1) prerequisites to a major, (2) the business administration core, and (3) the area of concentration.

The prerequisites, which overlap the General Education program, provide the essential ingredients in the foundation upon which the major 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 the student 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 major, students should schedule most courses in the core during their junior year.

The area of concentration provides the opportunity for a limited amount of specialized study in a selected area of interest. Permissible areas of concentration currently available are Accounting, Finance, Management Information Systems, Marketing, Operations Administration (Quantitative Methods), and Personnel Administration. Students may also elect to complete 12 units of adviser-approved upper division course work in business administration in lieu of a specified concentration. Course work in the area of concentration is restricted to the junior and senior years.

REQUIREMENTS FOR THE BACHELOR OF ARTS, BUSINESS ADMINISTRATION

Students seeking the Bachelor of Arts, Business Administration must:

1. Complete all college-wide requirements for the Bachelor of Arts degree.
2. Complete the major, including the prerequisites to the major, the business administration core, and the selected area of concentration. Courses in the business administration core and the area of concentration must be completed for a letter grade. "Credit" grades are acceptable for applicable Winter Term courses.
3. Complete with a grade of C or better all courses which are specified prerequisites to advanced courses in the student's major.
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4. Satisfy the Division's requirement for proficiency in English. (See below)
Completion of a minor is not required.

RECOMMENDED LOWER DIVISION PREPARATION

Prospective business administration majors should emphasize General Education during the first two years, thus laying a foundation upon which the professional program can be built. In addition, the specified prerequisites to the major should be completed. Elective courses should be chosen in the following areas: behavioral sciences, economics, English, mathematics, and political science.

DEGREE MAJOR IN BUSINESS ADMINISTRATION

Prerequisites to the Major

ECON 2500, 2510. Principles of Economics I, II, 8 units
ENGL 1003. English Composition I, 2 units
and PHIL 1001. Logic in Writing, 1 unit
ENGL 1004. English Composition II, 2 units
and DRAM 1001. Spoken Communication, 1 unit
ENGL 3007. Business and Technical Communication, 3 units
MATH 1500. Finite Mathematics, 3 units
or MATH 1910. Calculus with Applications I, 3 units
MATH 1610. Statistics for Decision Making, 3 units
BUS 2000. Introduction to BASIC Programming and Business Computer Systems, 3 units
BUS 2010. COBOL Programming and Business Information Systems, 3 units
or BUS 2014. RPG II Programming and Business Information Systems, 3 units
BUS 2060. Business Law I, 3 units
BUS 2110. Financial Accounting, 4 units
BUS 2130. Managerial Accounting, 4 units
(Students concentrating in Accounting will substitute BUS 3140, Cost Accounting, 4 units)

The Business Administration Core

BUS 3000. Quantitative Analysis for Business Decisions, 3 units
BUS 3010. Organization and Environment, 3 units
BUS 3220. Business Finance, 3 units
BUS 3410. Basic Marketing, 3 units
BUS 4080. Business Policy, 3 units
ECON 3150. National Income Analysis, 3 units
or BUS 4510. Production and Operations Administration, 3 units

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THE AREA OF CONCENTRATION

Each student will either choose an area of concentration from those listed below or complete 12 units of approved upper division course work in business administration. Students who complete one of the concentrations listed below may have this concentration noted on their permanent record.

ACCOUNTING

Accounting is a systematic way of describing and analyzing economic activity in order to provide useful information for the guidance of management and others interested in an organization. It involves recording transactions, processing and analyzing the related financial and other quantitative data, and reporting results to management and/or other interested parties.

Work in accounting generally falls into two related areas: managerial accounting—providing useful information for the guidance of management, and financial accounting—reporting results to interested parties outside the organization. Professional careers in accounting are available in business, in government, and in public accounting.

Course requirements are as follows:

BUS 3110. Intermediate Accounting I, 3 units
BUS 3120. Intermediate Accounting II, 3 units
Two of the following as approved by the major adviser:
BUS 4110. Advanced Accounting, 4 units
BUS 4120. Auditing, 4 units
BUS 4140. Income Tax Accounting, 4 units
BUS 4150. Seminar in Accounting Theory, 4 units

FINANCE

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, brokerage houses, and investment companies.

Course requirements are as follows:

BUS 4210. Security Analysis and Portfolio Management, 4 units
BUS 4240. Management of Financial Institutions, 4 units
BUS 4820. Financial Management, 4 units
MANAGEMENT INFORMATION SYSTEMS

Management Information Systems combines management decision making methods with computer technology and applications. An MIS provides information and processing support for management and decision functions in addition to providing all necessary transaction processing for an organization. The MIS program develops business systems analysts and business application programmers. The emphasis is on the functional areas of management, including accounting, production, marketing, and finance, and on the application of computers to these functional areas.

Course requirements are as follows:

BUS 3730. Structured Programming, 3 units
BUS 4720. Data Base Management Systems, 3 units
BUS 4770. Systems Analysis and Design, 3 units
BUS 4780. Management Information Systems, 3 units

One of the following as approved by the major adviser:

BUS 3740. Computer Architecture, 3 units
BUS 3750. Computer Operating Systems, 3 units
BUS 3760. Computer Graphics, 3 units
MATH 3100. Assembly Language Programming, 3 units
MATH 4001. Programming Languages, 3 units
MATH 4201. Data Structures and Algorithms, 3 units

MARKETING

Marketing is the bridge which links the firm to the markets it serves. It includes measuring and interpreting market forces and market opportunities; developing products and/or services to match market opportunities; designing and managing channels of distribution; pricing, market cultivation—advertising, sales promotion, personal selling; and physical distribution.

Professional careers in marketing are to be found in the marketing departments of industrial firms, in merchandising firms, and in specialized marketing firms such as advertising agencies and marketing research agencies.

Course requirements are as follows:

BUS 4400. Consumer Behavior, 3 units
BUS 4420. Marketing Research, 3 units
BUS 4490. Problems in Marketing Strategy, 3 units

One of the following as approved by the major adviser:

BUS 4430. Sales Management, 3 units
BUS 4440. Industrial Marketing, 3 units
BUS 4450. Retailing, 3 units
OPERATIONS ADMINISTRATION

Operations Administration is concerned with the functioning of operating systems in different types of organizations. It involves the analysis, design, implementation, operation, and control of integrated systems of manpower, material, facilities, and capital for the conversion of inputs into desired products and/or services, and the distribution of these outputs. Emphasis is placed on the use of quantitative methodologies in the formulation and solution of management problems.

Career opportunities in the field of operations administration may be found in a variety of organizations--manufacturing firms, banks, hospitals, wholesale-retail chains, transportation firms, etc.

Course requirements are as follows:

BUS 4360. Human Problems in Administration, 3 units
BUS 4550. Introduction to Management Science, 4 units

Two of the following as approved by the major adviser:

BUS 4520. Program Administration, 3 units
BUS 4750. Computer-Based Business Simulation, 3 units
BUS 4770. Systems Analysis and Design, 3 units

PERSONNEL ADMINISTRATION

Personnel Administration is the process of obtaining and maintaining the human resources of an organization. It includes manpower planning, personnel recruitment, selection and development, performance appraisal, compensation administration, and labor-management relations.

Professional careers in personnel administration may be found with government agencies, hospitals, universities, and labor unions, as well as with private businesses.

Course requirements are as follows:

Four of the following as approved by the major adviser:

BUS 4360. Human Problems in Administration, 3 units
BUS 4610. Personnel Administration, 3 units
BUS 4620. Labor Management Relations, 3 units
BUS 4640. Manpower Development, 3 units
BUS 4650. Personnel Administration and the Law, 3 units
BUS 4660. Grievance-Arbitration Process, 3 units
ECON 4100. Labor Economics, 3 units
Prerequisites to the Minor

BUS 2110. Financial Accounting, 4 units
ECON 2500, 2510. Principles of Economics I, II, 8 units

Required Courses in Minor Field

BUS 3010. Organization and Environment, 3 units

Plus 9 upper division units as approved by the minor adviser.

REQUIREMENT FOR PROFICIENCY IN ENGLISH

Every student seeking a degree in business administration must meet the requirement for proficiency in English. Satisfactory completion of every course is contingent upon such proficiency. No student will be recommended for a degree in business administration unless his work in the program demonstrates satisfactory performance in the writing of English. Any student whose work reflects marked deficiency in English at any point in his degree program will be referred to the Chair of the Division for such action as seems appropriate.

COURSE PREREQUISITES

Most business administration courses have specific subject matter prerequisites for enrollment. Students must complete, with a grade of C or better, 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 Division, a qualifying examination may be required.

TEACHING CREDENTIALS

The major and the minor in Business Administration do not constitute appropriate preparation for prospective teachers of business.
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MASTER OF BUSINESS ADMINISTRATION

The MBA Program provides professional education in business and administration for men and women who wish to prepare for responsible managerial and staff positions in business, various governmental agencies, and other organizations, and for the recognized business professions.

DEGREE OBJECTIVES

This program is designed to help each student acquire:

1. Increased capacity for flexible adjustment to changing conditions.
2. The capacity to use information effectively at the point of decision.
3. The ability to make and execute decisions.
4. Patterns of thinking and behavior in accordance with the gradually evolving standards of professional behavior.
5. The ability to engage productively with others in a variety of organizational settings.
6. The ability to relate the activities of the organization to a broad view of economic conditions and social attitudes.

PROGRAM STRUCTURE

The MBA Program has two principal components: (1) the foundation program, and (2) the advanced program.

The Foundation Program is intended to give the student the essence of the undergraduate major in Business Administration.

The Advanced Program consists of a core of 7 required courses (21 units) and an area of specialization (9 units).

Each student will develop a specialization in a functional or analytical field. Students may draw upon the resources of other departments of the College, as appropriate, in developing this part of their program. The current list of courses approved for this purpose may be obtained from the Division of Business Administration.

REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION

In addition to successfully completing all required courses, candidates for the MBA must:

1. Meet all college-wide requirements for masters' degrees.
2. Satisfy the Division's requirements for proficiency in English (see above).
3. Complete all requirements for the degree within seven years.
Qualified individuals will be admitted to the program without regard to their undergraduate major. There are no specific course prerequisites, majors, or areas of concentration that an applicant must complete in order to qualify. However, all applicants must hold a Bachelor's degree from an accredited college or university.

It is assumed that all applicants have completed 2 years of high school algebra or its equivalent. (Applicants with a deficiency in mathematics are advised to complete MATH 1050, Basic College Algebra. Credit for this course will not apply toward MBA degree requirements.)

It is assumed that all applicants are proficient in writing the English language. Should questions arise regarding an applicant's proficiency, the applicant will be required to demonstrate proficiency by successfully completing ENGL 3007, Business and Technical Communication. Credit for this will not apply toward MBA degree requirements.

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 and part scores of 54 on each part prior to being admitted to the program.

Conditionally Classified Standing

The College admits qualified applicants to conditionally classified standing and advances them to classified standing when eligible. Conditionally classified graduate students are expected to make definite and timely progress toward the achievement of classified standing. Students must achieve classified standing within three calendar years from the date of first enrollment.

Classified Standing

Classified students are those who have been officially admitted to the MBA Program. Classified standing is a prerequisite for enrollment in 5000-level courses in business administration. To qualify for classified standing, students must demonstrate to the satisfaction of the Admissions Committee that they possess the potential for success in the MBA Advanced Program. In making its decisions the Admissions Committee will be guided by the following:

1. Achievement on the Graduate Management Admission Test (GMAT) is required. The candidate should have a total of at least 950 points based on the formula: 200 times the overall GPA plus the GMAT score; or at least 1000 points based on the formula: 200 times the upper division GPA plus the GMAT score.*

*The Graduate Record Examination (GRE) is not an acceptable substitute for the Graduate Management Admission Test (GMAT).
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2. Previous academic record—with particular reference to performance in courses in the MBA Foundation Program—a 3.0 (B) average is required in all Foundation Program courses taken subsequent to the baccalaureate degree.

3. Employment experience.

4. Three letters of recommendation from faculty and other sources.

5. Statement of career objectives.

Students seeking classified standing must follow the procedures obtainable in the office of the Division of Business Administration.

Credit for Previously Completed Work

Students who possess the background equivalent to that which would be obtained by successful completion of any required courses in the MBA Program will be given suitable credit for this work. For courses in the Foundation Program, this means exemption from the course; for courses in the Advanced Program, this means the substitution of a more appropriate course. Students who believe that they have completed the equivalent of any required course must provide acceptable proof of course equivalency to the coordinator of the course, who will make the final decision.

SCHOLARSHIP STANDARDS

A 3.0 (B) average is required of all students in order to remain in good standing in the program. Students who earn less than a B average in any term are subject to review of their eligibility to continue in the program. Required withdrawal from the program may result.

RESEARCH OPTION

Although the MBA Program does not require a thesis, the opportunity to carry out a research project will be made available to interested students.

METHODS OF INSTRUCTION

Instruction is offered in small classes with heavy emphasis upon student participation. Case problem analysis, simulation exercises, group projects, lecture-discussions, independent research, role playing, field trips, etc., are all employed to the extent that they are effective aids to learning.
MASTER OF BUSINESS ADMINISTRATION PROGRAM

Foundation Program: (21 units)*

Required Courses:

BUS 3000. Quantitative Analysis for Business Decisions, 3 units
BUS 4490. Problems in Marketing Strategy, 3 units
BUS 4820. Financial Management, 4 units
BUS 4860. Computers in Business, 3 units
BUS 4870. Principles of Accounting, 3 units
ECON 4850. Business Economics, 3 units
MATH 4840. Mathematics for Business, 3 units

Advanced Program: (30 units)**

Required Courses: (21 units)

BUS 5080. Business Policy, 3 units
BUS 5090. Law, Environment, and Ethics, 3 units
BUS 5110. Management Accounting Seminar, 3 units
BUS 5210. Managerial Finance, 3 units
BUS 5310. Business Organization, Theory, and Behavior, 3 units
BUS 5410. Marketing Management, 3 units
BUS 5510. Quantitative Business Methods, 3 units

Area of Specialization (9 units)

An adviser-approved sequence of courses tailored to meet the unique needs and interests of the individual student. (Note: At least 3 of the 9 units must be in 5000-level courses; not more than 10 units of the 30-unit Advanced Program may be taken in any one field.)

*Typically waived for students with a Bachelor's degree in Business Administration from CSCS or any AACSB-accredited school.

**Students who possess the background equivalent to that which would be obtained by successful completion of any required course in the Advanced Program will substitute a more appropriate course.
BUS 2000. Introduction to BASIC Programming and Business Computer Systems (3)

Introduction to the uses of computers in business. The basic concepts, components, and operation of computer systems are studied. Methods of application problem definition and solution are covered along with flow charting, programming logic, and computer programming in the BASIC language. Students will learn to use the computer laboratory facilities at CSCS. Prerequisites: Sophomore standing and MATH 1050 or 2 years of high school algebra.

BUS 2005. Computer Facilities Laboratory (1)

An introduction to the computer laboratory facilities at CSCS including the use of computer library programs. Required of all students who have taken the prerequisite computer courses at a school other than CSCS.

BUS 2010. COBOL Programming and Business Information Systems (3)

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 BASIC programming knowledge. Prerequisites: BUS 2000 and 2110.

BUS 2014. RPG II Programming and Business Information Systems (3)

The application of the RPG programming language to business information systems. Advanced programming applications include matching records, magnetic tape, sequential file processing, advanced table lookup, sequential disk logic and update, and the indexed sequential access method. Course is designed for the persons who have an understanding of data processing fundamentals and BASIC programming knowledge. Prerequisites: BUS 2000 and 2110.

BUS 2060. Business Law I (3)

Introduction to the law applicable to business firms and their operation; history and philosophy; sources of law; legal reasoning and procedure; law of contracts, agency.

BUS 2110. Financial Accounting (4)

BUS 2130. Managerial Accounting (4)

The analysis, use, interpretation, and synthesis of accounting and financial data for and by management for planning, control, and decision-making purposes. Designed for students pursuing a concentration other than accounting; credit not applicable to the undergraduate accounting concentration. Prerequisite: BUS 2110 or consent of instructor.

BUS 2950. Selected Topics in Business Administration (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in business. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

BUS 2970. Selected Topics offered during Winter Term (4)

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BUS 3000. Quantitative Analysis for Business Decisions (3)

Introduction to the application of selected optimization techniques to the solution of complex business problems; the use of quantitative information obtained from accounting and statistical sources in decision making for business. Prerequisites: MATH 1610, 1500 or 1910, BUS 2000; or MATH 4840.

BUS 3010. Organization and Environment (3)

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. Prerequisites: ECON 2500, 2510, and junior standing; or consent of instructor.

BUS 3060. Business Law II (3)

Law of business; emphasis on laws relating to sales, personal property, bailments, negotiable instruments, partnerships, corporations, real property, and insurance. Prerequisite: BUS 2060.

BUS 3110. Intermediate Accounting I (3)

Accounting theory, development of accounting principles, and their application to income determination and presentation of financial position for the business firm. Prerequisite: BUS 2110.
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BUS 3120. Intermediate Accounting II (3)

A continuation of Intermediate Accounting I with particular emphasis on accounting for facilities investment, borrowed and equity capital, and managerial analysis of financial data. Prerequisite: BUS 3110 or consent of instructor.

BUS 3140. Cost Accounting (4)

Theory and practice of cost accounting, including costing manufactured products, planning and control of operations, budgeting, standards, and relevant quantitative techniques. Prerequisites: BUS 2110, MATH 1500 or 1910, and MATH 1610.

BUS 3220. Business Finance (3)

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: BUS 2130 or 3140 or 4870; MATH 1610.

BUS 3310. The Administrative Process (3)

The nature of administration, its role, responsibilities, and functions. Administration is treated as a distinct activity applicable to all types of organizations— not just the business organization. Prerequisite: Junior standing.

BUS 3410. Basic Marketing (3)

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 confronted by the business firm in establishing an overall marketing program. Prerequisite: BUS 3010; concurrent enrollment permitted.

BUS 3730. Structured Programming (3)

Solving business problems using structured programming techniques. The student will be introduced to top down design, modular programming, and the rules of structured programming. Several application programs will be designed and written using the above techniques. (Formerly 4730) Prerequisites: BUS 2000 and 2010.

BUS 3740. Computer Architecture (3)

A survey of basic computer architecture including one-address machines, two-address machines, stack machines, addressing methods, memories, I/O multiprogramming, multiprocessing, and microprogramming. The course will also include preparation of a hardware evaluation study. Prerequisites: BUS 2000, 2010 or MATH 2000.
BUS 3750. Computer Operating Systems (3)

An introduction to computer operating systems, as currently found in business environments. The course will cover batch, multi-programming, multiprocessing, and timesharing operating systems. Topics include sequential processes, concurrent processes, memory management, segmentation, scheduling algorithms, and security. The course will require a systems programming project. Prerequisite: BUS 3730 or 3740.

BUS 3760. Computer Graphics (3)

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: BUS 2000, 2010, MATH 1500.

BUS 4010. Readings in Business Administration (2)

Directed readings in a selected area within the broad field of business administration. May be repeated for a maximum of 4 units. Prerequisites: Consent of instructor and approval of division chair.

BUS 4050. Government, Business, and the Economy (3)

The relation between government and business concerning public policy, administrative agencies, judicial decisions, and legislation. Attention will be focused on the impact of government on the private sector of business.

BUS 4080. Business Policy (3)

Consideration of the business enterprise as a total system in a total environment. Analysis and evaluation of the problems and opportunities which face the chief executive of a business firm. Emphasis will be on the formulation and implementation of corporate strategy. Extensive use of the technique of case problem analysis. Prerequisites: Completion of all other courses in business administration core and satisfaction of CSCS writing competency requirement.

BUS 4110. Advanced Accounting (4)

Accounting principles and procedures applied to accounting for partnership formation, profit sharing, and liquidation; installment sales; consignment sales; business combinations; and government entities. Prerequisite: BUS 3120 or consent of instructor.

BUS 4120. Auditing (4)

Standards and procedures broadly applied to examination of financial statements, including a consideration of the field of public accounting, professional ethics, internal controls, preparation of working papers, and audit reports. Prerequisites: BUS 3110, 3120.
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BUS 4140. Income Tax Accounting (4)

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: BUS 3120 or consent of instructor.

BUS 4150. Seminar in Accounting Theory (4)

History and development of accounting theory; accounting standards, conventions, and principles. Current problems, including a survey of current literature. Prerequisites: BUS 3110, 3120.

BUS 4210. Security Analysis and Portfolio Management (4)

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 with special attention to the investment problems of the individual investor. Prerequisite: BUS 3220.

BUS 4240. Management of Financial Institutions (4)

Analysis of the 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: BUS 3220 or ECON 3320.

BUS 4360. Human Problems in Administration (3)

The behavior of individuals and groups in administrative organizations. Emphasis on empirically derived knowledge about human behavior and its meaning to the administrator. Prerequisite: BUS 3010 or 3310 or consent of instructor.

BUS 4400. Consumer Behavior (3)

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: BUS 3410.

BUS 4401. Professional Ethics (3)

An examination of moral issues as they apply to professions. Ethical issues in business, law, and medicine will be used as models for dealing with moral problems in the professional codes of ethics, business goals, values and practices, confidentiality, informed consent and coercion, paternalism, etc. (Same as PHIL 4401)
BUS 4420. Marketing Research (3)

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: BUS 3000, 3410.

BUS 4430. Sales Management (3)

Planning, direction, and control of sales personnel and sales promotion activities. Sales management is approached as an integral element of overall marketing program of a firm. Prerequisite: BUS 3410.

BUS 4431. Personal Selling (3)

The role of personal selling in the marketing of consumer and industrial products and services. Analysis of sales opportunities and techniques. Includes lectures, discussions, demonstrations, and practice in sales presentation. Prerequisite: BUS 3410 or consent of instructor.

BUS 4440. Industrial Marketing (3)

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: BUS 3410.

BUS 4450. Retailing (3)

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: BUS 3410.

BUS 4460. Advertising (3)

Basics of developing advertising applications for products, services, and ideas being marketed. Prerequisite: BUS 3410.

BUS 4490. Problems in Marketing Strategy (3)

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: BUS 3410, with 4400, 4420 recommended; or graduate standing and consent of instructor.
BUS 4510. Production and Operations Administration (3)

Production problems of a managerial nature: production planning and control, product development, simplification and standardization, procurement, materials handling, methods improvement, impact of technological change. (Field trips) Prerequisites: BUS 3000, 3010.

BUS 4520. Program Administration (3)

Planning, organizing, administration, and control of programs. Administration of network systems. Includes programs such as development and introduction of new products, facilities expansion and relocation, construction projects, etc. (Field trips) Prerequisites: BUS 3000, 3010.

BUS 4540. Entrepreneurship and Venture Initiation (3)

Study of selected problems involved in starting and operating new business ventures. Prerequisites: Senior standing and consent of instructor.

BUS 4550. Introduction to Management Science (4)

Analysis by quantitative techniques for managerial planning and decision making. The modeling process; linear, integer, quadratic and dynamic programming; system simulation. Application of statistical methods to problems in business administration. Prerequisite: BUS 3000 or MATH 4840.

BUS 4560. Managing the Small Business (3)

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.

BUS 4610. Personnel Administration (3)

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: BUS 3010 or consent of instructor.

BUS 4620. Labor Management Relations (3)

Perspectives on the internal relationship between management and unionized employees. Prerequisite: BUS 4610.
BUS 4640. Manpower Development (3)

Manpower development as a managerial responsibility. Manpower planning, performance appraisal and career path development, training and development of personnel. Coordination of training and development with recruitment, compensation, and other personnel functions. (Formerly 4630) Prerequisite: BUS 4610 or consent of instructor.

BUS 4650. Personnel Administration and the Law (3)

An examination of current legislation and statutory requirements placed on the human resource function. Laws will be analyzed for background cause-current application. An understanding of "how to" work with the laws in dynamic enterprise will be stressed.

BUS 4660. Grievance-Arbitration Process (3)

Examination of the grievance-arbitration process as a key personnel activity. Various techniques of discipline, grievance, and arbitration processes will be analyzed in both private and public sectors. Legal frameworks will be studied to develop understanding of arbitration process.

BUS 4720. Data Base Management Systems (3)

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: BUS 2000, 2110, 3000, and 4770.

BUS 4750. Computer-Based Business Simulation (3)

Study of computer simulation techniques as applied to business administration and management science. (Formerly 4530) Prerequisites: BUS 2000 and 3000.

BUS 4770. Systems Analysis and Design (3)

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: BUS 2000, 2110, 3000.
BUS 4780. Management Information Systems (3)

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 areas of organization management. Case studies. Prerequisites: BUS 2000, 2110, 3000, 3010.

BUS 4820. Financial Management (4)

Analysis of financial policies and problems of non-financial firms. Includes consideration of both long- and short-term capital problems. Use of case problems and/or simulation exercises. (Formerly 4250) Prerequisites: BUS 3220 or 4870, BUS 3000, and graduate standing.

BUS 4860. Computers in Business (3)

An introduction to computer hardware and software, problem definition, program design, and flow charts. Introduction to the BASIC general purpose programming language. Prerequisite: Graduate standing.

BUS 4870. Principles of Accounting (3)

The principles, concepts, and conventions employed in measuring business transactions and analyzing, interpreting, and reporting results to management and other users of financial information. Prerequisite: Graduate standing.

BUS 4880. Organizational Behavior (3)

Study of human behavior in complex social organizations. Analysis of organization systems and managerial actions in terms of their influence on behavior patterns. Prerequisite: Graduate standing.

BUS 4890. Business Forecasting and Planning (3)

Developing strategic plans with emphasis on product-market relationships. Goal setting, objective specification, environmental definition and assessment, analysis and evaluation of the competitive situation, formulation of plans. Prerequisite: Graduate standing.
BUS 4950. Selected Topics in Business Administration (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

BUS 4970. Selected Topics offered during Winter Term (4)

BUS 4980. Individual Study (1-4)

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 division chair.

Graduate

BUS 5010. Readings in Business Administration (2)

Directed readings in a selected area within the broad field of business administration. May be repeated for a maximum of 4 units. Prerequisites: Consent of instructor and approval of division chair.

BUS 5020. Management Information Systems (3)

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 MIS; the uses of MIS; computer hardware, software; data base systems and the principles of MIS development and management. Prerequisites: BUS 3000, 4860, 4870.

BUS 5050. Seminar in the Management of International Business (3)

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. Prerequisite: ECON 4415 recommended.

BUS 5080. Business Policy (3)

The formulation, implementation, and administration of corporate strategy. Study, through the technique of case problem analysis of the pattern of goals and objectives which define a firm, and of the means of the execution of strategy in a specific situation. Prerequisites: BUS 5090, 5110, 5210, 5310, 5410, 5510.
Business Administration

BUS 5090. Law, Environment, and Ethics (3)

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.

BUS 5100. Seminar - Organizational and Administrative Theory (3)

Examination of development and current emphasis in organization theory from scientific management to existentialism. Focuses on the use of theory. (Same as PADM 5100)

BUS 5110. Management Accounting Seminar (3)

The application of managerial accounting techniques and procedures to the solution of managerial problems in all functional areas of business. Prerequisites: MATH 4840, BUS 4870; ECON 4850 recommended.

BUS 5210. Managerial Finance (3)

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, and capital budgeting, dividend policy, and valuation of enterprises operating for profit. Prerequisites: BUS 3000, 3220 or 4820, BUS 5110, and ECON 4850.

BUS 5310. Business Organization, Theory, and Behavior (3)

Advanced study of complex business organizations. Analysis of organization systems and managerial actions in terms of their influence on patterns of behavior.

BUS 5410. Marketing Management (3)

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: BUS 4490, ECON 4850, and consent of instructor.

BUS 5420. Seminar in Marketing (3)

Advanced study in selected areas within the marketing field. Course content will change from term to term as indicated in the class schedule. Among the subjects to be included are: Marketing Institutions, Product Management, International Marketing, Current Concepts and Emerging Issues. Each of these subjects may be taken for credit under this course number. Prerequisite: BUS 5410.
BUS 5510. Quantitative Business Methods (3)

Analysis by quantitative techniques for managerial planning and decision making. The modeling process; linear, integer, quadratic, and dynamic programming; system simulation. Application of statistical methods to problems in Business Administration. Prerequisite: BUS 3000 or 4550.

BUS 5950. Selected Topics in Business Administration (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

BUS 5970. Selected Topics offered during Winter Term (4)

BUS 5980. Individual Study (1-4)

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 division chair.
Chemistry

John Almy, Ph.D., Associate Professor, Chair
Hobart G. Hamilton, Jr., Ph.D., Professor
Jimmy W. Hinkson, Ph.D., Professor
Alexander J. Pandell, Ph.D., Professor
Evan M. Thompson, Ph.D., Professor
James E. Byrd, Ph.D., Associate Professor
Michael J. Perona, Ph.D., Associate Professor

The Department of Chemistry offers the degrees Bachelor of Arts and Bachelor of Science, Chemistry. The student should consult with his departmental adviser to determine which degree is more suitable for his career objective. A student may also qualify for a concentration in the Environmental Sciences in addition to his degree in chemistry.

BACHELOR OF SCIENCE

This program is accredited by the American Chemical Society (ACS) and provides the comprehensive training in chemistry necessary for the student who wishes to become a professional chemist in industry or government, or who plans to attend graduate school. Students wishing to receive a degree accredited by the American Chemical Society must complete one year of German or computer science in addition to the major requirements for the Bachelor of Science degree listed below. Students obtaining an accredited degree are eligible to join the ACS immediately upon graduation.

BACHELOR OF ARTS

In contrast to the B.S. program, 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 health professions such as medicine, optometry, dentistry, medical technology, pharmacy, physical therapy, and veterinary medicine. Technical sales writing, chemical patent law, library work, and high school teaching would be examples of other careers for Bachelor of Arts graduates. The student will be advised to take specific courses depending on his field of interest; for example, ZOOL 1050, CHEM 4010, 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 Health Sciences Advisory Committee.

An approved single subject waiver is available for students who wish to declare Physical Sciences as their subject matter teaching area. Students must plan their academic programming carefully with their adviser in order to complete the approved waiver program at the time of graduation.
REQUIREMENTS FOR THE BACHELOR OF ARTS OR BACHELOR OF SCIENCE, CHEMISTRY

Chemistry majors are to:

1. Complete the college requirements for the bachelor's degree.
2. Complete prerequisites to the major: CR grades will not be accepted for chemistry course prerequisites.
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 8 units of CR graded course work may apply toward the major.

Completion of a minor is not required.

BACHELOR OF ARTS DEGREE IN CHEMISTRY

Prerequisites to the Major:

Required courses in the majör field:
- CHEM 1100, 1110. Principles of Chemistry I, II, 10 units
- CHEM 2010. Quantitative Analysis & Basic Instrumental Techniques, 4 units

Required courses in supporting fields:
- MATH 1910, 1920. Calculus with Applications I, II, 6 units
  OR
- MATH 1410, 1420. Calculus I, II, 8 units

Either of the following sequences:
- PHYS 1100, 1110. Basic Physics I, II, 10 units
  OR
- PHYS 2250, 2260. General Physics I, II, 8 units
- PHYS 2350, 2360. General Physics Laboratory I, II, 2 units

The Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 3010, 3020</td>
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<tr>
<td>CHEM 3030, 3040</td>
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<td>CHEM 4010</td>
<td>3</td>
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<tr>
<td>CHEM 4021</td>
<td>1</td>
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<td>CHEM 4030</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 4100</td>
<td>4</td>
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</table>

At least 5 credit hours from the following courses:
- CHEM 4020. Physical Chemistry II, 3 units
- CHEM 4030. Physical Chemistry Lab, 1-2 units
- CHEM 4200. Advanced Inorganic Chemistry, 3 units
- CHEM 4300. Advanced Organic Chemistry, 3 units
- CHEM 4400. Biochemistry, 5 units
- CHEM 4410. Biochemistry Laboratory, 1 unit
### Prerequisites to the Major:

**Required courses in the major field:**
- CHEM 1100, 1110. Principles of Chemistry I, II, 10 units
- CHEM 2010. Quantitative Analysis and Basic Instrumental Techniques, 4 units

**Required courses in supporting fields:**
- MATH 1410, 1420. Calculus I, II, 8 units
- MATH 2410. Multivariate Calculus, 4 units
- MATH 2500. Elementary Linear Algebra, 3 units
- or MATH 3250. Ordinary Differential Equations, 4 units
- PHYS 2250, 2260. General Physics I, II, 8 units
- PHYS 2350, 2360. General Physics Laboratory, I, II, 2 units

### Bachelor of Science Degree in Chemistry

### The Major

**Units**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CHEM 3010, 3020. Organic Chemistry I, II</td>
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<tr>
<td>CHEM 3030, 3040. Organic Chemistry Laboratory I, II</td>
<td>4</td>
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<tr>
<td>CHEM 4010, 4020. Physical Chemistry I, II</td>
<td>6</td>
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<tr>
<td>CHEM 4030. Physical Chemistry Laboratory</td>
<td>2</td>
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<tr>
<td>CHEM 4100. Instrumental Analysis</td>
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</tr>
<tr>
<td>CHEM 4200. Advanced Inorganic Chemistry</td>
<td>3</td>
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At least 6 credit hours from the following courses: 6

**Units**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CHEM 4300. Advanced Organic Chemistry</td>
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</tr>
<tr>
<td>CHEM 4400. Biochemistry</td>
<td>3 units</td>
</tr>
<tr>
<td>CHEM 4410. Biochemistry Laboratory</td>
<td>1 unit</td>
</tr>
<tr>
<td>CHEM 4940. Chemistry Internship</td>
<td>2-4 units</td>
</tr>
<tr>
<td>CHEM 4950. Selected Topics in Chemistry</td>
<td>1-5 units</td>
</tr>
<tr>
<td>CHEM 4960. Research Seminar</td>
<td>1 unit</td>
</tr>
<tr>
<td>CHEM 4980. Individual Study</td>
<td>1-4 units</td>
</tr>
<tr>
<td>PHYS 3520. Modern Physics</td>
<td>3 units</td>
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<tr>
<td>PHYS 4450. Nuclear Physics</td>
<td>3 units</td>
</tr>
<tr>
<td>PHYS 4530. Thermal &amp; Statistical Physics I</td>
<td>4 units</td>
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</table>

**Total** 31
One of the following sequences as approved by the student's major adviser should be taken by those students wishing an ACS accredited degree.

GERM 1010, 1020. Elementary German I, II, 8 units
OR 6 units selected from the following by advisement:
CHEM 2600. Computer Programming with Applications, 2 units
MATH 1151. Programming in BASIC, 3 units
MATH 2000. FORTRAN Programming, 3 units
MATH 2011. Computer Programming, 3 units

PHYSICAL SCIENCE WAIVER PROGRAM WITH A BACHELOR OF ARTS DEGREE IN CHEMISTRY

**Lower Division**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 1010.</td>
<td>Principles of Biology</td>
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</tr>
<tr>
<td>BIOL 1020-1029.</td>
<td>Special Laboratory Studies</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1100, 1110.</td>
<td>Principles of Chemistry I, II</td>
<td>10</td>
</tr>
<tr>
<td>CHEM 2010.</td>
<td>Quantitative Analysis &amp; Basic Instrumental Techniques</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2100.</td>
<td>Principles of Geology (lec &amp; Lab)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1910, 1920.</td>
<td>Calculus with Applications I, II</td>
<td>6-8</td>
</tr>
<tr>
<td>OR MATH 1410, 1420.</td>
<td>Calculus I, II</td>
<td>6-8</td>
</tr>
<tr>
<td>PHSC 2100.</td>
<td>Atmosphere, Weather, and Climate</td>
<td>3</td>
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<tr>
<td>PHYS 2250, 2260.</td>
<td>General Physics I, II</td>
<td>8</td>
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<tr>
<td>PHYS 2350, 2360.</td>
<td>General Physics Lab</td>
<td>2</td>
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</table>

**Total** | | **43** |

**Upper Division**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ASTR 3000.</td>
<td>Contemporary Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3010, 3020.</td>
<td>Organic Chemistry I, II</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 3032, 3042.</td>
<td>Organic Chemistry Lab I, II</td>
<td>4</td>
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<tr>
<td>CHEM 4010.</td>
<td>Physical Chemistry I</td>
<td>3</td>
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<tr>
<td>CHEM 4021.</td>
<td>Additional Topics in Physical Chemistry</td>
<td>1</td>
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<tr>
<td>CHEM 4030.</td>
<td>Physical Chemistry Lab</td>
<td>1</td>
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<tr>
<td>CHEM 4100.</td>
<td>Instrumental Analysis</td>
<td>4</td>
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<tr>
<td>PHYS 3520.</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
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</table>

At least 5 upper division elective units in Chemistry selected from the following | | 5 |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 4020.</td>
<td>Physical Chemistry II</td>
<td>3 units</td>
</tr>
<tr>
<td>CHEM 4030.</td>
<td>Physical Chemistry Lab, 1-2 units</td>
<td></td>
</tr>
<tr>
<td>CHEM 4200.</td>
<td>Advanced Inorganic Chemistry</td>
<td>3 units</td>
</tr>
<tr>
<td>CHEM 4300.</td>
<td>Advanced Organic Chemistry</td>
<td>3 units</td>
</tr>
<tr>
<td>CHEM 4400.</td>
<td>Biochemistry</td>
<td>3 units</td>
</tr>
<tr>
<td>CHEM 4410.</td>
<td>Biochemistry Lab, 1 unit</td>
<td></td>
</tr>
<tr>
<td>CHEM 4940.</td>
<td>Chemistry Internship, 2-4 units</td>
<td></td>
</tr>
</tbody>
</table>
CHEM 4950. Selected Topics in Chemistry, 1-5 units
CHEM 4960. Research Seminar, 1 unit
CHEM 4980. Individual Study, 1-4 units

Total .......................... 30

DEGREE MINOR IN CHEMISTRY

Consists of 18 units in chemistry as approved by the department, which must include at least 8 upper division units.

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

The following courses are required for a concentration in Chemistry within the Liberal Studies degree:

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>*CHEM 1110. Principles of Chemistry II 5</td>
</tr>
<tr>
<td>CHEM 3010, 3020. Organic Chemistry I, II 6</td>
</tr>
<tr>
<td>CHEM 3030, 3040. Organic Chemistry Lab I, II 2</td>
</tr>
<tr>
<td>Upper division electives in chemistry as approved by the department. 7</td>
</tr>
</tbody>
</table>

Total .......................... 20

COURSE DESCRIPTIONS

Lower Division

CHEM 1000. Chemistry in the Modern World (3)

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)

*CHEM 1100, which is prerequisite to this course, can be taken in place of CHEM 1000 for those Liberal Studies students opting for the chemistry concentration.
CHEM 1001. Chemistry in the Modern World Laboratory (1)

An optional laboratory course to accompany CHEM 1000, 1200, or 2400. 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, 1200, or 2400.

CHEM 1100. Principles of Chemistry I (5)

Fundamental principles of chemistry emphasizing atomic structure, periodic properties, theories of bonding, kinetic theory of gases, solution chemistry. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) Prerequisite: Two years of high school algebra or consent of instructor.

CHEM 1110. Principles of Chemistry II (5)

A continuation of CHEM 1100; emphasizing gaseous and ionic equilibria, electrochemical principles, thermodynamics, radiochemistry, and descriptive chemistry of the elements. (Lecture, 3 hours; discussion, 1 hour; lab, 3 hours) Prerequisite: CHEM 1100.

CHEM 1200. The Consumer and Chemistry (2)

Basic principles of chemistry will be developed and applied to areas of interest to the consumer. The chemistry of cleaning products, textiles, medicines, etc., will be emphasized to illustrate the principles of chemistry and to promote consumer awareness. (Lecture, 2 hours) (Optional laboratory: CHEM 1001)

CHEM 2010. Quantitative Analysis & Basic Instrumental Techniques (4)

Principles and practice of volumetric, gravimetric, and instrumental methods of analysis. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: CHEM 1110.

CHEM 2400. The Science of Winemaking (4)

A basic and practical introduction to the science of wine-making. Topics to include fermentation, history of the wine industry, and related topics. Basic chemical concepts will be developed to facilitate the understanding of the subject matter. (Lecture, 4 hours) Prerequisite: None

CHEM 2600. Computer Programming With Applications (2)

Programming in BASIC with emphasis on practical applications in the sciences and the use of mini- and micro-computers. (Lecture, 1 hour; laboratory, 3 hours) (Same as PHYS 2600) Prerequisite: Two years of high school algebra or consent of instructor.
Chemistry

CHEM 2950. Selected Topics in Chemistry (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of chemistry. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

CHEM 2970. Selected Topics offered during Winter Term (4)

Upper Division

CHEM 3010. Organic Chemistry I (3)

Structure, properties, reactions, and stereochemistry of carbon compounds. Reaction mechanisms. Applications of spectroscopy to organic molecules. Carbohydrates, amino acids, and proteins. (Lecture, 3 hours) Concurrent enrollment in CHEM 3030 required. Prerequisite: CHEM 1110.

CHEM 3020. Organic Chemistry II (3)

Continuation of CHEM 3010. (Lecture, 3 hours) Concurrent enrollment in CHEM 3040 required. Prerequisite: CHEM 3010.

CHEM 3030. Organic Chemistry Laboratory I (1-2)

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 or 6 hours) Concurrent enrollment in CHEM 3010 required. Prerequisite: CHEM 1110.

CHEM 3040. Organic Chemistry Laboratory II (1-2)

Continuation of CHEM 3030. (Laboratory, 3 or 6 hours) Concurrent enrollment in CHEM 3020 required. Prerequisite: CHEM 3030.

CHEM 3070. The Chemicals in Your Life (3)

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 physical science.

CHEM 3650. Aquatic Chemistry (3)

The chemistry of natural and waste waters. Special emphasis is placed on those chemical species most commonly determined in the characterization of water quality, their significance in the
aquatic environment, and the theory and practice of the standard analytical methods used in their determination. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: CHEM 1110.

CHEM 4010. Physical Chemistry I (3)

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.

CHEM 4020. Physical Chemistry II (3)

Continuation of CHEM 4010. (Lecture, 3 hours) Concurrent enrollment in CHEM 4030 required. Prerequisites: MATH 1420, CHEM 4010.

CHEM 4021. Additional Topics in Physical Chemistry (1)

An introduction to either chemical kinetics or molecular spectroscopy, depending upon the student's interest. The course is intended for BA chemistry majors and others desiring a survey of either of these topics, and is not open to BS chemistry majors. Prerequisite: CHEM 4010.

CHEM 4030. Physical Chemistry Laboratory (1 or 2)

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.

CHEM 4100. Instrumental Analysis (4)

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. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: CHEM 2010, 3020 and 4010, or consent of instructor.

CHEM 4200. Advanced Inorganic Chemistry (3)

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.

CHEM 4300. Advanced Organic Chemistry (3)

Chemical kinetics, structure-reactivity relationships, molec-
Chemistry

Lunar orbital theory, orbital symmetry, reactive intermediates, rearrangements and neighboring group effects, nucleophilic aliphatic substitution, photochemistry. (Lecture, 3 hours) Prerequisite: CHEM 3020.

CHEM 4400. Biochemistry (3)

The chemistry, metabolism, enzymology, and energy relationships of important biological compounds and processes. (Lecture, 3 hours) Prerequisite: CHEM 3020 or consent of instructor.

CHEM 4410. Biochemistry Laboratory (1)

An introduction to biochemical techniques including chromatography, enzyme purification, spectrophotometry, and fluorimetry. (Laboratory, 5 hours) Prerequisite: Concurrent enrollment in CHEM 4400 or consent of instructor.

CHEM 4940. Chemistry Internship (2-4)

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. Prerequisite: CHEM 2010, 3020, 3042 and consent of Department Internship Coordinator.

CHEM 4950. Selected Topics in Chemistry (Topics to be specified in Class Schedule) (1-5)

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)

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.

CHEM 4970. Selected Topics offered during Winter Term (4)

CHEM 4980. Individual Study (1-4)

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.

CHEM 5980. Individual Study (1-4)

For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.
Child Development

Gary Novak, Ph.D., Coordinator
Associate Professor of Psychology

The Bachelor of Arts degree program in Child Development is an interdisciplinary program aimed toward providing students with a background of knowledge and skills in child growth and development and/or early childhood education. Courses selected from related departments, to include laboratory experience at the CSCS Child Development Center, are designed to prepare students for:

1. Working as a credentialed instructor or supervisor in child development/early childhood education programs.
2. Advanced study in education, special education, psychology, social science related fields, and child guidance.
3. Developing innovative programs related to the welfare and guidance of young children, parents, families, and the community.

The Child Development program also provides a concentration for the Liberal Studies degree leading to the Multiple Subjects Teaching Credential (see Liberal Studies).

Requirements for the Bachelor of Arts Degree in Child Development

1. Complete General Education requirements for the Bachelor of Arts degree.
2. Complete the major requirements of not less than 34 units of approved upper division course work as outlined below.
3. Community college transfer students with an A.A. in child development may waive PSYC 3120, 3130, and 3170; complete remainder of required course work, plus additional upper division course work selected on advisement for a total of 34 units.
4. Community college transfer students without an A.A. in child development must complete course requirements as outlined below for a total of not less than 34 units of approved upper division course work.
Recommended lower division courses

ANTH 2060. Introduction to Cultural Anthropology, 3 units
or ANTH 2080. Introduction to Physical Anthropology, 3 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
SOCL 1010. Introduction to Sociology, 3 units

The Major

Units

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<tr>
<th>Course Code</th>
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<td>PSYC 3150</td>
<td>Human Development</td>
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<td>PSYC 3120</td>
<td>Human Development Lab.</td>
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<td>PSYC 3170</td>
<td>Early Cognitive Development</td>
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<td>PSYC 3250</td>
<td>Preschool Development</td>
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<td>PSYC 3941</td>
<td>The Preschool Program: Curriculum Development</td>
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<tr>
<td></td>
<td>Internship</td>
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<tr>
<td>PSYC 3950</td>
<td>The Preschool Program: Laboratory</td>
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<tr>
<td>SOCL 3150</td>
<td>The Family</td>
<td>3</td>
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<td></td>
<td>or ETHS 4000. The Mexican American Family, 3 units</td>
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<td></td>
<td>or ETHS 4010. The Black American Family, 3 units</td>
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<td>SPCH 3010</td>
<td>Language and Speech Development</td>
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<td>SPCH 4721</td>
<td>Practicum in Developmental Assessment</td>
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Electives chosen from the following. 11 units

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<tr>
<td>ENGL 4602</td>
<td>Children's Literature</td>
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<tr>
<td>PSYC 3100</td>
<td>Introduction to Physiological Psychology</td>
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<tr>
<td>PSYC 3320</td>
<td>Introduction to Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3350</td>
<td>Introduction to the Study of Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3700</td>
<td>Introduction to Learning and Motivation</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4110</td>
<td>Behavior Genetics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4130</td>
<td>Psychological Disorders of Children</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4150</td>
<td>Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4850</td>
<td>Psychology of Sex Differences</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4910</td>
<td>Advanced Internship in Administration of Preschool Programs</td>
<td>1-6 units</td>
</tr>
<tr>
<td>PSYC 4960</td>
<td>Organization and Administration of Early Childhood Education Programs</td>
<td>4 units</td>
</tr>
<tr>
<td>SOCL 3160</td>
<td>Sociology of Youth</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3000</td>
<td>Phonetics</td>
<td>3</td>
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<tr>
<td>SPCH 3020</td>
<td>Structural and Psycholinguistics</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 3400</td>
<td>Oral Interpretation of Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3610</td>
<td>Introduction to Communication Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

Total. 34 units
FOR INSTRUCTIONAL CHILDREN'S CENTER PERMIT

1. Twenty-four units of course work in early childhood education/child development (exclusive of field work).

2. One of the following:
   a. Two years' experience in an instructional capacity as a paid aide or assistant in a child development program; OR
   b. A certificate from a Commission-approved, field-based assessment system; OR
   c. Three years' experience as a volunteer in an instructional capacity in a child development program; OR
   d. Supervised field work to total 9 semester units selected from SPCH 3940 and 4940, to include one year of experience in an instructional capacity in a child development program.

3. Sixteen diversified semester units in general education.

FOR SUPERVISORY CHILDREN'S CENTER PERMIT

1. A regular Children's Center Instructional Permit.

2. Twelve semester units in early childhood education/child development at an advanced level.

3. Course work in Administration and Supervision to include PSYC 4960 (2 units may be applied from SPCH 3940 and 4940).

4. Two years' experience as a teacher in a child development program.

5. A bachelor's or higher degree granted by an approved institution.

LIBERAL STUDIES CONCENTRATION IN CHILD DEVELOPMENT

Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PSYC 3130</td>
<td>Human Development</td>
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<tr>
<td>PSYC 3170</td>
<td>Early Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3230</td>
<td>Preschool Development</td>
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<tr>
<td>SPCH 3010</td>
<td>Language and Speech Development</td>
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<tr>
<td>SPCH 4721</td>
<td>Practicum in Developmental Assessment</td>
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Electives chosen from the following

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<tr>
<td>PSYC 3120</td>
<td>Human Development Lab, 1 unit</td>
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<tr>
<td>PSYC 3700</td>
<td>Introduction to Learning and Motivation, 3 units</td>
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<tr>
<td>PSYC 3941</td>
<td>The Preschool Program: Curriculum Development Internship, 1 unit</td>
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<tr>
<td>PSYC 3950</td>
<td>The Preschool Program: Laboratory, 2 units</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
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<tr>
<td>PSYC 4130</td>
<td>Psychological Disorders of Children</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4150</td>
<td>Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4720</td>
<td>Experimental Analysis of Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4721</td>
<td>Analysis of Behavior, Experimental Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 4960</td>
<td>Organization and Administration of Early Childhood</td>
<td>4</td>
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<tr>
<td>PSYC 4706</td>
<td>Psychology of Children</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4720</td>
<td>Experimental Analysis of Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4721</td>
<td>Analysis of Behavior, Experimental Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>SPCH 3000</td>
<td>Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3020</td>
<td>Structural and Psycholinguistics</td>
<td>4</td>
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<tr>
<td>SPCH 3400</td>
<td>Oral Interpretation of Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3610</td>
<td>Introduction to Communication Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL** 22
Communication Studies

Fred P. Hilpert, Jr., Ph.D., Associate Professor, Chair
James R. McDearmon, Ph.D., Professor
Max C. Norton, Ph.D., Professor
James H. Platt, Ph.D., Professor
Randall C. Ruechelle, Ph.D., Professor
Jerry L. Weedon, Ph.D., Professor
Aleta P. Klevmyr, M.A., Assistant Professor
W. Barry West, Ph.D., Assistant Professor

The Department of Communication Studies offers the degrees of Bachelor of Arts and Master of Arts, Speech Communication; and degree minors in Journalism and Speech Communication. Concentrations in Communication Disorders and Organizational Communication are available in addition to the general speech curriculum in the B.A. program. The M.A. program provides concentration in Communication Disorders. Overall objectives of the program are to provide the student with opportunities to fulfill the following academic and professional needs:

1. To gain understanding of theories and processes of oral communication as a necessary part of one's education in the liberal arts.
2. To gain specialized knowledge and proficiencies in the communicative arts and sciences for entrance into such professional programs as public school teaching, special education, clinical speech pathology and audiology; and such professions as the ministry, law or business and industry.

The College 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 Social Sciences.)

The degree Bachelor of Arts, Liberal Studies, is also offered with speech as an area of concentration. (For further information, see Liberal Studies.)

REQUIREMENTS FOR BACHELOR OF ARTS,
SPEECH COMMUNICATION

Speech majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 30 upper division units; of these, no more than 10 units of CR-graded course work may apply toward the major. Completion of a minor is not required.
DEGREE MAJOR IN SPEECH COMMUNICATION

Prerequisite to the Major

SPCH 2011. Approaches to Human Communication, 4 units
One lower division course in speech as approved
by major adviser, 3 units

THE GENERAL MAJOR

SPCH 3000. Phonetics. .......................... 3
SPCH 3010. Language and Speech Development. ........ 3
SPCH 3100. Dyadic and Interpersonal Communication
OR SPCH 4100. Group Communication. .............. 3
SPCH 3900. Introduction to Research Methods
in Communication .................................. 3
SPCH 4000. Communication Theory .................. 4
Upper division courses in speech as approved
by major adviser .................................. 14

Total ............................................. 30

CONCENTRATION IN COMMUNICATION DISORDERS

Complete the prerequisites to the General Major and the
following requirements:

The concentration:

SPCH 3000. Phonetics. .......................... 3
SPCH 3010. Language and Speech Development. ........ 3
SPCH 3100. Dyadic & Interpersonal Communication
OR SPCH 4100. Group Communication. .............. 3
SPCH 3900. Introduction to Research Methods
in Communication .................................. 3
SPCH 4000. Communication Theory .................. 4
Additional courses selected on advisement. .......... 14

SPCH 3020. Structural and Psycho-
linguistics, 4 units
SPCH 3610. Introduction to Communication
Disorders, 3 units
SPCH 3641. Anatomy and Physiology of Speech,
3 units
SPCH 3701. Introduction to Clinical Methods,
1 unit
SPCH 3810. Theory and Practice of Hearing
Measurement I, 4 units
SPCH 4611. Proseminar in Communication
Disorders I: Language, 3 units
SPCH 4621. Proseminar in Communication
Disorders II: Articulation, 3 units
### Communication Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SPCH 4630</td>
<td>Proseminar in Communication Disorders III: Aphasia and Neuromotor Disorders,</td>
<td>3</td>
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<tr>
<td>SPCH 4640</td>
<td>Proseminar in Communication Disorders IV: Voice and Dysfluency,</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 4702</td>
<td>Clinical Practice: Speech and Language Disorders,</td>
<td>2</td>
</tr>
<tr>
<td>SPCH 4712</td>
<td>Clinical Practice: Hearing Disorders,</td>
<td>2</td>
</tr>
<tr>
<td>SPCH 4811</td>
<td>Proseminar in Aural Rehabilitations,</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

#### CONCENTRATION IN ORGANIZATIONAL COMMUNICATION

Complete the prerequisites to the General Major, ECON 2500 (Principles of Economics I, 4 units), and the following requirements:

<table>
<thead>
<tr>
<th>Requirements for the concentration:</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUS 3010. Organization &amp; Environment, 3 units</td>
<td>3</td>
</tr>
<tr>
<td>OR SOCL 4800. Formal Organizations, 3 units</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3100. Dyadic &amp; Interpersonal Communication.</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3122. Management Communication.</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3900. Introduction to Research Methods in Communication.</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 4000. Communication Theory.</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 4110. Organizational Communication.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Additional minimum of 13 units selected on advisement.</strong></td>
<td>13</td>
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</tbody>
</table>

#### DEGREE MINOR IN SPEECH COMMUNICATION

Eighteen units, to include at least 12 units in upper division.

**Lower Division**

SPCH 2002. Public Speaking, 3 units
OR SPCH 2011. Approaches to Human Communication, 4 units

One of the following as approved by minor adviser:

SPCH 2102. Group Discussion Processes, 3 units
SPCH 2400. Oral Interpretation, 3 units

**Upper Division**

Courses as approved by minor adviser, 12 units
LIBERAL STUDIES CONCENTRATION IN SPEECH COMMUNICATION

The following courses are required for a concentration in speech communication:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 2011. Approaches to Human Communication</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 2002. Public Speaking, 3 units</td>
<td>3</td>
</tr>
<tr>
<td>or SPCH 2050. General Semantics, 3 units</td>
<td></td>
</tr>
<tr>
<td>or SPCH 2102. Group Discussion Processes, 3 units</td>
<td></td>
</tr>
<tr>
<td>or SPCH 2400. Oral Interpretation, 3 units</td>
<td>3</td>
</tr>
<tr>
<td>Upper division courses on advisement</td>
<td>15</td>
</tr>
</tbody>
</table>

Total: 22

TEACHING CREDENTIALS

An approved single subject waiver is available to speech majors who wish to declare Speech Communication as their subject matter teaching area, with applicable courses on advisement. Please refer to the Education section of the Catalog for a description of other requirements to be completed in obtaining a single subject credential.

SERVICE CREDENTIAL: CLINICAL AND REHABILITATIVE SERVICES IN THE AREA OF LANGUAGE, SPEECH, AND HEARING SERVICES

The department offers the Clinical and Rehabilitative Services Credential in conjunction with the Bachelor and Masters programs in Communication Disorders. The credential is designed to prepare individuals for careers as language, speech, and hearing specialists. Application to enter the program should be made through the Secretary, Speech, Language, and Hearing Center.

MASTER OF ARTS IN SPEECH COMMUNICATION

CONCENTRATION IN COMMUNICATION DISORDERS

The Department of Communication Studies offers graduate study leading to the Master of Arts degree. The concentration in Communication Disorders is designed to satisfy academic and clinic practicum requirements for the Certificate of Clinical Competence in Speech-Language Pathology issued by the American Speech-Language-Hearing Association and for licensure in Speech Pathology by the State of California Board of Medical Quality Assurance. Requirements for the Clinical and Rehabilitation Services credential may also be completed in conjunction with the master's degree. Students should consult a department graduate adviser for specific credential requirements. Enrollment in 5000-level courses in Communication Disorders is restricted to students who have been admitted as classified graduate students in the department or have received departmental approval for continuing education program. Credits earned under the latter condition may not be applied to an advanced degree in the Communication Disorders program unless a special petition is approved (up to 9 units maximum may be approved).
ADMISSION TO THE GRADUATE PROGRAM

Students desiring to be admitted must meet the following requirements:

1. Satisfy the general requirements for admission to the College with classified graduate standing as described in the Graduate Programs section of this catalog.

2. Possess an acceptable baccalaureate degree earned at an institution accredited by a regional accrediting association. Students whose undergraduate preparation was not in Communication Disorders, or was substantially different from that offered at CSCS, will be required to complete the equivalent baccalaureate degree requirements. Any deficiencies will be determined by the department graduate committee after consultation with the student and study of transcripts.

3. Submit a completed departmental application form to the Director, Communication Disorders. The deadline for filing this application is the 2nd Monday of February for the following Summer Session, the 2nd Monday of March for the following Fall semester, and the 2nd Monday of October for the following Spring semester. In addition, three letters of recommendation from academic personnel or individuals who have knowledge of the applicant in settings requiring close interpersonal relationships are required. These recommendations should contain information which includes evaluation of the student's potential as a graduate student.

4. Submit one copy of transcripts of all undergraduate and graduate work to the Director, Communication Disorders. These transcripts are in addition to those required by the Office of Admissions and Records. Transcripts will be evaluated to determine that the following minimal requirements have been met:
   a. A grade point average (GPA) of 3.0 or better (on a four point scale) in the last 60 units attempted.
   b. A GPA of 3.0 or better in the major field of study.
   c. Confirmation of a 3.0 at the time of completion of the degree.

5. Submit Graduate Record Examination scores to the Director, Communication Disorders.

ADVANCEMENT TO CANDIDACY

Advancement to candidacy gives a student permission to proceed toward qualifying for the degree. Students should apply for advancement to candidacy after completion of a minimum of 12 units earned following acceptance as a classified graduate student in Communication Disorders. Specific minimum requirements for advancement are listed in the Graduate Programs section of this catalog. The departmental committee evaluation of the candidate will be completed in two phases as follows:
1. Upon completion of 12 semester units of departmentally approved courses, academic performance and clinical skills will be reviewed. A minimum GPA of 3.0 must have been earned on all upper division and graduate course work completed after the date of embarking on the first course to be included in the Master's degree program. Clinical skills will be evaluated at the end of the first semester of SPCH 5702, Advanced Clinical Practice: Speech and Language Disorders.

2. Plan II (Internship). Candidates must achieve a passing performance level on the departmentally administered written comprehensive examinations. These examinations will be administered during the student's final academic semester prior to student teaching, SPCH 5990 or SPCH 5940, internship assignment.

**REQUIREMENTS FOR THE DEGREE**

In addition to completion of the basic requirements for the Master's degree as described in the Graduate Programs section of this Catalog, the student must complete all requirements for either Plan I (Thesis) or Plan II (Clinical Internship). Both options require a minimum of 30 semester units of graduate credit selected on departmental advisement and approval and shall include SPCH 5900, Research Methods in Speech. Students must also accrue a minimum of 300 hours of departmentally approved clinical contact hours of which 150 hours must be at the graduate level while enrolled at California State College, Stanislaus.

Students selecting the clinical internship option (Plan II) must achieve a passing performance level on a departmentally administered written comprehensive examination prior to enrollment in SPCH 5946, Clinical Internship in Communication Disorders. This examination may be repeated only once. Individuals interested in pursuing the thesis option (Plan I) should consult the procedure sheet available from the departmental secretary.

**SPEECH COMMUNICATION SUB-AREAS**

**BASIC SYSTEMS AND PROCESSES: LANGUAGE AND COMMUNICATION**

- SPCH 2011. Approaches to Human Communication, 4 units
- SPCH 2050. General Semantics, 3 units
- SPCH 3000. Phonetics, 3 units
- SPCH 3010. Language & Speech Development, 3 units
- SPCH 3020. Structural & Psycholinguistics, 4 units
- SPCH 3900. Introduction to Research Methods in Communication, 3 units
- SPCH 4000. Communication Theory, 4 units
- SPCH 4950. Selected Topics in Speech, 1-5 units
- SPCH 4980. Individual Study, 1-4 units
# Communication Studies

## Interpersonal Communication

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>SPCH 2002</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 2102</td>
<td>Group Discussion Processes</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 2400</td>
<td>Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 2911</td>
<td>Communication Projects</td>
<td>2</td>
</tr>
<tr>
<td>SPCH 3100</td>
<td>Dyadic &amp; Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3122</td>
<td>Management Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3400</td>
<td>Oral Interpretation of Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3911</td>
<td>Communication Projects</td>
<td>2</td>
</tr>
<tr>
<td>SPCH 4100</td>
<td>Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 4110</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 4122</td>
<td>Social Influence: Persuasion and Attitude Change</td>
<td>3</td>
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<tr>
<td>SPCH 4140</td>
<td>Rhetorical Theory</td>
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<td>SPCH 4200</td>
<td>Mass Communication Perspectives</td>
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<tr>
<td>SPCH 4940</td>
<td>Organizational Communication Perspectives Internship</td>
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## Communication Disorders

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<td>SPCH 3610</td>
<td>Introduction to Communication Disorders</td>
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<tr>
<td>SPCH 3641</td>
<td>Anatomy and Physiology of Speech</td>
<td>3</td>
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<tr>
<td>SPCH 4701</td>
<td>Introduction to Clinical Methods</td>
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<tr>
<td>SPCH 3810</td>
<td>Theory &amp; Practice of Hearing Measurement I</td>
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<tr>
<td>SPCH 4611</td>
<td>Proseminar in Communication Disorders I: Language</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 4621</td>
<td>Proseminar in Communication Disorders II: Articulation</td>
<td>3</td>
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<tr>
<td>SPCH 4630</td>
<td>Proseminar in Communication Disorders III: Aphasia &amp; Neuromotor Disorders</td>
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<td>Proseminar in Communication Disorders IV: Voice and Dysfluency</td>
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<td>SPCH 4702</td>
<td>Clinical Practice: Speech &amp; Language Disorders</td>
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<td>SPCH 4721</td>
<td>Practicum in Developmental Assessment</td>
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## Graduate

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<tr>
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<td>Seminar in Dysfluency</td>
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<td>SPCH 5631</td>
<td>Seminar in Organic Disorders of Articulation</td>
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<tr>
<td>SPCH 5650</td>
<td>Seminar in Voice Disorders</td>
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</tr>
<tr>
<td>SPCH 5661</td>
<td>Seminar in Childhood Language Disorders</td>
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<td>SPCH 5662</td>
<td>Seminar in Adult Aphasia</td>
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<td>SPCH 5670</td>
<td>Advanced Diagnostic Methods in Communicative Disorders</td>
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<tr>
<td>SPCH 5702</td>
<td>Advanced Clinical Practice: Speech and Language Disorders</td>
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<td>SPCH 5712</td>
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<tr>
<td>SPCH 5720</td>
<td>Internship in Clinical Supervision</td>
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Communication Studies

SPCH 5730. Clinical Practice in Communication Disorders in Public Schools, 6 units
SPCH 5740. Clinical Evaluation: Speech and Language Disorders, 1 unit
SPCH 5800. Seminar: Audiological Research 4 units
SPCH 5820. Theory and Practice Hearing Measurement II, 4 units
SPCH 5900. Research Methods in Speech, 4 units
SPCH 5940. Clinical Internship in Communication Disorders, 3-6 units
SPCH 5950. Individual Study, 1-4 units
SPCH 5990. Thesis, 3-6 units

COURSE DESCRIPTIONS

Lower Division

SPCH 2002. Public Speaking (3)

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. (Formerly 2000)

SPCH 2011. Approaches to Human Communication (4)

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. Required for speech communication majors. (Formerly 2010)

SPCH 2050. General Semantics (3)

A study of the practical uses of language in human affairs and basic relationships between language and thought. Analysis of human behavior relating to such problems as conflict, confusion, prejudice, inaccuracy. Application of principles of general semantics to precision in use of verbal symbols, and reaction to their use. (Formerly 3050)

SPCH 2102. Group Discussion Processes (3)

The development of basic skills in interpersonal and small group communication. Areas of concern will include: discussion methodology and problem solving; information gathering, interviewing, conference management, leadership roles, and decision making. (Formerly 2101)

SPCH 2400. Oral Interpretation (3)

Fundamentals of theory; techniques and practices in communicating from the printed page.

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Communication Studies

SPCH 2911. Communication Projects (2)

Project course for involvement of the student in a variety of speech and/or instructionally related activities. Options include such projects as campus speech activities, participation in community projects, or in-depth studies of instructional programs in such settings as public schools, child development centers, or other public agencies. May be repeated for a total of 8 units. (Formerly 2910) Prerequisite: Consent of instructor.

SPCH 2950. Selected Topics in Speech (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of speech. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

SPCH 2970. Selected Topics during Winter Term (4)

Upper Division

SPCH 3000. Phonetics (3)

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 fields of general linguistics, dialects, pronunciation in foreign languages, speech correction, and language arts.

SPCH 3010. Language and Speech Development (3)

Development of normal speech and language, including the stages of development, the roles of learning and experience, phonological, morphological, grammatical, semantic, and pragmatic aspects; neuro-physiological and affective aspects.

SPCH 3020. Structural and Psycholinguistics (4)

Analysis of structure of English; methods of linguistic analysis of language samples using structural and transformational models. Survey of psycholinguistic theory including developmental transformations, bilingualism, and language change. (Formerly 4010) Prerequisites: SPCH 3000 and 3010.

SPCH 3100. Dyadic and Interpersonal Communication (3)

The purpose of this course is to develop awareness of the dimensions of interpersonal communication and to develop communication skills appropriate to the interpersonal context. Among the areas to be covered are communication rules and contracts, validation, interpersonal attraction, alienation, reciprocity spirals.
Communication Studies

and loops. Focus will be on the requirements for healthy communication, including postiveness, clarity, appropriateness, trust, and honesty. Prerequisite: SPCH 2011 or junior standing.

SPCH 3122. Management Communication (3)

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. (Formerly 3121) Prerequisite: SPCH 2011 or junior standing.

SPCH 3130. Communication and Aging (3)

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 influence of context. Prerequisite: Junior standing.

SPCH 3400. Oral Interpretation of Children's Literature (3)

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, storytelling as well as reading. Prerequisite: SPCH 2400 or consent of instructor.

SPCH 3610. Introduction to Communication Disorders (3)

Overview of speech pathology and audiology, including bases of normal language development; types of communication disorders and their etiologies, evaluation and remediation of communication disorders, historical review of the field of communication disorders, professional training requirements, program administration in clinical private practice, hospital and school settings. Communicative Disorders majors are required to register for 1 unit in SPCH 3701.

SPCH 3641. Anatomy and Physiology of Speech (3)

Anatomical and physiological characteristics of normal speech production. (Formerly 3640)

SPCH 3701. Introduction to Clinical Methods (1)

Philosophy and practical application of basic methodology in evaluation and treatment of communication disorders. Completion of 25 supervised hours of observation in on-campus clinic also required. Not applicable for clinical practice credit. May be repeated for a total of two semester units. (Formerly 3700)
Communication Studies

SPCH 3810. Theory and Practice of Hearing Measurement I (4)

Bases of normal auditory functions. Review of pathologies of the ear. Development of basic audiometric techniques. Students are required to register concurrently in SPCH 4712 for 2 units.

SPCH 3900. Introduction to Research Methods in Communication (3)

Designed to acquaint students with forms of research in speech communication and communicative disorders. 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: SPCH 2011 or junior standing.

SPCH 3911. Communication Projects (2)

Project course for involvement in a variety of communication and/or instructionally related activities. Options include such projects as campus speech activities, participation in community projects, or in-depth studies of instructional programs in such settings as public schools, child development centers, or other public agencies. May be repeated for a total of 8 units. (Formerly 3910) Prerequisite: Consent of instructor.

SPCH 4000. Communication Theory (4)

Communication models; natural and formal language systems; contributions of theories of information, semantics, psycholinguistics, cybernetics, and general systems to the study of communication. Prerequisites: SPCH 2011 and 3900, or consent of instructor.

SPCH 4100. Group Communication (3)

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. Prerequisite: SPCH 2011 and 3900, or consent of instructor.

SPCH 4110. Organizational Communication (3)

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: SPCH 3100, 3122, and 3900; or consent of instructor.
SPCH 4122. Social Influence: Persuasion and Attitude Change (3)

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. (Formerly 4121) Prerequisites: SPCH 2011 and 3900, or consent of instructor.

SPCH 4140. Rhetorical Theory (3)

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.

SPCH 4200. Mass Communication Perspectives (3)

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: SPCH 2011 and 3900, or consent of instructor.

SPCH 4611. Proseminar in Communication Disorders I: Language (3)

Language disorders in children; procedures used in the diagnosis and training of language-disordered children; causes and management of language disorders, including cerebral dysfunction, mental retardation, psychological disorders, and deprivation. (Formerly 4610) Prerequisites: SPCH 3010 and 3020.

SPCH 4621. Proseminar in Communication Disorders II: Articulation (3)

Disorders of articulation, their nature, diagnosis, and treatment. (Formerly 4620) Prerequisites: SPCH 3000 and 3010.

SPCH 4630. Proseminar in Communication Disorders III: Aphasia and Neuromotor Disorders (3)

Disorders of child and adult aphasia; cerebral palsy and other neuromotor disabilities and their diagnosis and treatment. Prerequisites: SPCH 3010, 3610, and 3641.
Communication Studies

SPCH 4640. Proseminar in Communication Disorders IV: Voice and Dysfluency (3)

Disorders of voice and dysfluency, their etiology, nature, diagnosis, and treatment. Prerequisites: SPCH 3010, 3610, and 3641.

SPCH 4702. Clinical Practice: Speech and Language Disorders (2)

Supervised work with representative cases in articulation, stuttering, aphasia, voice disorders, delayed speech and language, cleft palate, cerebral palsy. May be repeated for a total of 6 units. Minimum of 15 clinical contact hours required for each unit of credit earned. One hour of staffing per week is required. (Formerly 4700) Prerequisites: Successful completion of SPCH 3000, 3010, 3610, 3641, 3701, and two of the following: SPCH 4611, 4621, 4630; consent of instructor. Student must have current ASHA Professional Liability Insurance.

SPCH 4712. Clinical Practice: Hearing Disorders (2)

Supervised evaluation/habilitation of the hearing impaired. May be repeated for a total of 6 units. One hour of staffing per week is required. Prerequisite: SPCH 3810, or concurrent enrollment. Student must have current ASHA Professional Liability Insurance.

SPCH 4721. Practicum in Developmental Assessment (3)

Rationale and procedures for assessing perceptuo-motor and cognitive abilities, personal social maturity, and emergent language abilities in children. Practicum in evaluation and administration of developmental screening tests and their use in assessing potentially handicapping conditions of children. Prerequisite: SPCH 3010.

SPCH 4811. Proseminar in Aural Rehabilitation (3)

The study and analysis of various methods of developing communication skills in children and adults with impaired hearing. The principles and methods involved in the use of residual hearing in the hearing impaired. (Formerly 4810)

SPCH 4940. Organizational Communication Internship (2-4)

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. (Formerly 4960) Prerequisite: Completion of core program in the Organizational Communication concentration.
Communication Studies

SPCH 4950. Selected Topics in Speech (Topics to be specified in Class Schedule) (1-5)

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.

SPCH 4970. Selected Topics offered during Winter Term (4)

SPCH 4980. Individual Study (1-4)

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.

Graduate

SPCH 5610. Seminar in Dysfluency (3)

Stuttering, cluttering, other disorders of fluency. Theory, diagnosis, and treatment. Prerequisites: SPCH 4640, and admission to the Master's degree program in Speech.

SPCH 5631. Seminar in Organic Disorders of Articulation (3)

Articulation disorders of organic etiology, including cleft palate, rhinolalia clausa, and other oro-facial anomalies; dysarthria, including cerebral palsied speech; articulatory apraxia. (Formerly 5630) Prerequisites: SPCH 4621 and admission to the Master's degree program in Speech.

SPCH 5650. Seminar in Voice Disorders (3)

Voice disorders of functional, structural, and neurological etiology; cleft palate voice. Theory, diagnosis, and treatment. Prerequisites: SPCH 4640 and admission to Master's degree program in Speech.

SPCH 5661. Seminar in Childhood Language Disorders (3)

Study of the nature, diagnosis, and treatment of language and language learning disorders of children, with emphasis on severe oral language handicap. (Formerly 5660) Prerequisites: SPCH 4611 and admission to Master's degree program in Speech.

SPCH 5662. Seminar in Adult Aphasia (3)

Study of the nature, evaluation, and treatment of adult aphasia. (Formerly 5660) Prerequisites: SPCH 4611 and admission to the Master's degree program in Speech.
SPCH 5670. Advanced Diagnostic Methods in Communicative Disorders (3)

Advanced diagnostic methods of disorders of communication in children and adults. Administration and interpretation of diagnostic tests. Instrumentation, examination techniques, interview methods, report writing, and referral procedures. (Formerly 4600) Prerequisites: SPCH 4611, 4621 or equivalent; consent of instructor and admission to Master's degree program in Speech. Student must have current ASHA Professional Liability Insurance.

SPCH 5702. Advanced Clinical Practice: Speech and Language Disorders (2)

Supervised work with representative advanced cases in articulation, stuttering, aphasia, voice disorders, delayed speech and language, cleft palate, cerebral palsy. May be repeated for a total of 6 units. Minimum of 15 clinical contact hours required for each unit of credit earned. One hour of staffing per week is required. (Formerly 5700) Prerequisites: Successful completion of SPCH 3000, 3010, 3610, 3641, 3701, and two of the following: SPCH 4611, 4621, and 4640; consent of instructor and admission to Master's degree program in Speech. Student must have current ASHA Professional Liability Insurance.

SPCH 5712. Advanced Clinical Practice: Hearing Disorders (2)

Supervised work with representative cases of hearing disorders. Includes auditory training, lip reading, language development for the hard of hearing. Fifteen contact hours required for each unit earned. May be repeated for a total of 6 units. One hour staffing per week is required. Prerequisite: Consent of instructor and admission to the Master's degree program in Speech. Student must have current ASHA Professional Liability Insurance.

SPCH 5720. Internship in Clinical Supervision (4)

Practicum in supervision of undergraduate students enrolled in clinical practicum. Each student will supervise four beginning undergraduate students. A weekly seminar will be held to discuss problems in clinical supervision. Prerequisite: Consent of instructor and admission to Master's degree program in Speech. Student must have current ASHA Professional Liability Insurance.

SPCH 5730. Clinical Practice in Communication Disorders in Public Schools (6)

Supervised screening, identification of communication disorders in school setting, record keeping, supervised clinical practice in communication disorders. Prerequisite: 150 departmentally approved clinical contact hours, including 90 in residence; admission to the Master's degree and credential programs in Speech; approval of graduate studies faculty; student must have current ASHA Professional Liability Insurance.
SPCH 5740. Clinical Evaluation: Speech and Language Disorders (1)

Supervised work in the evaluation of cases involving speech and language disorders. The student will gain experience in test selection, administration, interviewing, counseling, and report writing. Ten clinical contact hours required. Two units may be earned concurrently. Prerequisites: SPCH 4702, consent of instructor, and admission to the Master's degree program in Speech. Student must have current ASHA Professional Liability Insurance.

SPCH 5800. Seminar: Audiological Research (4)

Review and discussion of current and past audiological research findings. Use and practice in operating psychoacoustic and physiological acoustic equipment through a series of research projects. Prerequisites: SPCH 3810 and 4712, and admission to the Master's degree program in Speech.

SPCH 5820. Theory and Practice of Hearing Measurement II

Development of an awareness of specific clinical techniques beyond basic procedures. Course projects and clinical practicum are designed to develop the student's appreciation of available tests. Usefulness of audiological information to each student's professional goals will be emphasized. (Formerly 3820) Prerequisites: SPCH 3810 and 4712, and admission to the Master's degree program in Speech.

SPCH 5900. Research Methods in Speech (4)

The purpose and methods of research in the field of speech; trends and developments with emphasis on the development of methods of studying existing problems and discovering new ones in the field of speech. Prerequisites: SPCH 3900 or equivalent, and admission to the Master's degree program in Speech.

SPCH 5940. Clinical Internship in Communication Disorders (3-6)

Advanced clinical practice in off-campus programs. Practicum in a variety of communication disorders under supervision of certified clinical supervisor. (Formerly 5960) Prerequisites: SPCH 5730; 150 contact hours of clinical practice, 90 of which must be in residence; admission to the Master's degree in Speech; approval of the graduate studies faculty. Student must have current ASHA Professional Liability Insurance.

SPCH 5950. Selected Topics in Speech (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of oral communication. Topics may vary each term, thus different topics may be taken for credit. Prerequisite: Graduate standing.
Communication Studies

SPCH 5970. Selected Topics offered during Winter Term (4)

SPCH 5980. Individual Study (1-4)

For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

SPCH 5990. Thesis Research (3-6)

Thesis research. Prerequisites: Satisfactory completion of SPCH 5900 or its equivalent, and approval of the thesis committee.
The College offers several distinct but related programs in Computer Science and Management Information Systems. These programs are offered in the Division of Business Administration and the Department of Mathematics. Students frequently find it advantageous to enroll in courses in both areas.

A concentration in Computer Science is offered within the Bachelor of Science, Mathematics degree. In addition to computer programming study at an introductory level, the program includes upper division course work in assembly language programming, computer simulation techniques, programming languages, data structures and algorithms, compiler theory, computer graphics, numerical analysis, and linear programming and applications. Through the Mathematics Department, the College has also developed a degree Minor in Computer Science which is open to all majors.

A concentration in Management Information Systems is offered within the Bachelor of Arts, Business Administration degree. The program is concerned with information systems that provide information and data processing support for management and decision functions in addition to providing all necessary transaction processing for an organization. Therefore, MIS incorporates several disciplines, particularly quantitative methods, managerial accounting, management theory, data processing and computer science. In addition to computer programming study at an introductory level, the program includes upper division course work in structured programming, data base systems, management information systems and systems analysis and design. The Management Information Systems program prepares business systems analysts and business applications programmers.

For detailed descriptions of these programs, students are referred to the Mathematics and Business Administration portions of this Catalog.
Drama

Jere D. Wade, Ph.D., Professor, Chair
Douglas McDermott, Ph.D., Professor
Noble T. Dinse, M.A.T., Associate Professor
Richard Levering, M.A., Associate Professor

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 and features 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 the student in liberal arts.

REQUIREMENTS FOR THE BACHELOR OF ARTS, DRAMA

Drama majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 38 upper division units as approved by the major adviser.

Completion of a minor is not required.

DEGREE MAJOR IN DRAMA

Prerequisites to the Major:

DRAM 2100. Theatre Management I, 1 unit
DRAM 2110. Theatre Management II, 1 unit
DRAM 2302. Play Production I, 2 units
DRAM 2500. Acting IA: Improvisation and Techniques, 3 units
DRAM 2501. Acting IB: Technique, Theory, and Practice, 3 units
Drama

The Major

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<tr>
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<tr>
<td>DRAM 3200</td>
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<td>DRAM 3260</td>
<td>Costume and Makeup I</td>
<td>3</td>
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<tr>
<td>DRAM 3261</td>
<td>Costume and Makeup II</td>
<td>3</td>
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<tr>
<td>DRAM 3510</td>
<td>History of Theatre I</td>
<td>3</td>
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<tr>
<td>DRAM 3520</td>
<td>History of Theatre II</td>
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<td>DRAM 3530</td>
<td>History of Theatre III</td>
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<tr>
<td>DRAM 4300</td>
<td>Play Production II</td>
<td>4</td>
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<tr>
<td>DRAM 4350</td>
<td>Rehearsal and Performance II</td>
<td>3</td>
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<tr>
<td>DRAM 4510</td>
<td>Acting IIA: Scene Study</td>
<td>3</td>
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<tr>
<td>DRAM 4600</td>
<td>Directing</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 4610</td>
<td>Senior Project</td>
<td>4</td>
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Elective Courses

In consultation with the major adviser, one or more of the following elective courses may be selected to supplement areas of major interest:

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<tr>
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<tr>
<td>DRAM 2950</td>
<td>Selected Topics in Drama, 1-5 units</td>
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<tr>
<td>DRAM 3020</td>
<td>Children's Theatre, 3 units</td>
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<tr>
<td>DRAM 4511</td>
<td>Acting IIB: Scene Study, 3 units</td>
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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 the catalog. Please refer to the Education section of the catalog for a description of other requirements to be completed in obtaining a single subject credential.

LIBERAL STUDIES CONCENTRATION IN DRAMA

Twenty units as approved by a drama adviser, 15 units of which must be upper division.

Lower Division

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<tr>
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<tr>
<td>DRAM 2110</td>
<td>Theatre Management II</td>
<td>1</td>
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<tr>
<td>DRAM 2500</td>
<td>Acting IA: Improvisation and Technique</td>
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Upper Division

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<tr>
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<tr>
<td>DRAM 3260</td>
<td>Costume and Makeup I</td>
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</tr>
<tr>
<td>DRAM 4600</td>
<td>Directing</td>
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Two courses selected from the following:  

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<th>Course Title</th>
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<td>DRAM 3261</td>
<td>Costume and Makeup II</td>
<td>3 units</td>
</tr>
<tr>
<td>DRAM 4510</td>
<td>Acting IIA: Scene Study</td>
<td>3 units</td>
</tr>
<tr>
<td>DRAM 4511</td>
<td>Acting IIB: Scene Study</td>
<td>3 units</td>
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**Total** 20 units

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**COURSE DESCRIPTIONS**  
**Lower Division**

**DRAM 1001. Spoken Communication** (1)  
Oral presentation of analytical and interpretive thought based on reading of imaginative literature. Designed to help the student achieve ease and clarity in situations where speaking is the appropriate mode of expressing ideas. Prerequisites: ENGL 1003 and concurrent enrollment in ENGL 1004.

**DRAM 1010. Introduction to Theatre** (3)  
Introductory survey of theatrical art. The theatre as an art form; elements of theatre; classroom practice in the fundamentals of theatrical production.

**DRAM 1112. Playgoing I: Amateur Theatre** (2)  
Understanding and appreciation of live theatrical performance by amateurs. Attendance of at least two campus or community plays. Optional activity laboratory (DRAM 1114) may be taken concurrently. May be repeated for credit once.

**DRAM 1113. Playgoing II: Professional Theatre** (2)  
Understanding and appreciation of live theatrical performance by professionals. Attendance of at least two professional plays in the Bay Area. Optional activity laboratory (DRAM 1114) may be taken concurrently. May be repeated for credit once.

**DRAM 1114. Playgoing Laboratory** (1)  
Optional activity laboratory to be taken concurrently with DRAM 1112 or 1113. (Must be taken concurrently with DRAM 1112 for a total of three units if taken as Liberal Studies elective.) Course provides practical introduction to backstage activities to enhance further the student's understanding of the playgoing experience. May be repeated once for credit. Prerequisite: Concurrent enrollment in DRAM 1112 or 1113.

**DRAM 2100. Theatre Management I** (1)  
An introduction to the methods of operating a theatre as a business; publicity, box office, and house management.
Drama

DRAM 2110. Theatre Management
An introduction to the methods of managing the backstage operation of a theatrical production.

DRAM 2302. Play Production I (2)
Practice in all phases of theatrical production, except acting and stage management. May be repeated for credit each semester.

DRAM 2350. Rehearsal and Performance I (3)
Practice in acting and in stage management for public performance. May be repeated for credit each semester. Prerequisite: Consent of instructor.

DRAM 2500. Acting IA: Improvisation and Technique (3)
Theatre games, improvisation, and exercises for the development of individual skills in acting. (Formerly 2000)

DRAM 2501. Acting IB: Technique, Theory, and Practice (3)
Introduction to character analysis, characterization, the playing of dramatic action. Will include work on vocal and physical skills, and will concentrate on scenes from modern realistic drama. Prerequisite: DRAM 2500 or consent of instructor.

DRAM 2950. Selected Topics in Drama (Topics to be specified in Class Schedule) (1-5)
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.

DRAM 2970. Selected Topics offered during Winter Term (4)

Upper Division

DRAM 3020. Children's Theatre (3)
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.

DRAM 3200. Stagecraft I (3)
Principles and techniques of designing, building, painting, mounting, and rigging of stage scenery; theory and practice in stage lighting. Individual project work will be included.

DRAM 3201. Stagecraft II (3)
A continuation of the principles and practice in the techniques of designing, building, painting, mounting, and rigging of stage scenery and properties. Practice in stage lighting. Individual project work will be included. May be repeated once for credit with consent of instructor. Prerequisite: DRAM 3200 or consent of instructor.
DRAM 3260. Costume and Makeup I (3)
An introduction to the basic techniques of stage makeup and the basic elements of costume construction. Individual project work will be included.

DRAM 3261. Costume and Makeup II (3)
A continuation of the principles and practice in the art of theatrical costuming and stage makeup. Individual project work will be included. May be repeated once for credit with consent of instructor. Prerequisite: DRAM 3260 or consent of instructor.

DRAM 3510. History of Theatre I (3)
Historical analysis of theatre from its origins to 1650.

DRAM 3520. History of Theatre II (3)
Historical analysis of theatre from 1650 to 1900.

DRAM 3530. History of Theatre III (3)
Historical analysis of theatre from 1900 to the present.

DRAM 4300. Play Production II (2)
Advanced practice in all phases of theatrical production, except acting and stage management. May be repeated for credit each semester. Prerequisite: Consent of instructor.

DRAM 4350. Rehearsal and Performance II (3)
Practice in acting and in stage management for public performance. May be repeated for credit each semester. Prerequisite: Consent of instructor.

DRAM 4510. Acting IIA: Scene Study (3)
Intensified work on the analysis of character and dramatic action. Scene work from modern realistic drama. May be repeated once for credit with consent of instructor. (Formerly 3500) Prerequisite: DRAM 2501 or consent of instructor.

DRAM 4511. Acting IIB: Scene Study (3)
Scene work in realistic and non-realistic comedy and drama. May be repeated once for credit with consent of instructor. (Formerly 3501) Prerequisites: DRAM 4510 or consent of instructor.

DRAM 4600. Directing (3)
Examination of principles and procedures of the theatrical director. Practical scene work in composition, movement and tempo.
Drama

DRAM 4610. Senior Project (4)

Senior drama majors, in consultation with the faculty, will select and complete an appropriate project. Prerequisites: Standing as a senior drama major and consent of instructor.

DRAM 4950. Selected Topics in Drama (Topics to be specified in Class Schedule) (1-5)

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.

DRAM 4970. Selected Topics offered during Winter Term (4)

DRAM 4980. Individual Study (1-4)

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.

DRAM 5940. Advanced Production (2-6)

Advanced production work in drama for qualified postbaccalaureate students. Prerequisite: Consent of instructor.

DRAM 5950. Selected Topics in Drama (Topics to be specified in Class Schedule) (1-5)

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.

DRAM 5970. Selected Topics offered during Winter Term (4)

DRAM 5980. Individual Study (1-4)

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.
Economics

Frederick E. Kottke, Ph.D., Professor, Chairman
William Dale Crist, Ph.D., Professor
Albert Yin-Po Lee, Ph.D., Professor
H. Dieter Renning, Dr. rer. pol., Professor
Edward C. Erickson, Ph.D., Associate Professor

The Department of Economics offers the degree Bachelor of Arts, Economics. It also offers the Master's in Public Administration jointly with the Department of Political Science. The objectives of the major in economics are: (1) to provide a concentration in economics as the central core of a liberal oriented education; (2) to provide the major with 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 preprofessional base for the prospective business administration major enabling him to satisfy 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.

REQUIREMENTS FOR BACHELOR OF ARTS, ECONOMICS

Economics majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 24 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.

DEGREE MAJOR IN ECONOMICS

Prerequisites to the Major:

ECON 2500, 2510. Principles of Economics I, II, 8 units

Recommended courses in supporting fields:

Course work in mathematics as recommended by major adviser.

The Major

A minimum of 24 upper division units in economics including a course in microtheory and macrotheory (ECON 4200 and 4000), Quantitative Analysis (ECON 3205), Senior Seminar (ECON 4960) and at least one course each from four of the areas of specialization:
Economics

1. Money and Banking
2. Economic Theory and Doctrines
3. Labor Economics
4. International Economics
5. Public Finance and Fiscal Policy
6. Economic History
7. Quantitative Economics
8. General Courses

DEGREE MINOR IN ECONOMICS

Principles of Economics and 12 units of upper division courses as approved by the minor adviser.

LIBERAL STUDIES CONCENTRATION IN ECONOMICS

The Liberal Studies Concentration in Economics consists of 20 units, at least 15 of which must be upper division units.

TEACHING CREDENTIALS

Majors in Economics interested in a Social Sciences waiver for a single subject credential should review Plan II of the Social Sciences waiver described in the Social Sciences section of the Catalog. Please refer to the Education section of the Catalog for a description of other requirements to be completed for the single subject credential.

ECONOMICS SUB-AREAS

GENERAL COURSES (Lower Division)

ECON 2500. Principles of Economics I, 4 units
ECON 2510. Principles of Economics II, 4 units
ECON 2950. Selected Topics in Economics, 1-5 units

ECONOMIC THEORY AND DOCTRINES

ECON 3150. National Income Analysis, 3 units
ECON 4000. Intermediate Theory (Macroeconomics), 3 units
ECON 4010. Economic Thought, 3 units
ECON 4200. Intermediate Theory (Microeconomics), 3 units

MONEY AND BANKING

ECON 3320. Money and Banking, 3 units
ECON 4500. Economics of Investment, 3 units

PUBLIC FINANCE AND FISCAL POLICY

ECON 4540. Public Finance & Fiscal Policy, 3 units
LABOR ECONOMICS

ECON 4100. Labor Economics, 3 units

INTERNATIONAL ECONOMICS

ECON 4050. Comparative Economic Systems, 3 units
ECON 4415. International Economics, 3 units
ECON 4420. Soviet Economics, 3 units
ECON 4450. Economic Planning, 3 units

ECONOMIC HISTORY

ECON 3100. Economic History of the United States, 3 units

QUANTITATIVE ECONOMICS

ECON 3205. Quantitative Analysis, 4 units
ECON 4300. Mathematical Economics I, 3 units

GENERAL COURSES

ECON 4600. Urban Economics, 3 units
ECON 4850. Business Economics, 3 units
ECON 4950. Selected Topics in Economics, 1-5 units
ECON 4960. Senior Seminar, 3 units
ECON 4980. Individual Study, 1-4 units

COURSE DESCRIPTIONS

Lower Division

ECON 2500. Principles of Economics I (4)

Macroeconomics; scope, method, economic resources, monetary system, income determination, economic stability-instability, public finance.

ECON 2510. Principles of Economics II (4)

Microeconomics; price system and market structures, public policy and income distribution. Fundamentals of international 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.
Economics

ECON 2950. Selected Topics in Economics (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of economics. Topics may vary each term. Different topics may be taken for credit.

ECON 2970. Selected Topics offered during Winter Term (4)

Upper Division

ECON 3100. Economic History of the United States (3)

Analysis of American business organizations and economic growth from colonial period to present with emphasis on evolution and changes in the American system.

ECON 3150. National Income Analysis (3)

Analysis of macroeconomic conditions and adjustments in a free enterprise system. National income accounting and employment theory. Prerequisite: Economic Principles or consent of instructor.

ECON 3205. Quantitative Analysis (4)

A study of econometric techniques for measurement of economic relationships, analysis and forecasting of business situations, and testing of economic theories. (Formerly 3200 and 3210) Prerequisite: A course in basic statistics or consent of instructor.

ECON 3320. Money and Banking (3)

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.

ECON 4000. Intermediate Theory (Macroeconomics) (3)

Macroanalysis; income levels, expenditures, prices, and employment; application to depression and inflation: Prerequisite: Economic Principles or consent of instructor.

ECON 4010. Economic Thought (3)

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.
ECON 4050. Comparative Economic Systems (3)

Comparison of alternative economic systems. Market economies versus planned economies. Institutions and patterns of economic decision making. Resource allocation and income distribution under different forms of economic organization. Comparative economic performance. Prerequisite: Economic Principles or consent of instructor.

ECON 4100. Labor Economics (3)

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.

ECON 4200. Intermediate Theory (Microeconomics) (3)

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.

ECON 4300. Mathematical Economics (3)

Static analysis; comparative-static analysis; optimization problems, input-output analysis; linear programming and game theory. Prerequisite: Economic Principles or consent of instructor.

ECON 4415. International Economics (3)

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 payment adjustment, international financial institutions and systems, and regional trade organizations. (Formerly 4410 and 4430). Not open to students who have credit for 4410 or 4430. Prerequisite: Economic Principles or consent of instructor.

ECON 4420. Soviet Economics (3)

Economics

ECON 4450. Economic Planning (3)

Structure, methodology, and application of economic planning; decentralized vs. centralized organization of economic activity; macro-economic planning models. Prerequisite: Economic Principles or consent of instructor.

ECON 4500. Economics of Investment (3)

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.

ECON 4540. Public Finance and Fiscal Policy (3)

Principles, problems, and policies of federal taxation, expenditures, debt, budgeting, and fiscal policy. Prerequisite: Economic Principles or consent of instructor.

ECON 4600. Urban Economics (3)

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.

ECON 4850. Business Economics (3)

An analysis and application of economic principles to concepts of decision-making; macrotheory, demand and supply analysis, pricing, and business regulations. Prerequisite: MBA candidacy.

ECON 4950. Selected Topics in Economics (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in economics. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Junior standing or consent of instructor.

ECON 4960. Senior Seminar (3)

Reading and discussion in significant areas of economics; analysis of major contemporary economic problems, national and international. Prerequisite: Senior standing in economics.

ECON 4970. Selected Topics offered during Winter Term (4)
ECON 4980. Individual Study (1-4)

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.

ECON 5950. Selected Topics in Economics (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

ECON 5970. Selected Topics in Economics offered during Winter Term (1-4)

ECON 5980. Individual Study (1-4)

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.

ECON 5990. Thesis (1-6)

Thesis research. May be repeated for a total of 6 units. Prerequisite: Consent of instructor and approval of graduate adviser.
Education

Charles R. Farrar, Ed.D., Professor, Chair
James C. Cole, Ed.D., Professor
Joseph W. Corbin, Ed.D., Professor
Edward R. Credell, Ph.D., Professor
Jack A. Graves, Ed.D., Professor
Charles C. Hanna, Ed.D., Professor
R. J. Moriconi, Ed.D., Professor
Haig A. Rushdoony, Ed.D., Professor
Priscilla R. Smith, Ed.D., Professor
Lorna M. Swain, Ed.D., Professor
William G. Webster, Ed.D., Professor
Roy Y. Yasui, Ph.D., Professor
Leodoro Hernandez, Ed.D., Associate Professor
David E. Lema, Ed.D., Associate Professor
Nina R. Rosenthal, Ph.D., Associate Professor
Lloyd R. Thompson, Ed.D., Associate Professor
Jane Diekman, M.A., Visiting Lecturer
Laurence J. Peter, Ph.D., Adjunct Professor

The College, in addition to the curricula in the liberal arts, offers professional programs in the Division of Education to prepare candidates for certification in elementary and secondary school teaching, bilingual emphasis teaching, learning handicapped, reading, school administration, and school counseling. Students interested in teaching credential programs should make application to the Division of Education. Graduate programs leading toward a Master of Arts in Education with concentrations in various curriculum areas, administration, or school counseling are also available to qualified students. Students interested in graduate degree programs may obtain application forms and information from the Division of Education Office. The College also offers preparation for teachers of the speech and hearing handicapped and prepares school psychologists as described in the Psychology section of this catalog.

Professional programs in education are designed to help students achieve basic competencies essential to effective performance within the range of services authorized. All credential programs are presently approved by the Commission for Teacher Preparation and Licensing in fulfillment of certification regulations. The California State Board of Education and the Commission are empowered to change credential requirements without prior notice. The College will make changes in programs leading to credentials whenever revisions are reported to it in the California Administrative Code, Title 5, Education, or by other official notifications from the Commission for Teacher Preparation and Licensing.
TEACHING CREDENTIAL PROGRAMS

California State College, Stanislaus, is authorized to prepare students to teach in either the elementary or secondary levels. Under the Credentialing Law of 1972 (Ryan Act), these are the Multiple Subjects Credential (elementary schools) and Single Subject Credential (secondary schools).

I. MULTIPLE SUBJECTS CREDENTIAL (ELEMENTARY SCHOOL TEACHING)

A. Academic Requirements

1. Completion of a B.A. degree with a major other than Education. Normally the student completes the major in Liberal Studies (see Liberal Studies section of the Catalog). The Bilingual/Cross-Cultural Liberal Studies Program differs from the other concentrations. (See the Bilingual/Cross-Cultural Emphasis and Concentration section of the Catalog.)

2. If a major other than Liberal Studies is completed, the student must pass the State-approved examination (N.T.E., Commons).

3. ENGL 3000 and 3999, MATH 1030, a course in general psychology, and PSYC 3130 or a course in growth and development or child psychology must be completed before admission to the credential program whether or not the N.T.E. or waiver program is completed.

4. PSCI 1201, or equivalent, is required by the State for a teaching credential.

B. Academic Recommendations

1. Select Liberal Studies electives and an area of concentration appropriate to elementary teaching (i.e., electives in cross-cultural studies, special education, child development, foreign languages, etc.).

2. If a major other than Liberal Studies is elected, utilize electives to prepare for the N.T.E. by selecting elective courses in Social Science, Mathematics-Science, Art-Humanities, and English-Speech.

3. Program the major for the junior year and leave the electives for the senior year to allow completion of the credential program.

4. Attend a multiple subject credential program orientation meeting your first semester on campus. Watch for meeting notice.

5. Cross-cultural, i.e., ETHS 2000 or 2100, and special education course work are strongly recommended.

6. PHED 3401 is strongly recommended for motor development.

*Pre-admission program assistance related to the teaching credential programs may be obtained in the Division of Education Office.
C. Professional Requirements

1. Students must pass special screening before being permitted to enroll in professional education courses applicable to the Multiple Subjects Credential Program. Forms for seeking admission to the Multiple Subjects Credential Program may be obtained from the Division of Education Office. Admission criteria are those in the catalog effective during the year of application and acceptance. Application must be completed by October 1st for Spring Semester admittance and mid-February for Fall Semester admittance.

2. Minimal cumulative GPA of 2.75*, or a GPA of 3.0 in the most recent 30-semester hours completed, is required for admission. Once admitted, a GPA of 2.75 or better each term in education course work must be maintained to remain in the program. A grade of "C" or better must be earned in all required education course work.

3. The Liberal Studies major (waiver program) must be completed (or State-required scores on the N.T.E. Commons Examination filed with the Division of Education) before enrolling in Student Teaching (EDUC 3816/4812/4816).

D. Professional Recommendations

1. When applying for admission to the Credential Program, plan to start education work after the academic course work is completed, because preference will be given to applicants who are ready to take the education course work full time.

2. Obtain school aide experience to enhance professional background (see EDUC 1000, 2970/4970, and 3000).

E. Required Course Work for the Preliminary Multiple Subjects Credential (24 units)

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EDUC 3010. Foundations of Elementary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 3120. Elementary Curriculum and Instruction I</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 3130. Elementary Curriculum and Instruction II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 3250. Reading Instruction in the Elementary School</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 3816. Multiple Subjects Student Teaching I</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4816. Multiple Subjects Student Teaching II</td>
<td>6</td>
</tr>
</tbody>
</table>

*Student petitions presenting compensating strengths as basis for exception to the 2.75 rule may be submitted with the credentials program application forms.
F. Requirements for the Clear Multiple Subjects Credential (Fifth Year Completed)

1. To be recommended for a Clear credential, students must complete a 30-unit approved program of post-B.A. upper division/graduate course work with a 2.75 or better GPA. The Fifth Year must include at least 18 hours of resident course work and at least 12 hours of course work related to Multiple Subjects Teaching. Students are urged to apply Fifth Year course work toward Advanced Credentials and M.A. programs. The 30-unit Fifth Year program must be planned with and approved by the Fifth Year adviser.

2. The following additional courses are required to obtain a Clear credential:
   a. EDUC 3050. School Health Programs, 2 units
   b. EDUC 4120. Seminar: Diagnostic Teaching, 3 units
   c. EDUC 4130. Special Education Strategies for the Classroom Teacher, 3 units
   d. EDUC 4840. Seminar: Analysis & Strategies of Teaching, 3 units

II. MULTIPLE SUBJECT CREDENTIAL WITH BILINGUAL/CROSS-CULTURAL EMPHASIS

A. This Liberal Studies degree program with the Bilingual/Cross-Cultural Emphasis and Concentration is recommended for students who wish to be admitted to the Multiple Subjects Credential Program with a Bilingual/Cross-Cultural Emphasis (see the Bilingual/Cross-Cultural section of this catalog).

B. Presently, this program is limited to students who are literate in both English and Spanish. Admission to the Emphasis Program is contingent upon screening for language skills, cultural knowledge, and teaching aptitude in addition to the regular Multiple Subjects Credential admissions requirements and procedures outlined above (I. A-E). Spanish or other majors are also acceptable, but the student will need to select, by advisement, elective course work to prepare for required language proficiency and cultural knowledge as well as file with the Division of Education the State-required N.T.E. Commons Examination minimum scores.

C. Students will complete the following courses:
   EDUC 3011. Foundations of Elementary Education: Bilingual, 3 units
   EDUC 3141. Elementary Curriculum & Instruction: Bilingual I, 3 units
   EDUC 3142. Elementary Curriculum & Instruction: Bilingual II, 3 units
Education

EDUC 3251. Reading Instruction in the Elementary School: Bilingual/Cross-Cultural, 3 units
*EDUC 3816. Multiple Subjects Student Teaching I, 6 units
EDUC 4812. Multiple Student Teaching, Bilingual, 6 units

D. Complete the Fifth Year program and course work as outlined above (I. F).

III. SINGLE SUBJECTS CREDENTIAL (SECONDARY SCHOOL TEACHING)
A. Academic Requirements

1. Complete a B.A. degree, generally with a major in a single subject state-approved subject matter "waiver program."

2. Complete one of the following single subject waiver programs or file with the Division of Education a passing score on the N.T.E. Area Examination for the selected subject matter area.

   | Single Subject Waiver for: | Subject Matter Programs:
<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Art</td>
<td>Art</td>
</tr>
<tr>
<td>English</td>
<td>English</td>
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<tr>
<td>Foreign Language</td>
<td>Speech Communication</td>
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<tr>
<td>Government</td>
<td>French</td>
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<tr>
<td>History</td>
<td>German</td>
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<tr>
<td>Life Science</td>
<td>Spanish</td>
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<tr>
<td>Mathematics</td>
<td>Political Science</td>
</tr>
<tr>
<td>Music</td>
<td>History</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>Mathematics</td>
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<tr>
<td>Social Sciences</td>
<td>Music</td>
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<tr>
<td></td>
<td>Physical Education</td>
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<td></td>
<td>Physical Sciences</td>
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<tr>
<td></td>
<td>Chemistry</td>
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<tr>
<td></td>
<td>Social Sciences</td>
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</tbody>
</table>

The College does not offer majors in Industrial Arts, Business, Home Economics, or Agriculture, but students who have completed approved waiver programs elsewhere may apply to the Credential Program.

3. ENGL 3000 and a companion 2-unit 3999 course must be completed before admission to the Credential Program.

4. PSCI 1201, or equivalent, is required by the State for a teaching credential.

*A student who demonstrates strong teaching skills gained from two or more years of full-time employment as a bilingual teacher-aide may accelerate through student teaching upon demonstrating proficiency. Consult the program adviser for specific requirements and procedures.

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B. Academic Recommendations

1. Students should complete the major before entering the professional program since the year-long, full-day field-site program generally prohibits much concurrent academic course work.

2. Attend a Single Subject Credential Program orientation meeting your first semester on campus. Watch for the meeting notice.

3. Cross-cultural and special education course work is strongly recommended.

4. A course in general psychology and a course in human growth & development or adolescent psychology.

C. Professional Requirements

The single subject credential program is field centered and performance based. It integrates theory and practice by providing an on-going experience, within a school setting, which focuses on the attainment of the knowledge and skills which characterize effective teaching. Students are at a center daily from 7:30 a.m. until 12:30 p.m. late August through mid-June.

1. Students must pass formal screening before being permitted to enroll in the program. Students make separate application for admission to the Single Subject Credential Program. Forms are obtained from the Division of Education office. Admission criteria are those in the catalog effective during the year of application and acceptance. The application folder must be completed by mid-February for the following Fall admission (program is open only once a year).

2. A minimum cumulative GPA of 2.75, or 3.00 in the most recent 30 units completed, and a 3.00 GPA in the upper division work of the major are required. Once admitted, the 2.75 overall and 3.00 in major field must be maintained or the student may be disqualified. A grade of "C" or better must be earned in all required education course work.

3. The Single Subject waiver program must be completed or the State-required (N.T.E., Area) minimal score must be filed with the Division of Education before the student will be permitted to enroll in the final segment of field practicum (EDUC 4852).

D. Professional Recommendations

1. Utilize electives toward a second teaching major to enhance employability.

2. Obtain school aide experiences to enhance professional background (see EDUC 1000 or 3000).
E. Required Course Work for the Preliminary Single Subject Credential (24-27 units).

FALL
EDUC 4851. Field Practicum: Secondary Education I, 6 units
EDUC 4151. Secondary Education Seminar I, 2 units
EDUC 4161. Single Subject Instruction I, 2 units
*EDUC 3470. Reading Instruction in the Secondary School, 3 units

WINTER
EDUC 4152. Secondary Education Seminar II, 4 units (Includes Practicum Experience)

SPRING
EDUC 4852. Field Practicum: Secondary Education II, 6 units
EDUC 4153. Secondary Education Seminar III, 2 units
EDUC 4162. Single Subject Instruction II, 2 units

F. Requirements for the Clear Single Subject Credential (Fifth Year Completed)

1. To be recommended for a Clear credential, the student must complete a 30-unit approved program of post-B.A. upper division/graduate course work with a GPA of 2.75 or better. The Fifth Year must include at least 18 units of residence course work and at least 12 units of course work related to Single Subject teaching. Students are urged to apply the Fifth Year work towards additional teaching majors or advanced credentials and M.A. programs. The 30 units must be planned with and approved by the Fifth Year adviser.

2. The following courses are required to obtain a Clear Credential:
   a. EDUC 3050. School Health Programs, 2 units
   b. EDUC 4840. Seminar: Analysis & Strategies of Teaching, 3 units
      OR EDUC 4120. Seminar: Diagnostic Techniques of Teaching, 3 units
   c. EDUC 4130. Special Education Strategies for the Classroom Teacher, 3 units

*EDUC 3470 is optional for Art, Home Economics, Industrial Arts, Music, and Physical Education, but it is strongly recommended for all.

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CATEGORIES OF ENROLLMENT

The Unclassified Graduate student, finishing Fifth Year course work or taking professional growth courses, must advance to classified standing (see below) to become enrolled in an advanced credential and/or M.A. program.

Step 1. Graduate: Conditionally Classified
Students who have applied to enter the M.A. and/or an advanced credential program and who are completing the Division of Education program application procedures.

Step 2. Graduate: Classified (Acceptance into a Program)
Students who have been advanced to candidacy in the M.A. in Education program and have been reviewed and accepted by the appropriate credential Advisory Committee: Administrative Services, Pupil Personnel Services, or Reading.

MASTERS PROGRAM  (Coordinator: Dr. Priscilla R. Smith)

The Master of Arts in Education is designed to meet the professional growth needs of school professionals. Course work is offered late afternoons and evenings. The masters program may be completed in one of three areas of specialization: (1) Curriculum & Instruction, (2) Administration, and (3) School Counseling. Programming worksheets which outline required and elective course work for each specialization may be obtained in the Division of Education Office.

APPLICATION PROCESS: MASTERS PROGRAMS AND ADVANCED CREDENTIALS

Students who plan to enroll in a graduate program in Curriculum & Instruction, Administrative Services, or School Counseling must complete the following steps:

1. Apply to the College for admission. (Fill out Part B, II, Masters degree only, M.A. and credential, or credential only). Forms are available from the Office of Admissions.

2. Apply to the graduate program of the Division of Education. Forms are available in the Division of Education.

Application procedures include:

a. Declaration of Intent (Form MA-1)

b. Transcripts verifying baccalaureate degree and all course work beyond

c. Vita/Resume

d. Two letters of recommendation, or placement file
e. GRE scores (Verbal, Quantitative and Advanced Education) or Miller Analogies scores.

f. Copy of valid California Teaching Credential (appropriate substitute experience/training may be accepted in counseling).

3. After review and acceptance by the Graduate Committee, the student is accepted as a pre-candidate. A program is planned with the assigned adviser and course work up to nine units is pursued.

a. While a pre-candidate and/or conditionally classified, students working toward the Administrative Services, School Counseling, or the Reading Specialist Credential will be interviewed by an appropriate selection committee. See the appropriate credential coordinator for further details.

b. Following favorable action by the Division Graduate Studies Committee and the selection committee, candidates with a 3.0 GPA in the first nine units, may apply for Graduate: Classified standing through their advisers.

4. When advanced to Graduate: Classified standing by the Graduate Studies Committee of the Division of Education, M.A. candidates establish their Masters Committee and complete the remaining course work.

REQUIRED FOR M.A. DEGREE AND ADVANCED CREDENTIALS

Students planning to complete both an M.A. and an advanced credential should plan their programs carefully with their advisers. The student's official program is the course work approved in advance by the student's graduate adviser. A minimum of 30 units is required for the degree. Students must maintain a minimum overall GPA of 3.0 in graduate work. A "C" or better must be earned in all course work. The M.A. program requires each candidate to complete a thesis, project, or three approved masters papers and a final oral examination.

Listed below are course requirements for each of the five areas of specialization in the M.A. program. Students seeking the advanced credential and the M.A. will take all of the required courses and select electives with adviser approval.

PROGRAMS

LEARNING HANDICAPPED SPECIALIST CREDENTIAL (Coordinator: Dr. David Lema)

A basic teaching credential must be held in order to qualify for this specialist credential. Undergraduates may plan a program of studies to work on both credentials concurrently. Undergraduates
are encouraged to enroll in the Liberal Studies major with a concentration in Exceptional Children and Youth. The Multiple Subjects Credential is preferred, Single Subject Credential holders may obtain this specialist credential by taking recommended MSC course work. Inservice teachers will need individual evaluation of prior course work to establish an appropriate course of study. A minimum GPA of 2.75 is required in the program. At least 30 post-BA units are required for institutional recommendation for the clear credential.

The student is responsible for any prerequisite courses to the psychology and speech generic courses in special education and advanced courses in Learning Handicapped listed in the following program:

**EXCEPTIONAL CHILDREN (Generic)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 3010</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 4721</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3130</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4510</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4150</td>
<td>3</td>
</tr>
</tbody>
</table>

**LEARNING HANDICAPPED (Advanced)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 4750. Applied Behavior Analysis for Severely and Learning Handicapped</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 5150. Identification and Evaluation of Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5250. Reading Diagnosis &amp; Remediation</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5410. Guidance for Exceptional Child &amp; Parent</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5420. Curriculum and Instruction: Learning and Severely Handicapped</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5430. Prescriptive/Individual Instruction: Learning and Severely Handicapped</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 6947. Fieldwork: Learning &amp; Severely Handicapped</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
</tr>
</tbody>
</table>

**READING SPECIALIST CREDENTIAL** (Coordinator: Dr. Jack A. Graves)

Elementary or secondary experience under standard certification and intensive and extensive experience in reading at the K-12 level are required for admission to this program. The program totals 30 hours of course work and field experience. See Division of Education Office and the Reading Specialist Credential Coordinator for admission information and advisement. The Masters degree, in Curriculum and Instruction-Reading, is optional.

*See also the minor/concentration in Exceptional Children & Youth.
**Credential only, additional work required for M.A.
Courses required for the Credential:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 3250.</td>
<td>Reading Instruction in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 3470.</td>
<td>Reading Instruction in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4050.</td>
<td>Reading Skills: Assessment &amp; Evaluation</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4100.</td>
<td>Improving Reading: K-12</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 4240.</td>
<td>Reading Instruction in the Primary Grades</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 4250.</td>
<td>Reading Instruction in the Intermediate Grades</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 5250.</td>
<td>Reading Diagnosis and Remediation</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5250.</td>
<td>Research &amp; Trends in Reading &amp; Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3000.</td>
<td>Reading Improvement Center</td>
<td>3+3</td>
</tr>
<tr>
<td>ENGL 4602.</td>
<td>Children’s Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

PUPIL PERSONNEL SERVICES CREDENTIAL: SCHOOL COUNSELING

This program is particularly designed for teachers. Teacher education course work is part of the program. Requirements include elementary or secondary teaching certification**, and counseling field experiences at the elementary and secondary levels, as well as other agencies. See the Division of Education and the School Counseling Credential Coordinator for admission information and advisement.

The course work is as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3790.</td>
<td>Introduction to Counseling Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4770.</td>
<td>Introduction to Counseling Techniques, 3 units</td>
<td>3</td>
</tr>
<tr>
<td>OR EDUC 5640.</td>
<td>The Counselor</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5010.</td>
<td>Education in Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5050.</td>
<td>Methods of Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5060.</td>
<td>Theories of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5530.</td>
<td>Testing in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5540.</td>
<td>Exceptional Children &amp; Youth</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5570.</td>
<td>Counseling &amp; Guidance in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5600.</td>
<td>Family Counseling &amp; Community Resources</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5610.</td>
<td>Educational &amp; Occupational Information</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5650.</td>
<td>School Group Guidance &amp; Counseling Techniques</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 5760.</td>
<td>Pupil Personnel Services Seminar</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5990.</td>
<td>Thesis or Project (3+3)</td>
<td>6***</td>
</tr>
<tr>
<td>EDUC 6944.</td>
<td>Fieldwork: Counseling (2+2+2)</td>
<td>6</td>
</tr>
<tr>
<td>Electives assigned as needed</td>
<td>0-6</td>
<td></td>
</tr>
</tbody>
</table>

* Credential only, additional coursework required for the MA.
** See Coordinator for admission without teacher certification.
***Optional, if student wishes the MA in School Counseling
The program is designed to prepare students for their initial administrative or supervisory assignments at the Masters level of proficiency. Requirements include 5 years of teaching experience, completion of the M.A., and the competencies included in the courses listed below. See the Division of Education and Administrative Services Credential Coordinator for admission information and advisement.

The course work to meet Ryan requirements is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 5010</td>
<td>Education in Society</td>
<td>3</td>
</tr>
<tr>
<td>OR EDUC 5040</td>
<td>Philosophy of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5050</td>
<td>Methods of Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5060</td>
<td>Theories of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5130</td>
<td>Administration of Special Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5310</td>
<td>Curriculum Planning &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5500</td>
<td>Organization of Public Education</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 5510</td>
<td>Supervision of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5521</td>
<td>Public School Law</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5522</td>
<td>Public School Finance</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5550</td>
<td>Administration of Individual Schools</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 5560</td>
<td>Educational Leadership</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 5720</td>
<td>Seminar in School Supervision and Administration</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 5990</td>
<td>Thesis or Project</td>
<td>(6)*</td>
</tr>
<tr>
<td>EDUC 6940</td>
<td>Fieldwork: Supervision</td>
<td>4</td>
</tr>
</tbody>
</table>

**MASTERS IN CURRICULUM & INSTRUCTION**

Concentrations in Curriculum and Instruction are available for graduate students. These include Elementary, Secondary, Early Childhood, Reading, Exceptional Children & Youth, and Bilingual/Cross-Cultural. Other concentrations may be developed by advisement.

These programs include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One from: EDUC 5010, 5030, or 5040</td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>Required: EDUC 5050, 5060, 5770</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Curriculum &amp; Instruction concentration area</td>
<td></td>
<td>13-17</td>
</tr>
<tr>
<td>Electives by advisement, including EDUC 5990</td>
<td></td>
<td>7-12</td>
</tr>
</tbody>
</table>

See Division of Education and the M.A. Coordinator for admission information and advisement.

*Optional for students completing the M.A.
EDUC 1000. Participation in Tutoring (1)

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: T.B. clearance and consent of instructor.

EDUC 2970. Selected Topics offered during Winter Term (4)

EDUC 3000. The Instructional Aide (2)

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 credit. Prerequisites: T.B. clearance and consent of instructor.

EDUC 3010. Foundations of Elementary Education (3)

Study of selected sociologically and psychologically based knowledge, skills, and understandings related to teaching in the elementary schools. Prerequisite: Admission to the credential program; EDUC 3000 recommended.

EDUC 3011. Foundations of Elementary Education: Bilingual (3)

Study of selected sociologically and psychologically based knowledge, skills, and understanding related to teaching in the elementary schools. Emphasis on bilingual issues and concerns. Prerequisites: Admission to the credential program and permission of MSC adviser.

EDUC 3050. School Health Programs (2)

Nature and scope of health education as outlined in the Framework for Health Instruction in California Public Schools, K-12, current problems related to individual, family, and community health education. Prerequisites: Upper division standing.

EDUC 3120. Elementary Curriculum and Instruction I (3)

Introduction to the skill subject of language arts and mathematics. Emphasis on communication skills; speaking, listening, reading, and writing in the multiple subjects classroom. Emphasis given to developing skills for the teaching of mathematics. Prerequisites: Admission to credential program and EDUC 3010.
EDUC 3130. Elementary Curriculum and Instruction II (3)

Teaching concepts and applications emphasizing social studies and science in multiple subjects grades. Instructional planning, demonstrations, and materials based on modern strands and techniques. Prerequisites: Admission to credential program and EDUC 3010.

EDUC 3141. Elementary Curriculum & Instruction: Bilingual I (3)

Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in mathematics and science. Planning, demonstration, and materials based upon modern strands and techniques. Prerequisites: EDUC 3011 and consent of bilingual credential adviser.

EDUC 3142. Elementary Curriculum & Instruction: Bilingual II (3)

Introduction to the skills, concepts, and applications required for bilingual multiple subjects teaching in language arts and social studies. Planning, demonstrations, and materials based upon modern strands and techniques for bilingual instruction. Prerequisites: EDUC 3011 and consent of bilingual credential adviser.

EDUC 3250. Reading Instruction in the Elementary School (3)

Includes an understanding of the principles and practices of reading (K-6) and its relation to the language arts; various approaches to reading; development of reading lessons; word analysis skills, including phonics; manipulative aids in reading. Prerequisites: Admission to credential program and EDUC 3010.

EDUC 3251. Reading Instruction in the Elementary School: Bilingual/Cross-Cultural (3)

Introduction to multiple subjects instruction reading: principles and practices in Spanish and English. Reading related to the language arts; various approaches to reading in Spanish and English; development of reading lessons; word analysis skills, including phonics; manipulative aids in reading. Prerequisites: EDUC 3011 and consent of bilingual credential adviser.

EDUC 3360. Instructional Media (2)

Use of libraries, instructional materials centers, and audio-visual materials and equipment. Preparation and evaluation of instructional materials. Prerequisite: Admittance to credential program or teaching experience.
Education

EDUC 3470. Reading Instruction in the Secondary School (3)

Selection and organization of materials; instructional procedures for developmental reading programs (7-12), reading and the content subjects; analysis of research concerning reading needs; field practicum. Prerequisites: Admittance to credential program and consent of credential coordinator.

EDUC 3800. Multiple Subjects Intern Student Teaching I (4)

District/college supervised observation/participation and student teaching--"New Careers" internship in approved public school, self-contained classroom. Includes on-site seminars to cover legal and ethical issues and problems related to teaching. Prerequisite: Approval of MSC coordinator and program coordinator.

EDUC 3814. Multiple Subjects Student Teaching I (4)

Supervised observation/participation and student teaching in public elementary school settings. Includes scheduled on-campus seminar dealing with legally required instruction in elementary schools, the structure of public education, and student teaching problems. CR or NC grade is given. Prerequisites: EDUC 3010, 3120, 3130, 3250, NTE or waiver program, and consent of credential coordinator.

EDUC 3815. Multiple Subjects Student Teaching I (5)

Supervised observation/participation and student teaching in public elementary school settings. Concurrent enrollment in EDUC 3899 required. (Formerly 3816) Prerequisites: EDUC 3010, 3120, 3130, 3250.

EDUC 3899. Student Teaching Seminar I (1)

Initial student teaching seminar required as concurrent enrollment with EDUC 3815. Completes student teaching required hours but graded separately.

EDUC 4050. Reading Skills: Assessment and Evaluation (1)

Examination of candidate's capabilities in the area of reading instruction. Designed only for those interested in the Reading Specialist credential. Prerequisites: One full year of credentialed teaching including the teaching of reading; consent of Reading Specialist credential coordinator and instructor.

EDUC 4100. Improving Reading: Grades K-12 (4)

Teaching of analysis of children's reading patterns; individualizing, grouping, production, and use of materials in skills development; correlation of phonics as part of reading developmental program. Includes 50 hours of directed field experiences in reading. Student must be teaching full-time to take this course. Prerequisites: EDUC 3250 or 3470, and consent of instructor.

EDUC 4120. Seminar: Diagnostic Techniques of Teaching (3)

Methods of diagnosing student difficulties and prescribing remediation in terms of instruction and curriculum. Performance-based instruction evaluation. Prerequisite: Completion or concurrent enrollment in student teaching.
EDUC 4130. Special Education Strategies for the Classroom Teacher (3)

Planning to teach the mainstreamed special education child in the regular classroom. Individualized diagnostic and prescriptive teaching, counseling, legal aspects, and instructional principles and practices. Includes 20 hours of directed observation/participation. Meets Commission Clear MSC/SSC requirement; not special education credential requirements. Prerequisite: Completion of student teaching or consent of instructor. EDUC 4120, 4310, and 5540 recommended.

EDUC 4151. Secondary Education Seminar I (2)

While engaged in an accompanying Practicum (EDUC 4851), the student begins the study of competency-based instruction, theory and knowledge of methodology, and a variety of processes of instruction which focus on the individual learner in the secondary school, including therapeutic instruction. Daily participation in the field and attendance at regularly scheduled seminar sessions required for completion. Prerequisites: Admission to CSCS Secondary Teacher Education Program and concurrent enrollment in EDUC 4851 and 4161.

EDUC 4152. Secondary Education Seminar II (4)

A continuation of EDUC 4151, the second segment of the study of competency-based instruction, theory and knowledge of methodology, and a variety of instructional processes, including therapeutic instruction. Within this part of the program, there is a transition from a focus on the individual learner and small groups of learners to a focus on large groups of students in classroom/instructional settings in the secondary school. Daily participation in the field and attendance at regularly scheduled seminar sessions required for completion. (Includes one unit of Field Practicum). Prerequisites: Successful completion of EDUC 4151, 4161, and 4851.

EDUC 4153. Secondary Education Seminar III (2)

Continuation of EDUC 4152. While engaged in an accompanying Practicum (EDUC 4852), the student completes the third segment of the study of competency-based instruction, theory and knowledge of methodology, and a variety of processes of instruction which focus on large groups of learners in secondary school settings. Daily participation in the field and attendance at regularly scheduled seminar sessions required for completion. Prerequisites: Successful completion of EDUC 4151, 4152, 4161, and 4851. Concurrent enrollment in EDUC 4162 and 4852.

EDUC 4161. Single Subject Instruction I (2)

Introduction to teaching in single subject instructional settings in the secondary school: Study of theory and methodology
in the student's single subject area; to the study of the scope and sequence of the single subject area as part of the total school curriculum; to analysis of current trends and practices in teaching the single subject; to review of courses of study and instructional materials; to use of instructional techniques; to analysis of practices appropriate to different types of secondary students; to evaluation of student learning in single subject areas. Prerequisites: Admission to CSCS Secondary Teacher Education Program and concurrent enrollment in EDUC 4151 and 4851.

EDUC 4162. Single Subject Instruction II (2)

Continuation of EDUC 4161, 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 be directed by specialists from appropriate academic areas of the College. Prerequisites: Successful completion of EDUC 4151, 4152, 4161, and 4851; concurrent enrollment in EDUC 4153 and 4852.

EDUC 4200. Teaching the Culturally Different (3)

Principles of adapting school instructional materials and programs to the particular needs and interests of children of minority ethnic groups. Identification of suggested teaching competencies. Includes selected field experiences. Prerequisite: Upper division standing.

EDUC 4210. Outdoor Education (2)

Introduction to outdoor teacher education, with appropriate teaching procedures and instructional materials. Includes one weekend directed outdoor school field experience. Prerequisite: Consent of instructor.

EDUC 4220. Strategies for Teaching the Gifted (3)

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: Valid teaching credential and teaching experience or consent of instructor.

EDUC 4230. Principles of Early Childhood Education (3)

An analysis of the early childhood education program from its beginning to today. An overview of the relationships of the school, the child, and the home. Prerequisites: Valid teaching credential and consent of education adviser.
EDUC 4240. Reading Instruction in the Primary Grades (2)

Emphasis on all aspects of reading readiness, including methods and materials; techniques of beginning reading, including language experience. Prerequisites: EDUC 3250 or 4100, and consent of education adviser.

EDUC 4250. Reading Instruction in the Intermediate Grades (2)

Emphasis on reading to learn, particularly reading-study skills; individualized instruction; extension of reading concepts and phonics. Prerequisites: EDUC 3250 or 4100, and consent of education adviser.

EDUC 4260. Improving Elementary Social Studies (3)

Current practices, trends, and concepts in today's elementary social studies. Planning, developing, and evaluating group and individualized programs. Prerequisite: Teaching credential or consent of education adviser.

EDUC 4280. Improving Elementary Mathematics (3)

Current practices, trends, and concepts in today's elementary mathematics. Planning, developing, and evaluating group and individualized programs. Prerequisite: Teaching credential or consent of education adviser.

EDUC 4310. Introduction to Special Education Programs (3)

Introduction to school programs and practices for special education students. Includes directed observation/participation and initial experiences with problems of assessment, prescription and individualized programs. Prerequisites: PSYC 3130, SPCH 3010, and consent of instructor.

EDUC 4400. Introduction to Bilingual Education (3)

Historical, sociological and psychological aspects of bilingual education and its role in American public education; a survey of learning and teaching styles appropriate for bilingual children; types of bilingual programs and their accompanying classroom management systems. Prerequisites: Teaching experience, consent of instructor and bilingual studies coordinator.

EDUC 4410. Teaching Reading--Bilingual/Cross Cultural (3)

Includes approaches and techniques for teaching reading to the Spanish speaker; its relation to language development. Prerequisites: Teaching experience, consent of bilingual studies coordinator and instructor.
EDUC 4420. Language Arts for the Bilingual Classroom (3)

Learning theories for first and second language acquisition; interrelationship between culture and language; ESL and SSL teaching techniques; assessment instruments for proficiency and language dominance; material selection. Prerequisites: Teaching experience, consent of instructor and bilingual studies coordinator.

EDUC 4430. Cross-Cultural Techniques for Teachers (3)

Exploring the concept of culture and of cultural pluralism in education. Specific approaches to finding out about the ethnic groups within the community, and for implementing a culturally pluralistic classroom. Prerequisites: Teaching experience, and consent of instructor and bilingual studies coordinator.

EDUC 4620. Death Education and Counseling (3)

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 instructor.

EDUC 4650. The Law and the Teacher (3)

The historical and philosophical background of American Public School Law. Introduction to a working knowledge of laws pertaining to the California public schools. Prerequisite: Consent of instructor.

EDUC 4800. Multiple Subjects Intern Student Teaching II (4)

Continuation of district/college supervision of student teaching/internship. Includes on-site seminars covering teaching skills and problems. Prerequisite: Approval of MSC coordinator and program coordinator. May be repeated for a total of 8 units.

EDUC 4812. Multiple Subjects Student Teaching: Bilingual (6)

Supervised observation, participation, and student teaching in a public multiple subjects bilingual classroom setting. Includes a scheduled on-campus seminar meeting dealing with professional ethnics, special activities, use of audiovisual equipment, and student teaching problems. Prerequisites: EDUC 3815, NTE or waiver program, and consent of bilingual credential adviser.

EDUC 4815. Multiple Subjects Student Teaching II (5)

Supervised student teaching in public multiple subjects school settings. Concurrent enrollment in EDUC 4899 required. (Formerly 4816) Prerequisites: EDUC 3815 and 3899.
EDUC 4818. Multiple Subjects Student Teaching II (8)
Same as EDUC 4815; longer assignment.

EDUC 4840. Seminar: Analysis and Strategies of Teaching (3)
Analytical methods used to study the instructional process. Investigation theories and methods in instructional analysis. Emphasis on strategies of teaching. Prerequisites: Completion or concurrent enrollment in EDUC 3815 and 3899, or completion of EDUC 4851, or consent of credential adviser.

EDUC 4851. Field Practicum: Secondary Education I (6)
First segment of intensive field-site sequence of experiences which focus on individual, therapeutic, and small group instruction of secondary students in both a junior and a senior high school within a single school district. Daily participation in the field and adherence to the public school calendar required for completion. Observation and supervision of the college student is provided jointly by district and CSCS personnel. Prerequisites: Admission to CSCS Secondary Teaching Education Program and concurrent enrollment in EDUC 4151 and 4161.

EDUC 4852. Field Practicum: Secondary Education II (6)
A continuation of EDUC 4851. The second segment of an intensive field-site sequence of experiences which focus on working with large groups of secondary students in classroom/instructional settings in both a junior and a senior high school within a single school district. Daily participation in the field and adherence to the public school calendar required for completion. Observation and supervision of the college student is provided jointly by district and CSCS personnel. Prerequisites: Successful completion of EDUC 4851, 4151, 4152, and 4161; and concurrent enrollment in EDUC 4153 and 4162.

EDUC 4899. Student Teaching Seminar II (1)
Second student teaching seminar. Concurrent enrollment in EDUC 4815 required. Completes student teaching required hours but graded separately.

EDUC 4950. Selected Topics in Education (Topics to be specified in Class Schedule) (1-5)
Development of a selected topic in education. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

EDUC 4970. Selected Topics offered during Winter Term (4)

EDUC 4980. Individual Study (1-4)
For qualified undergraduate students in need of specialized study not available through regular programs. Request for individual study must be presented to the chair of the Division of
Education

Education prior to registration. May be repeated for a total of 5 units. Prerequisites: Divisional approval and consent of instructor.

Graduate

EDUC 5010. Education in Society (3)

Study of social forces influencing the educative process, the curriculum and institutional and professional roles in America public education. Analysis of characteristics and problems of ethnic groups in school and society. Prerequisites: Valid teaching credential and consent of education adviser.

EDUC 5030. Comparative Education (2)

Study of representative national educational programs, emphasis on the political, social, and economic determinants, and contemporary issues and trends. Prerequisites: Valid teaching credential and consent of education adviser.

EDUC 5040. Philosophy of Education (3)

Modern philosophies of education and their significance for contemporary educational practices. Recommended for experienced elementary and secondary teachers; a required course in advanced credential programs. Prerequisites: Valid teaching credential and consent of education adviser.

EDUC 5050. Methods of Research in Education (3)

Application of methods of research to problems in education. Emphasis on research methodology of the social and behavioral sciences. Prerequisite: Advancement to M.A. candidacy or consent of graduate adviser or instructor.

EDUC 5060. Theories of Instruction (3)

Analysis and evaluation of learning and instructional theories as they apply to the classroom. Study of human teaching and learning. Fieldwork component included. Prerequisites: Valid teaching credential or appropriate experience and EDUC 5010, 5030, or 5040.

EDUC 5130. Administration of Special Education Mainstreaming (3)

Preparation for administration of mainstreamed students' instructional programs including practices and principles of identification, admission, counseling, programming, legal aspects, and diagnostic techniques. Meets Clear Administrative Services requirement. EDUC 4130 and 5540 recommended. Prerequisite: Clear basic teaching credential.
EDUC 5230. Curriculum in Early Childhood (3)

A study of early childhood curriculum, class organization, methods, and materials. Prerequisites: EDUC 3010 and 4230 or equivalent, and consent of education adviser.

EDUC 5250. Reading Diagnosis and Remediation (3)

Understanding and correcting reading difficulties; use of procedures in preventing reading retardation; selecting and developing materials; making use of informal inventories; critiquing clinical and corrective techniques; analysis of research in these two areas. Prerequisites: EDUC 3250 or 3470, EDUC 4240 or 4250, teaching experience, and consent of instructor.

EDUC 5310. Curriculum Planning and Development (3)

Analysis of models in curriculum development; systematic planning for curriculum improvement; behavioral objectives. Prerequisites: Teaching experience and EDUC 5060 or consent of instructor.

EDUC 5320. New Developments in Education (2)

Evaluation of new developments in the schools affecting all educators. Issues, programs, organisational structure, curriculum innovations, instructional materials and methodology. Prerequisites: Teaching experience and consent of instructor.

EDUC 5330. Research and Trends in Mathematics, Science, and Social Studies, K-12 (3)

Analysis and evaluation of K-12 curriculum with emphasis on mathematics, science, and social studies; selected topics for extensive and intensive study. Prerequisites: Valid teaching credential, curriculum course work at the 4000 or 5000 level, and consent of education adviser and instructor.

EDUC 5350. Research and Trends in Reading and Language Arts (3)

Review of research and literature in reading and language arts; in-depth analysis of one or more related topics. Evaluations of trends. Prerequisites: EDUC 3250 or 3470, EDUC 4240 or 4250, and consent of education adviser and instructor.

EDUC 5410. Guidance for Exceptional Child and Parent (3)

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: EDUC 4310, teaching experience, or consent of instructor.
Education

EDUC 5420. Curriculum & Instruction: Learning & Severely Handicapped (3)

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: Basic teaching credential, EDUC 4310, and consent of the learning handicapped credential coordinator.

EDUC 5430. Prescriptive/Individualized Instruction: Learning & Severely Handicapped (3)

Practice in the development and implementation of individualized learning programs. Includes case studies and critiques of the progress of selected handicapped students. Prerequisites: Basic teaching credential, EDUC 4310, and consent of learning handicapped credential coordinator.

EDUC 5500. Organization of Public Education (2)

Study of organizational concepts and practices in the public schools; legal cases for schools; financial planning and budget systems. Analysis of administrative theory. Prerequisites: Teaching experience and consent of education adviser and instructor.

EDUC 5510. Supervision of Instruction (3)

Techniques and practices used in school supervision; selection, placement, and evaluation of school personnel; analysis of personnel administration. Prerequisites: Teaching experience, EDUC 5310, and consent of education adviser and instructor.

EDUC 5521. Public School Law (3)

Legal principles in education; the Education Code of California; applicable case law; the law related to financing; permissive vs. restrictive codes. Prerequisite: Teaching experience or consent of instructor.

EDUC 5522. Public School Finance (3)

Principles of financing public schools; concepts of school support; sources of school revenue; administrative problems; budgeting procedures; PPBS. Prerequisite: Teaching experience or consent of instructor.

EDUC 5530. Testing in Education (3)

Measurement and evaluation in education; techniques of test construction for classroom and school use; statistical aspects of testing; selection and use of standardized tests with emphasis on the atypical student. Introductory course to M.A. and credential programs. Prerequisites: Consent of education adviser and instructor.
EDUC 5540. Exceptional Children and Youth (3)

Physical, intellectual, social, and emotional deviations among children and youth; community resources, educational adjustments. Prerequisite: Teaching experience or consent of education adviser or instructor.

EDUC 5550. Administration of Individual Schools (2)

An analysis of personnel processes and utilization of appropriate materials and procedures to promote staff development; an analysis of specific school problems; an exploration of basic principles in administration appropriate for elementary and secondary administration and supervision. Prerequisites: Teaching experience or equivalent, and consent of education adviser and instructor.

EDUC 5560. Educational Leadership (2)

Analysis and practices of leadership skills; a study of various types of leadership, techniques employed in the development of positive relations in the school. Prerequisites: Teaching experience or equivalent, and consent of education adviser and instructor.

EDUC 5570. Counseling and Guidance in Education (3)

Roles, functions, and responsibilities of the school counselor. Use of group techniques in counseling and guidance. Working with community groups and emphasis on the culturally different student. Theory, practice, and trends. Prerequisite: Teaching experience or consent of instructor.

EDUC 5600. Family Counseling and Community Resources (3)

Dynamics of relationships of family, community, and school; community-wide services; agency-school relationships; family visiting, including conferences, interviews, and referrals. Prerequisites: Valid teaching credential, and consent of education adviser and instructor.

EDUC 5610. Educational and Occupational Information (3)

Sources of occupational information; community and nationwide surveys; job analysis; procedures for relating vocational and self-information. Emphasis on meeting needs for school counselors in the area of career guidance. Prerequisites: Valid teaching credential, and consent of education adviser and instructor.

EDUC 5620. Family Life Living Education (3)

Focus on family life living instructional and counseling programs. Analysis of current problems in families, their effect on school-age children and youth and other family members and society in general. Designed for pre- and in-service teachers, counselors, and other school personnel. Prerequisites: Consent of credential adviser and instructor.
EDUC 5640. The Counselor (3)

Focus on the person as counselor, the becoming self of the counselor, personal identity and integrity, and authentic response to role conflict situations. The course is designed for people who (1) have had successful teaching experience, and (2) are enrolled in a counseling credential program or are practicing counselors, supervisors, or administrators. Prerequisites: PSYC 3790, admission to Pupil Personnel Services Credential Programs, and consent of instructor.

EDUC 5650. School Group Guidance and Counseling Techniques (2)

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. Prerequisites: Admission to the School Counseling Program; EDUC 5570 and 5640.

EDUC 5720. Seminar in School Supervision and Administration (2)

Case study analysis of practical problems in school administration and supervision. Open to practicing principals, supervisors, consultants, and students nearing completion of the Administration/supervision M.A. program. Prerequisites: Completion of at least 20 units of Administrative Services Credential Program, and consent of credential adviser.

EDUC 5760. Pupil Personnel Services Seminar (3)

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 near completion of program. Prerequisite: Consent of instructor.

EDUC 5770. Seminar in Elementary and Secondary Education (2)

Analysis and evaluation of interrelationships among content, purposes, organization, policies, and practices in contemporary elementary and secondary schools. Prerequisites: Completion of at least 20 units of graduate program and consent of education adviser.

EDUC 5780. Seminar for Student Teaching Supervisors (2)

Seminar in student and beginning teacher supervision; principles and practices. Techniques for performance evaluation. Prerequisites: Valid California teaching credential and current teaching experience.
EDUC 5910. Reading Improvement Center (3)

Study of techniques of reading diagnosis and prescription for selected children. In addition to class sessions, each student will be assigned an elementary pupil with whom to work in the Reading Improvement Center (at least 2 hours per week). May be repeated for a total of 6 units. Prerequisites: EDUC 5250, teaching credential, and consent of Reading Specialist credential coordinator.

EDUC 5950. Selected Topics in Education (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in education. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

EDUC 5970. Selected Topics offered during Winter Term (2-4)

EDUC 5980. Individual Study (1-4)

For graduate classified students in need of advanced and specialized study related to a thesis. May be repeated for a total of 6 units. Prerequisites: Approval of student's graduate committee, divisional approval, and consent of instructor.

EDUC 5990. Thesis or Project (3)+(3)

This enrollment involves individual consultation in the preparation of a master's thesis or project. May be repeated for a total of 6 units. Prerequisites: Consent of student's thesis/project graduate committee.

EDUC 6940. Field Work: Administration-Supervision (2) or (4)

Actual work experience in the field for which student is seeking credential. Joint supervision by district and college personnel. Includes bi-weekly practicum. May be repeated for a total of 4 units. Prerequisites: Admittance to and enrolled in the last semester of the Administrative Services Credential Program course work and consent of program coordinator.

EDUC 6941. Field Work: School Counseling (2)+(2)+(2)

Actual work experience in the field for which student is seeking credential. Joint supervision by district and college personnel. Includes bi-weekly practicum. May be repeated for a total of 6 units. Prerequisites: Admittance to Pupil Personnel Services Credential: School Counseling, and consent of credential adviser.
Education

EDUC 6947. Field Work: Learning and Severely Handicapped (3)+(3)

Actual work experience (teaching) in the field for which the student is seeking credential. Includes placements at elementary and secondary levels. Includes weekly seminar. May be repeated for a total of 6 units. (Formerly 4870; no credit may be earned if student has completed EDUC 4870.) Prerequisites: Approval of Learning Handicapped program coordinator.

EDUC 6970. Selected Topics offered during Winter Term (4)

EDUC 6980. Individual Study (1-4)

For qualified students in need of advanced or specialized study. Requests for individual study must be presented to the chair of the Division of Education 6 weeks prior to registration. May be repeated for a total of 6 units. Prerequisites: Division approval and consent of instructor.
English, Foreign Languages, and Philosophy

Lola V. Johnson, M.A., Professor of English, Chair
Robert K. Anderson, Ph.D., Professor of Spanish
Lawrence D. Berkoben, Ph.D., Professor of English
Joseph Brewer, Ph.D., Professor of English
John E. Carroll, Ph.D., Professor of English
William H. Hayes, Ph.D., Professor of Philosophy
James P. Jensen, Ph.D., Professor of English
Gerhard Mack, Ph.D., Professor of German
Paul P. Reubén, Ph.D., Professor of English
Douglas H. Taylor, Ph.D., Professor of English
Michael C. Fuller, Ph.D., Associate Professor of French
William H. Phillips, Ph.D., Associate Professor of English
George Settera, Jr., Ph.D., Associate Professor of English
Gisela D. Tadlock, Ph.D., Associate Professor of Spanish
Alice F. Worsley, Ph.D., Associate Professor of English
Jack W. Williams, M.A., Associate Professor of English
Alicia Q. Woodruff, M.A., Instructor of Spanish

The Department of English, Foreign Languages, and Philosophy offers the degrees of Bachelor of Arts, English; Master of Arts, English; Bachelor of Arts, French; Bachelor of Arts, Spanish; Liberal Studies degree concentrations in English, French, German, Spanish, and Philosophy; and degree minors in English, French, German, Spanish, and Philosophy. Courses are offered in language, composition, literature, creative writing, the film, and philosophy.

To students of English, the foreign languages, and philosophy, many career options are open, including teaching, journalism, publishing, advertising, and writing; students also find that study in these disciplines 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 to fluent and mature expression in their chosen subject fields. Courses in literature and the film familiarize students, through a variety of critical and instructional approaches, with important literary works and forms ranging from traditional to contemporary, while encouraging informed and independent critical evaluations. Certain courses are indispensable for a proper grounding in a discipline, but beyond these the student encounters a wide selection of courses in planning a program.

The curriculum in philosophy is conceived as contributing to broad, general education in the liberal arts. It can provide for any student an adequate component of philosophy whether pursued as a supplement to major studies, undergraduate or graduate, or for the values of philosophy itself.

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English, Foreign Languages, & Philosophy

The foreign languages curricula are intended to provide students with skills necessary to speak and write a foreign language with fluency and with knowledge of the cultural background from which the foreign language comes. As American society becomes increasingly multilingual and American business becomes increasingly multinational, fluency in a foreign language becomes more immediately valuable.

REQUIREMENTS FOR BACHELOR OF ARTS, ENGLISH

English majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 33 upper division units; of these, no more than 11 units of CR graded course work may apply toward the major.
4. Complete a minor to be selected in consultation with the major adviser, or complete 18 units of course work in addition to the General Education requirements to be selected in consultation with the major adviser. These units must be taken outside the English program and should be demonstrably relevant to the study of literature and language.
5. Consult with the major adviser during each advising period concerning requirements, changes in curriculum, waivers, etc.

DEGREE MAJOR IN ENGLISH

Prerequisite to the Major:

ENGL 2010. Critical Approaches to Literature, 3 units

The Major

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<tr>
<th>Units</th>
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<tr>
<td>ENGL 3110. Major British Authors to 1800</td>
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<td>ENGL 3111. Major British Authors After 1800</td>
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<td>ENGL 3400. Major American Authors</td>
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<td>ENGL 4300. Shakespeare</td>
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<td>ENGL 3800. Introduction to Linguistics</td>
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<td>ENGL 3805. Introduction to Historical Linguistics</td>
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<tr>
<td>ENGL 3815. Introduction to Bilingualism</td>
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<tr>
<td>ENGL 4850. English Grammar</td>
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Electives. Courses to be chosen in consultation with the major adviser

Total 33
English, Foreign Languages, & Philosophy

(Note: Prospective postgraduate students in English are encouraged to undertake the study of some foreign language while still undergraduates. Such students should also consult their English adviser concerning what courses in English will best prepare them for graduate study.)

DEGREE MINOR IN ENGLISH

Eighteen units, to include at least twelve upper division units. Six units may be taken CR/NC.

Lower Division

ENGL 2010. Critical Approaches to Literature, 3 units

Upper Division

1. Literature. The following courses are required for the degree minor: 6
   ENGL 3110 or 3111, 3 units
   ENGL 3400, 3 units

2. Course chosen in consultation with the minor adviser 6
   Total 12

TEACHING CREDENTIALS

The requirements for English majors interested in obtaining an English single subject credential waiver are listed below. Please refer to the Education section of the Catalog for a description of other requirements to be completed in obtaining a single subject credential.

SINGLE SUBJECT CREDENTIAL WAIVER PROGRAM
with a Bachelor of Arts Degree in English

Lower Division

DRAM 1010. Introduction to Theatre 3
ENGL 1010. Introduction to Literature 3
ENGL 2010. Critical Approaches to Literature 3
SPCH 2002. Public Speaking, 3 units
   OR SPCH 2011. Approaches to Human Communication, 3-4
   4 units
SPCH 2400. Oral Interpretation, 3 units
   OR DRAM 2500. Acting IA: Improvisation and Technique, 3 units 3
   15-16

Upper Division

1. Requirements:
   HUM 3999. Junior Composition: Humanities 2
   ENGL 3400. Major American Authors 3
ENGLISH, FOREIGN LANGUAGES, & PHILOSOPHY

ENGL 3800. Introduction to Linguistics, 3 units
OR ENGL 4850. English Grammar .......................... 3
ENGL 4605. Adolescent Literature .......................... 3
ENGL 4610. Curriculum and Instruction: English ........ 3

2. Electives (9 units to be taken from the following):
   DRAM 3200. Stagecraft I, 4 units
   *DRAM 4300. Play Production II, 2 units
   ENGL 3010. Creative Writing Workshop, 3 units
   ENGL 3500. Studies in Film, 3 units
   ENGL 3815. Introduction to Bilingualism, 3 units
   ENGL 4300. Shakespeare, 3 units
   *SPCH 3911. Communication Projects, 2 units
   SPCH 4100. Group Communication, 3 units

LIBERAL STUDIES CONCENTRATION IN ENGLISH

The following courses are required for the Liberal Studies concentration in English:

   Units

ENGL 2010. Critical Approaches to Literature .............. 3
ENGL 3110. Major British Authors to 1800, 3 units
OR ENGL 3111. Major British Authors After 1800, 3 units 3
ENGL 3400. Major American Authors ........................ 3
Electives, to be selected under advisement, to include a minimum of 9 upper division units ....................... 11
Total .................................................. 20

For a student preparing to take the multiple-subject credential, the following courses would be particularly appropriate for the concentration:

ENGL 3010. Creative Writing Workshop, 3 units
ENGL 3500. Studies in Film, 3 units
ENGL 3800. Introduction to Linguistics, 3 units
ENGL 3805. Introduction to Historical Linguistics, 3 units
ENGL 3930. World Literature in Translation, 2-5 units
ENGL 4105. English Novel I, 3 units
ENGL 4106. English Novel II, 3 units
ENGL 4107. American Novel I, 3 units
ENGL 4108. American Novel II, 3 units
ENGL 4130. Dramatic Literature I, 3 units
ENGL 4135. Dramatic Literature II, 3 units
ENGL 4300. Shakespeare, 3 units
ENGL 4305. Chaucer, 3 units
ENGL 4310. Milton, 3 units
ENGL 4600. Tutorial Projects in English, 3 units
ENGL 4602. Children's Literature, 3 units
ENGL 4603. Adolescent Literature, 3 units
ENGL 4850. English Grammar, 3 units

*May be repeated for credit in the English Waiver Program.
Applications for admission to the Master of Arts program in English and for advancement to candidacy should be filed in the office of the Department of English and Foreign Languages. Each student may elect either the Thesis or the Non-Thesis Programs described below.

Prerequisites for Admission to the General Program:

1. B.A. degree with a major in English
2. Undergraduate GPA of 3.0 in English courses

REQUIREMENTS FOR THE MASTER'S DEGREE

1. Completion of at least 30 units to include the following:
   A. ENGL 5000. Seminar: Graduate Studies in English, 5 units
   B. Minimum of 15 units to be completed from among seminars in the following subject areas:**
      ENGL 5100. Seminar: Medieval Literature, 4 units
      ENGL 5200. Seminar: The Renaissance, 4 units
      ENGL 5300. Seminar: The Enlightenment and 18th Century, 4 units
      ENGL 5400. Seminar: The Nineteenth Century, 4 units
      ENGL 5500. Seminar: The Twentieth Century, 4 units
      ENGL 5600. Seminar: American Literature, 4 units
   C. 1. A maximum of five units to be taken in ENGL 5990. Thesis
        2. A maximum of ten units of postbaccalaureate, 4000-level courses, as approved by the graduate adviser.
   D. Comprehensive examinations:
      Candidates must pass a written and an oral examination covering major figures in English and American literature.
   E. Reading knowledge of an appropriate foreign language as determined by the Department of English, Foreign Languages, and Philosophy.

REQUIREMENTS FOR THE THESIS PROGRAM:

1. A minimum of 30 units of approved graduate credit.
2. The submission of an approved thesis.
3. A written general literature examination.
4. An oral examination upon the thesis and the written examination.

*Specific seminar titles will be announced in the Class Schedule.
REQUIREMENTS FOR THE NON-THESIS PROGRAM

1. A minimum of 30 units of approved graduate credit.
2. The submission of two approved seminar papers written in two different subject areas.
3. A written general literature examination.
4. An oral examination covering the seminar papers and the written examination.

General Prerequisites:

Normally, an undergraduate major in English is expected for admission to graduate seminars. Consultation with an English graduate adviser and approval is required for all graduate credit courses.

WRITING COMPETENCY

All students graduating from California State College, Stanislaus must demonstrate advanced writing competency by successfully completing ENGL 3000 (1 unit) and one of its 2-unit companion courses, HUM 3999 (Humanities), NSCI 3999 (Natural Sciences), or SSCI 3999 (Social Sciences); or ENGL 3007. Students must enroll in both ENGL 3000 and one of the 3999 companion courses during the same semester. All courses will be offered every fall and spring semester and will be graded Credit/No Credit only.

Students who do not demonstrate adequate writing proficiency will be asked to drop ENGL 3000 and its 3999 companion course and enroll in ENGL 0111, Writer's Workshop.

Satisfactory completion of ENGL 3000 and one of the companion subject-based advanced composition courses, or ENGL 3007, satisfies the writing skills competency requirement and the credential advanced composition requirement. A maximum of 3 units towards a degree will be allowed for all former and present advanced composition courses.

COURSE DESCRIPTIONS FOR ADVANCED COMPOSITION COURSES

ENGL 3000. Junior Composition (1)

A four-week course devoted to composition evaluation and writing skills diagnosis. Students will be assigned texts to which they will be asked to respond in writing. Discussion of types of writing and what constitutes good writing. (Formerly ENGL 3001, 3005, and 3008) Prerequisites: Sophomore standing and completion of ENGL 1003 or equivalent; concurrent enrollment in HUM 3999, NSCI 3999, SSCI 3999, or other companion subject-based advanced composition course.

ENGL 3007. Business and Technical Communication (3)

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. Meets the junior-level writing competency requirement. (Formerly 2070) Prerequisite: ENGL 1003.
English, Foreign Languages, & Philosophy

HUM 3999. Junior Composition: Humanities (2)

A nine-week advanced expository composition course, based on selected readings from the humanities, with intensive exercise in writing. Includes consideration of the types and styles of writing most frequently encountered in the various humanities. Prerequisite: Enrollment in or credit earned previously for ENGL 3000.

NSCI 3999. Junior Composition: Natural Sciences (2)

A nine-week advanced expository composition course, based on selected readings from the natural sciences, with intensive exercise in writing. Includes consideration of the types and styles of writing most frequently encountered in the various natural sciences. Prerequisite: Enrollment in or credit earned previously for ENGL 3000.

SSCI 3999. Junior Composition: Social Sciences (2)

A nine-week advanced expository composition course, based on selected readings from the social sciences, with intensive exercise in writing. Includes consideration of the types and styles of writing most frequently encountered in the various social sciences. Prerequisite: Enrollment in or credit earned previously for ENGL 3000.

COURSE DESCRIPTIONS

Lower Division

ENGL 0111. Writer's Workshop (3)

A course emphasizing the development of individual student's writing abilities, with intensive practice in basic writing skills, including grammar, usage, and other processes of composition. Satisfactory completion of this course will allow a student to enroll in ENGL 1003. May be repeated for credit. (Formerly 0103)

ENGL 1003. English Composition I (2)

Directed writing based upon personal experience and then upon analytical reading of expository prose. Designed to help students achieve a clear, more mature expository style. Offered every fall and spring. (Formerly 1000) Prerequisites: English Placement Test (EPT), or successful completion of ENGL 0111, or an approved exemption from the EPT; and concurrent enrollment in PHIL 1001.

ENGL 1004. English Composition II (2)

Directed analytical and interpretive writing based upon the reading of imaginative literature. Designed to help students achieve a clear, more mature expository style. Offered every fall and spring. Prerequisites: ENGL 1003 or equivalent and concurrent enrollment in DRAM 1001.
ENGL 1010. Introduction to Literature (3)

Introduction to fiction, poetry, and drama. Meets the General Education requirement under Humanities. Offered every fall and spring.

ENGL 1011. Introduction to American Literature (3)

Introduction to fiction, poetry, and drama with emphasis of their application in American literature.

ENGL 2010. Critical Approaches to Literature (3)

Basic theories, approaches, techniques, and terminology in the study of literature, with special emphasis on poetry. Prerequisite: ENGL 1000 or equivalent. Offered every fall.

ENGL 2970. Selected Topics offered during Winter Term (4)

Upper Division

ENGL 3007. Business and Technical Communication (3)

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. Meets the junior-level writing competency requirement. (Formerly 2070) Prerequisite: ENGL 1003.

ENGL 3010. Creative Writing Workshop (3)

Methods and techniques of various types of writing. Typical studies include short fiction writing, poetry writing, and/or drama writing. May be repeated for credit. (Formerly 3030)

ENGL 3110. Major British Authors to 1800 (3)

Beowulf and selected works of Chaucer, Spenser, Donne, Jonson, Milton, Dryden, Swift, Pope, and others. Offered every fall. (Formerly 3100)

ENGL 3111. Major British Authors After 1800 (3)

Selected works of Wordsworth, Keats, Browning, Tennyson, Dickens, Arnold, Yeats, Shaw, Joyce, Auden, and others. Offered every spring (Formerly 3200)

ENGL 3209. Medieval Literature (3)

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. (Formerly 3101)
ENGL 3210. English Renaissance Literature (3)

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.

ENGL 3215. Seventeenth Century English Literature (3)

Literature of the period from about 1603 to 1660. Typical studies include works of Donne, Jonson, Marvell, Herbert, and/or others.

ENGL 3220. Eighteenth Century English Literature (3)

Literature of the period from 1660 to about 1780. Typical studies include examples of Restoration drama and works of Dryden, Pope, Swift, Jonson, Boswell, and/or others.

ENGL 3225. English Romantic Literature (3)

Literature of the late eighteenth and early nineteenth centuries. Typical studies include works of Blake, Wordsworth, Coleridge, Byron, Keats, Shelley, and/or others. (Formerly 3201)

ENGL 3230. English Victorian Literature (3)

Literature of the period from 1832 to 1900. Typical studies include Tennyson, Browning, Arnold, Carlyle, and/or others. (Formerly 3204)

ENGL 3235. Modern British Literature (3)

Literature of the late nineteenth and twentieth century. Typical studies include works by Hardy, Yeats, Joyce, Lawrence, Forster, Eliot, and/or others. (Formerly 3202)

ENGL 3400. Major American Authors (3)

Selected works of Emerson, Hawthorne, Thoreau, Melville, Whitman, Twain, James, and others. Offered every spring.

ENGL 3500. Studies in Film (3)

An examination of the film as a verbal and visual medium for story-telling and as a reflection of history and culture. Typical studies include the American sound film, science fiction films, horror films, silent films, American comedy, foreign films, and/or other types of films. May be repeated for credit.
ENGL 3800. Introduction to Linguistics (3)

An introduction to the scientific study of language. Topics covered include dialect study, language acquisition, comparative linguistics, and modern theories of language. (Same as ANTH 3800)

ENGL 3801. Applied Linguistics/Bilingualism (3)

An introduction to linguistics and its application to the teaching of English and foreign languages, particularly with respect to teaching English as a second language.

ENGL 3805. Introduction to Historical Linguistics (3)

An introduction to the study of how languages change. Primary emphasis will be on the history of the English language from prehistoric times to the present, but other languages will be treated. (Formerly 3810) Prerequisite: Consent of instructor.

ENGL 3815. Introduction to Bilingualism (3)

A course for prospective bilingual teachers. Topics to be covered will include the nature of bilingualism, application of linguistic concepts to bilingualism, and factors which hinder or facilitate bilingualism. (Formerly 3830)

ENGL 3930. World Literature in Translation (2-5)

Studies of various aspects of world literature in translation. Typical studies include modern French literature, Eastern European literature, literature of the Spanish Golden Age, Russian literature, German literature, or Japanese literature. (Same as FREN, GERM, SPAN 3930) Different topics may be taken for credit under this number.

ENGL 4010. Advanced Creative Writing (4)

Primarily a workshop for experienced writers, the course includes editorial work on the campus literary magazine, participation in a public reading, and examination of the literary market. Prerequisite: Consent of instructor.

ENGL 4105. English Novel I (3)

Authors to be studied include Defoe, Richardson, Fielding, Sterne, Smollett, Austen.

ENGL 4106. English Novel II (3)

Authors to be studied include Dickens, Thackeray, Bronte, Eliot, Hardy, Conrad.
ENGL 4107. American Novel I (3)

The American novel in the nineteenth century. Authors to be studied include Cooper, Hawthorne, Melville, Twain, Howells, James, Crane, and/or others.

ENGL 4108. American Novel II (3)

The American novel in the twentieth century. Authors to be studied include Dreiser, Hemingway, Fitzgerald, Lewis, Faulkner, Steinbeck, Salinger, and/or others.

ENGL 4130. Dramatic Literature I (3)

Analysis of drama as a literary form: Classics of the Greek, Renaissance, and Restoration theaters.

ENGL 4135. Dramatic Literature II (3)

Analysis of drama as a literary form: Ibsen, Strindberg, Chekhov, Shaw, Brecht, Williams, and/or others.

ENGL 4300. Shakespeare (3)

Representative plays from among the comedies, tragedies, romances, and histories; may also include examples of nondramatic poetry. (Formerly 3401)

ENGL 4305. Chaucer (3)

The works of Chaucer with emphasis on the Canterbury Tales. (Formerly 3403)

ENGL 4310. Milton (3)

Representative poetry and prose of Milton, with emphasis on Paradise Lost. (Formerly 3402)

ENGL 4508. Images of Women in Literature (3)

Studies in the images of women in medieval and Renaissance, 17th-century, 18th-century, 19th-century, or 20th-century literature. Will explore, as a literary study, the changing images of women, the symbols and stereotypes and the actual condition of women. (Formerly 4810)

ENGL 4600. Tutorial Projects in English (3)

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. Prerequisite: Consent of instructor. May be repeated once for credit. Offered every fall and spring.

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ENGL 4602. Children's Literature (3)

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 4603. Adolescent Literature (3)

Study of representative works read by adolescents, including fiction, poetry, and drama.

ENGL 4610. Curriculum and Instruction: English (3)

Contemporary trends and problems in English education with emphasis 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. Prerequisite: Consent of instructor.

ENGL 4700. Interdepartmental Study (2-5)

Various interdepartmental topics. Course content may vary from term to term. Typical courses include: Literature of Urban Life; Medieval English Drama; Literary Backgrounds and Contemporary Performance; Myth in Art and Literature; Backgrounds of American Literature; The Political Novel. Different topics may be taken for credit under this number. Prerequisite: Consent of instructor.

ENGL 4850. English Grammar (3)

An intensive and 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. Prerequisite: ENGL 3800 or consent of instructor.

ENGL 4930. Special Studies in American Literature (2-4)

Special studies in some area of American literature. Course content may vary from term to term. Typical courses include American war literature, the American dream and American literature, the Utopian dream in American literature, or California writers and the California scene. Different titles may be taken for credit under this number.

ENGL 4950. Special Studies in English Literature (1-5)

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.
English, Foreign Languages, & Philosophy

ENGL 4960. Seminar: Problems in Mass Media (3)

An inquiry into some important aspect of mass media as a force in contemporary society. Typical subjects include The Press and the Law, The Media and Politics, and The Media and the Presentation of Violence. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

ENGL 4970. Selected Topics offered during Winter Term (4)

ENGL 4980. Individual Study (1-4)

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. Offered every fall, winter, and spring.

Graduate

ENGL 5000. Graduate Studies in English: Problems and Methodology (5)

Introduction to the graduate study of English with primary focus upon methods of research, bibliography, and the various approaches to the disciplines of literature and criticism.

ENGL 5100. Seminar: Medieval Literature (4)

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 8 units. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5200. Seminar: The Renaissance (4)

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 8 units. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5300. Seminar: The Enlightenment and 18th Century (4)

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 8 units. Prerequisite: ENGL 5000 or consent of instructor.
ENGL 5400. Seminar: The Nineteenth Century (4)

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 8 units. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5500. Seminar: The Twentieth Century (4)

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 8 units. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5600. Seminar: American Literature (4)

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 8 units. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5600. Tutorial Projects in English (1-5)

Inquiry into the processes and methods of basic skills instruction; instruction in the problems and methods of teaching and tutoring students in English composition; to include supervised observation-participation and intern teaching in local settings. Includes weekly on-campus meetings with the student's teacher. Prerequisites: Graduate standing; consent of instructor.

ENGL 5950. Selected Topics in English (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in English. Topics will vary. Different topics may be taken for credit. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5970. Selected Topics offered during Winter Term (4)

ENGL 5980. Individual Study (1-4)

For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: ENGL 5000 or consent of instructor.

ENGL 5990. Thesis (3-5)
**English, Foreign Languages, & Philosophy**

**French**

**REQUIREMENTS FOR THE BACHELOR OF ARTS, FRENCH**

French majors are to:

1. Complete the requirements for Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 24 upper division units; of these no more than 8 units of CR graded course work may apply toward the major.

Completion of an academic minor is not required but is strongly recommended for single subject credential candidates.

**DEGREE MAJOR IN FRENCH**

Prerequisites to the Major:

*FREN 1010, 1020. Elementary French I, II, 8 units

**The Major**

Required courses in the major field:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 3010, 3020.</td>
<td>Advanced French Grammar and Composition I, II</td>
</tr>
<tr>
<td>FREN 3500.</td>
<td>French Phonetics</td>
</tr>
<tr>
<td>FREN 3510.</td>
<td>French Conversation</td>
</tr>
</tbody>
</table>

Elective courses in the major field:

Two courses from the sequence 3300, 3310, 3320, 3330, 3340 | 6 |
Upper division elective courses to total not less than 8 units | 8 |
Total | 24 |

**DEGREE MINOR IN FRENCH**

Twenty-six units, to include at least 12 units in upper division, with a minimum of 14 college units.

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*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.*

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Lower Division

*FREN 1010, 1020. Elementary French I, II, 8 units

Upper Division

FREN 3010, 3020. Advanced French Grammar and Composition I, II, 6 units

One course from the sequence 3300, 3310, 3320, 3330, 3340, 3 units
Upper division electives, 3 units

TEACHING CREDENTIALS

An approved single-subject waiver in Foreign Languages is available for students who wish to declare French as their subject matter teaching area. Students must plan their academic programming carefully with their adviser in order to complete the approved waiver program by the time of graduation.

LIBERAL STUDIES CONCENTRATION IN FRENCH

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 3010, 3020. Advanced French Grammar and Composition I, II</td>
<td>6</td>
</tr>
<tr>
<td>Two courses selected from the following</td>
<td>6</td>
</tr>
<tr>
<td>FREN 3300. Aspects of French Non-Fiction</td>
<td>3 units</td>
</tr>
<tr>
<td>FREN 3310. Aspects of French Drama</td>
<td>3 units</td>
</tr>
<tr>
<td>FREN 3320. Aspects of French Poetry</td>
<td>3 units</td>
</tr>
<tr>
<td>FREN 3330. Aspects of the French Novel</td>
<td>3 units</td>
</tr>
<tr>
<td>FREN 3340. Aspects du Conte Français</td>
<td>3 units</td>
</tr>
<tr>
<td>Upper division electives in French by advisement</td>
<td>3-8</td>
</tr>
<tr>
<td>Total</td>
<td>20-21</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

Lower Division

FREN 1010. Elementary French I (4)

First-year French: audio-lingual approach; understanding, speaking, reading, and writing; introduction to French culture.

*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.
English, Foreign Languages, & Philosophy

FREN 1020. Elementary French II (4)

Continuation of FREN 1010. Prerequisite: FREN 1010 or equivalent, or consent of instructor.

FREN 2010. Intermediate French I (3)

Second-year French, emphasizing the audio-lingual approach. Extensive review of the morphology and syntax of the language. Consideration of French culture. Prerequisite: FREN 1020 or equivalent, or consent of instructor.

FREN 2020. Intermediate French II (3)

Continuation of FREN 2010. Prerequisite: FREN 2010 or equivalent, or consent of instructor.

FREN 2970. Selected Topics offered during Winter Term (4)

Upper Division

FREN 3010. Advanced French Grammar and Composition I (3)

Oral and written practice in French, syntactic analysis, written and oral composition, and supplementary reading. Taught in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 3020. Advanced French Grammar and Composition II (3)

Continuation of FREN 3010. Prerequisite: FREN 3010 or equivalent, or consent of instructor.

FREN 3300. Aspects of French Non-Fiction (3)

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)

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)

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.

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FREN 3330. Aspects of the French Novel (3)

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)

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. Class conducted in French. Prerequisite: FREN 2020 or consent of instructor.

FREN 3500. French Phonetics (3)

A detailed study of modern French phonology and its representation, including work on dialectal differences as well as analysis of contrasts with English. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 3510. French Conversation (1)

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 (2-5)

Studies in various aspects of French literature in English translation. Course content may vary from term to term. Typical courses include: Arthurian Romances; Women in French Literature; French Existential Literature. Different titles may be taken for credit under this course number. (Same as ENGL 3930)

FREN 4070. French Classicism (3)

A study of the major literary and intellectual developments in France during the seventeenth century; an analysis of the development of major genres. Conducted in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor.

FREN 4080. French Romanticism (3)

Major works of the poetry, drama, and novels of the French Romanticists, beginning with Mme. de Staël and going through Edmond Rostand. Conducted in French. Prerequisite: FREN 2020 or equivalent, or consent of instructor.
English, Foreign Languages, & Philosophy

FREN 4810. Linguistics and Language Instruction (3)

An overview of the field of linguistics and its applicability for teaching foreign languages in the secondary schools. Prerequisite: FREN 3020 or consent of instructor.

FREN 4950. Selected Topics in French (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in French. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

FREN 4970. Selected Topics offered during Winter Term (4)

FREN 4980. Individual Study (1-4)

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.

FREN 5980. Individual Study (1-4)

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.
English, Foreign Languages, & Philosophy

German

DEGREE MINOR IN GERMAN

Twenty-six units, to include at least 12 units in upper division, with a minimum of 14 college units.

Lower Division

*GERM 1010, 1020. Elementary German I, II, 8 units
*GERM 2010, 2020. Intermediate German I, II, 6 units

Upper Division

GERM 3010, 3020. Advanced German Grammar & Composition I, II, 6 units

Additional courses in upper division German, as approved by adviser, to total not less than 6 units.

TEACHING CREDENTIALS

An approved single subject waiver in Foreign Languages is available for students who wish to declare German as their subject matter teaching area. Students must plan their academic programming carefully with their adviser in order to complete the approved waiver program at the time of graduation.

LIBERAL STUDIES CONCENTRATION IN GERMAN

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 2010, 2020. Intermediate German I, II or equivalent</td>
<td>0-6</td>
</tr>
<tr>
<td>GERM 3010. Advanced German Grammar &amp; Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 3110. Modern German Thought</td>
<td>3</td>
</tr>
<tr>
<td>GERM 3201. Classics of German Literature</td>
<td>3</td>
</tr>
<tr>
<td>GERM 3210. Modern German Fiction</td>
<td>3</td>
</tr>
<tr>
<td>Upper division electives in German, by advisement</td>
<td>3-8</td>
</tr>
<tr>
<td>Total</td>
<td>20-21</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

Lower Division

GERM 1010. Elementary German I (4)

First-year German, audio-lingual approach; understanding, speaking, reading, and writing; introduction to German culture.

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 German or the equivalent is required for admission to upper division courses.
GERM 1020. Elementary German II (4)
Continuation of GERM 1010. Prerequisite: GERM 1010 or equivalent, or consent of instructor.

GERM 2010. Intermediate German I (3)
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.

GERM 2020. Intermediate German II (3)
Continuation of GERM 2010. Prerequisite: GERM 2010 or equivalent, or consent of instructor.

GERM 2970. Selected Topics offered during Winter Term (4)

Upper Division

GERM 3010. Advanced German Grammar and Composition I (3)
Oral and written practice in German, syntactical analysis, written and oral composition, and supplementary reading. Prerequisite: The equivalent of two years of college-level German, or consent of instructor.

GERM 3020. Advanced German Grammar and Composition II (3)
Continuation of GERM 3010. Prerequisite: GERM 3010 or equivalent, or consent of instructor.

GERM 3110. Modern German Thought (3)
An introduction to the German mind as seen through literature, politics, history, religion, music. (Formerly 3100) Prerequisite: The equivalent of two years of college-level German or consent of instructor.

GERM 3201. Classics of German Literature (3)
Major works of German literature from the beginnings to the 19th century, within the context of literary-philosophical movements. Readings include works of Walter von der Vogelweide, Grimmelshausen, Lessing, Goethe, Schiller, Eichendorff, Kleist, Buchner. Prerequisite: Two years of college-level German or equivalent, or consent of instructor.

GERM 3210. Modern German Fiction (3)
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)

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: Equivalent of two years of college-level German, or consent of instructor.

GERM 3500. German Phonetics (3)

A detailed study of modern German phonology and its representation, including work on dialectical differences as well as analysis of contrasts with English. Prerequisite: The equivalent of one year of college-level German, or consent of instructor.

GERM 3510. German Conversation (1)

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: The equivalent of two years of college-level German, or consent of instructor.

GERM 3930. German Literature in Translation (2-5)

Studies in various aspects of German literature in English translation. Course content may vary from term to term. Typical courses include: The Age of Goethe; Modern German Fiction in Translation; Modern German Drama. Different titles may be taken for credit under this course number. (Same as ENGL 3930)

GERM 4810. Linguistics and Language Instruction (3)

An overview of the field of linguistics and its applicability for teaching foreign languages in the secondary schools. Prerequisite: GERM 3010 or consent of instructor.

GERM 4950. Selected Topics in German (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in German. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

GERM 4970. Selected Topics offered during Winter Term (4)

GERM 4980. Individual Study (1-4)

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.

GERM 5980. Individual Study (1-4)

For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.
English, Foreign Languages, & Philosophy

Spanish

REQUIREMENTS FOR BACHELOR OF ARTS, SPANISH

Spanish majors are to:
1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 24 upper division units; of these, no more than 8 units of CR-graded course work may apply toward the major.
Completion of an academic minor is not required, but is strongly recommended for single subject credential candidates.

DEGREE MAJOR IN SPANISH

Prerequisites to the Major:
*SPAN 1010, 1020. Elementary Spanish I, II, 8 units
**OR SPAN 2011, 2012. Spanish for the Native Speaker I, II, 6 units

The Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3010, 3020. Advanced Spanish I, II</td>
<td>6</td>
</tr>
<tr>
<td>3 courses from the following: 3200, 3210, 3300, 3310</td>
<td>9</td>
</tr>
<tr>
<td>Additional courses in upper division Spanish, as approved by the major adviser, to total not less than 9 units</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
</tr>
</tbody>
</table>

DEGREE MINOR IN SPANISH

Twenty-eight units, to include at least 12 units in upper division, with a minimum of 14 college units.

Lower Division

*SPAN 1010, 1020. Elementary Spanish I, II, 8 units
**OR SPAN 2011, 2012. Spanish for the Native Speaker I, II, 6 units

*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.

**Only those students who can demonstrate native proficiency may enroll in this intermediate course for native speakers.

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Upper Division

SPAN 3010, 3020. Advanced Spanish I, II, 6 units

Additional courses in upper division Spanish, as approved by the department, to total not less than 6 units.

TEACHING CREDENTIALS

An approved single subject waiver in Foreign Languages is available for students who wish to declare Spanish as their subject matter teaching area. Students must plan their academic programming carefully with their adviser in order to complete the approved waiver program at the time of graduation.

LIBERAL STUDIES CONCENTRATION IN SPANISH

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 2010, 2020</td>
<td>Intermediate Spanish I, II</td>
<td>0-6</td>
</tr>
<tr>
<td>OR SPAN 2011, 2012</td>
<td>Spanish for the Native Speaker</td>
<td>6</td>
</tr>
<tr>
<td>OR equivalent</td>
<td></td>
<td>0-6</td>
</tr>
<tr>
<td>SPAN 3010, 3020</td>
<td>Advanced Spanish I, II</td>
<td>6-14</td>
</tr>
<tr>
<td>Upper division electives in Spanish by advisement</td>
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<td>8-14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

Lower Division

SPAN 1010. Elementary Spanish I (4)

First-year Spanish. Audio-lingual approach; understanding, speaking, reading, and writing.

SPAN 1020. Elementary Spanish II (4)

Continuation of SPAN 1010. Prerequisite: SPAN 1010 or equivalent.

SPAN 2010. Intermediate Spanish I (3)

Second-year Spanish, with emphasis on audio-lingual work in the language laboratory. Includes review of language structure patterns and reading assignments. Consideration of Hispanic cultures. Prerequisite: One year college-level Spanish or equivalent.

SPAN 2011. Spanish for Native Speakers I (3)

Beginning Spanish for native Spanish speakers with no minimal training in the language. Cognition of language structures through reading, writing, and speaking is the aim of the course.

SPAN 2012. Spanish for Native Speakers II (3)

Intermediate Spanish for native Spanish speakers with no minimal training in the language. Cognition of language structures through reading, writing, and speaking is the aim of the course.

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SPAN 2020. Intermediate Spanish II (3)
Continuation of SPAN 2010. Prerequisite: SPAN 2010 or equivalent.

SPAN 2950. Selected Topics in Spanish (Topic to be specified in Class Schedule) (1-5)
Development of a selected topic in Spanish. Topics will vary. Different topics may be taken for credit. Prerequisite: Consent of instructor.

SPAN 2970. Selected Topics offered during Winter Term (4)

Upper Division

SPAN 3010. Advanced Spanish I (3)
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: The equivalent of two years of college-level Spanish, or consent of instructor.

SPAN 3020. Advanced Spanish II (3)
Continuation of SPAN 3010. Required of majors and minors. Prerequisite: SPAN 3010 or equivalent, or consent of instructor.

SPAN 3200. Literature of Spain I (3)
A study of selected complete works by Spanish writers. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3210. Literature of Spain II (3)
A study of selected complete works by Spanish writers. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3300. Literature of Spanish America I (3)
From the beginnings to 1880. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3310. Literature of Spanish America II (3)
From 1880 to the present. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3520. Spanish Conversation (1)
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)

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. (Formerly 3500, 3510) Prerequisite: SPAN 2020 or equivalent or consent of instructor.

SPAN 3600. History and Civilization of Spain (3)

A brief survey of the history of Spain, its culture and civilization. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3610. History and Civilization of Spanish America (3)

A survey course of the history and civilization of Spanish America. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 3700. La literatura femenina hispánica (3)

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)

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)

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)

A course dealing with the cultural background of the Chicano. Special emphasis will be given to works (prose, poetry, theatre) written by contemporary Chicano writers. Conducted in Spanish and English. Prerequisite: Student must be bilingual.

SPAN 3930. Spanish Literature in Translation (3)

Studies in various aspects of Hispanic literature in English translation. Course content may vary from term to term in accordance with the last digit: SPAN 3932. Golden Age Masterpieces in Translation; SPAN 3933. Spanish Literature 1900-1936 in Translation; and SPAN 3934. Contemporary Latin American Prose in Translation. Each of these titles can be taken for credit. This course
English, Foreign Languages, & Philosophy

does not fulfill any requirements for the Spanish major or minor. (Same as ENGL 3930.)

SPAN 4030. Gramática española (3)

Oral and written practice in Spanish, syntactical analysis. Prerequisite: SPAN 2020 and/or consent of instructor.

SPAN 4201. Teatro Hispanico (3)

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. (Formerly 4200)

SPAN 4231. La Novela de la Revolucion Mexicana (3)

Study of selected works by Mexican writers during the Mexican Revolution. To acquaint the student with the writers of a genuine Mexican literature which reflects the Mexican society and its roots and politics.

SPAN 4232. Novela Hispanica (3)

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.

SPAN 4240. Cervantes (3)

A study of the works of Cervantes including Don Quijote. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 4600. Literatura mexicana (3)

Authors of México and their works from Cortés to the contemporary period. Prerequisite: SPAN 3010 or consent of instructor.

SPAN 4810. Linguistics and Language Instruction (3)

An overview of the field of linguistics and its applicability for teaching foreign languages in the secondary schools. Prerequisite: SPAN 3020 or consent of instructor.

SPAN 4950. Selected Topics in Spanish (Topics to be specified in Class Schedule) (1-5)

Topics vary each term; different topics may be taken for credit. Prerequisite: SPAN 3010 or consent of instructor

SPAN 4970. Selected Topics offered during Winter Term (4)

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SPAN 4980. Individual Study (1-4)

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.

SPAN 5980. Individual Study (1-4)

For postbaccalaureate students needing advanced or specialized study. May be repeated for 6 units. Prerequisite: Consent of instructor.
**English, Foreign Languages, & Philosophy**

**Philosophy**

Philosophy's subject matter is the critical analysis of, and rational reflection on, persistent human problems of knowledge, of existence, of conduct, of art, and of religion. Courses offered present both the analytical and speculative aspects of philosophy, including as they do study of outstanding historical and contemporary philosophical statements, as well as practice of the analytical and argumentative techniques needed to discern, formulate, and defend philosophical principles of one's own.

**DEGREE MINOR IN PHILOSOPHY**

Fifteen units, including nine in upper division courses, distributed as follows:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1010</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>OR PHIL 1100</td>
<td>Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2200</td>
<td>Ancient Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>OR PHIL 2230</td>
<td>Seventeenth &amp; Eighteenth Century Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3300</td>
<td>Theory of Knowledge</td>
<td>4</td>
</tr>
<tr>
<td>OR PHIL 3400</td>
<td>Ethics</td>
<td>4</td>
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<tr>
<td>OR HIST 3890</td>
<td>The Oriental Mind</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 4250</td>
<td>Recent &amp; Contemporary Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>OR PHIL 4450</td>
<td>Philosophy of Religion</td>
<td>4</td>
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<tr>
<td>OR PHIL 4500</td>
<td>Aesthetics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 4980</td>
<td>Individual Study</td>
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**Total** 15

**LIBERAL STUDIES CONCENTRATION IN PHILOSOPHY**

Twenty-one units distributed as follows:

<table>
<thead>
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<th>Units</th>
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<tbody>
<tr>
<td>PHIL 1010</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>OR PHIL 1100</td>
<td>Logic</td>
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<tr>
<td>PHIL 2200</td>
<td>Ancient Greek Philosophy</td>
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<tr>
<td>OR PHIL 2230</td>
<td>Seventeenth &amp; Eighteenth Century Philosophy</td>
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</tr>
<tr>
<td>PHIL 3300</td>
<td>Theory of Knowledge</td>
<td>4</td>
</tr>
<tr>
<td>OR PHIL 3400</td>
<td>Ethics</td>
<td>4</td>
</tr>
<tr>
<td>OR HIST 3890</td>
<td>The Oriental Mind</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 4250</td>
<td>Recent &amp; Contemporary Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>Upper-division electives, as approved by adviser</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Total** 21
PHIL 1000. Reasoning (3)
A study of reasoning with emphasis on the natural language. Course aims to develop and improve skills and critical attitudes needed to analyze and evaluate the kinds of arguments and persuasive techniques encountered in everyday life. Course orientation is practical, not theoretical.

PHIL 1001. Logic in Writing (1)
An adjunct to ENGL 1003. Coherence, consistency, and logical expression in writing; the uses of language and clarity in expression; common fallacies in reasoning. Prerequisite: Concurrent enrollment in ENGL 1003.

PHIL 1010. Introduction to Philosophy (3)
Introduction to philosophical method by examining traditional and contemporary philosophical problems.

PHIL 1100. Logic (3)
Analysis of the methods and principles of deductive reasoning, including traditional logic; introduction to symbolic logic and to inductive argument.

PHIL 2200. Ancient Greek Philosophy (3)
A general survey of the history of Western philosophy from the pre-Socratic to the end of the Classical Period.

PHIL 2230. Seventeenth & Eighteenth Century Philosophy (3)
A general survey of the history of Western philosophy from the Renaissance through the Eighteenth Century.

PHIL 2400. Contemporary Moral Problems (3)
An examination of social issues such as racial and sexual discrimination, civil disobedience, war, abortion, law and morals, business and professional ethics, morals and the environment, and ethical problems that result from recent advances in medicine and biology. An effort will be made to discern the way in which fundamental ethical problems are manifested in these contemporary, practical problems.

PHIL 2950. Selected Topics in Philosophy (Topics to be specified in Class Schedule) (1-5)
Development of a selected topic in philosophy. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.
English, Foreign Languages, & Philosophy

PHIL 2970. Selected Topics offered during Winter Term (4)

Upper Division

PHIL 3000. Humanistic Inquiry (3)

Nature and interrelationships of the humanistic disciplines, including the performing and creative arts, and their relations with the natural and social sciences.

PHIL 3300. Theory of Knowledge (4)

Analysis of the concepts of knowledge, truth, belief, evidence, certainty; readings in classical and contemporary theories. Prerequisites: 3 units in philosophy and upper division standing.

PHIL 3400. Ethics (4)

Analysis of the concepts of right and wrong, good and bad, utility and duty, freedom, obligation, responsibility; readings in classical and contemporary theories. Prerequisites: 3 units in philosophy and upper division standing.

PHIL 3410. Philosophy of Law (4)

A study of problems and controversies in connection with the nature of law and its bearing on human conduct.

PHIL 4250. Recent and Contemporary Philosophy (4)

A general survey of the history of Western philosophy from the end of the Enlightenment to the present day. Prerequisites: 3 units in philosophy and upper division standing.

PHIL 4401. Professional Ethics (3)

An examination of moral issues as they apply to professions. Ethical issues in business, law, and medicine will be used as the model for dealing with moral problems in the professions generally. Topics to include: Professional codes of ethics, business goals, values and practices, confidentiality, informed consent and coercion, paternalism. (Same as BUS 4401)

PHIL 4410. Punishment and Responsibility (4)

An examination of problems relevant to the practice of punishment and determinations of responsibility: the aim and justification of punishment, the specific conditions of responsibility. The analysis of the concepts of "punishment," "responsibility," "retribution," "guilt," "shame," etc.
PHIL 4450. Philosophy of Religion (4)

Analysis of religious concepts with emphasis on the logic of religious discourse. Prerequisites: 3 units in philosophy and upper division standing.

PHIL 4500. Aesthetics (4)

Philosophy of art; analysis of aesthetic experience; principles of criticism. Prerequisites: 3 units in philosophy and upper division standing.

PHIL 4950. Selected Topics in Philosophy
(Topics to be specified in Glass Schedule) (1-5)

Development of a selected topic in philosophy. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

PHIL 4970. Selected Topics offered during Winter Term (4)

PHIL 4980. Individual Study (1-4)

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 5980. Individual Study (1-4)

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.
Environmental Sciences

Walter Tordoff, Ph.D., Coordinator

A Concentration for Majors in the Natural and Physical Sciences

Within the areas of natural and physical sciences, a concentration in environmental sciences is offered which is designed to acquaint the student with environmental problems and research in the areas of biological sciences, chemistry, and physical sciences. The student 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 college including the completion of a major in biological sciences, chemistry, physical science, or physics. In addition, the student must complete the 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.

PREREQUISITES TO THE ENVIRONMENTAL SCIENCE CONCENTRATION

Each student in the program is expected to complete these courses or their equivalent:

- BOTY 1050. Introduction to Botany, 4 units
- ZOOL 1050. Introduction to Zoology, 4 units
- CHEM 1100, 1110. Principles of Chemistry I, II, 10 units
- MATH 1600. Statistics, 4 units
  or MATH 3661. Modern Probability Theory, 4 units
- MATH 2000. FORTRAN Programming, 3 units
- PHYS 1100, 1110. Basic Physics I, II, 10 units
  or PHYS 2250, 2260. General Physics I, II, 8 units
  and PHYS 2350, 2360. General Physics Lab I, II, 2 units

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Environmental Sciences

ENVIRONMENTAL SCIENCE CONCENTRATION

Each student will complete the following course work:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3630. Ecology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2010. Quantitative Analysis &amp; Basic</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Techniques, 4 units</td>
<td></td>
</tr>
<tr>
<td>or CHEM 3650. Aquatic Chemistry, 3 units</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1410. Calculus I, 4 units</td>
<td></td>
</tr>
<tr>
<td>or MATH 1910. Calculus with Applications I, 3 units</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1420 or MATH 1920 is recommended.</td>
<td></td>
</tr>
<tr>
<td>NSCI 4960. Seminar in Environmental Science, 1 unit</td>
<td>2</td>
</tr>
<tr>
<td>(two semesters required)</td>
<td></td>
</tr>
<tr>
<td>PHSC 3000. Physical Science of the Environment, 3 units</td>
<td>3</td>
</tr>
<tr>
<td>or GEOL 3000. Physical &amp; Environmental Geology, 3 units</td>
<td></td>
</tr>
<tr>
<td>BIOL 4980, CHEM 4980, PHYS 4980, or PHSC 4980, Individual Study, 4 units</td>
<td></td>
</tr>
<tr>
<td>This study must be on an environmentally related problem which has been selected in consultation with the adviser</td>
<td>4</td>
</tr>
</tbody>
</table>

Total ............................................... 20-21

Each student should include additional environmental courses in consultation with the adviser.

COURSE DESCRIPTION

NSCI 4960. Seminar in Environmental Science  (1)

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.
Ethnic Studies
Richard L. Luevano, M.A., Assistant Professor
Delo E. Washington, Ph.D., Assistant Professor

Ethnic Studies is a multidisciplinary program that coordinates a variety of courses, activities, and projects designated to enhance the understanding of the roles, functions, and life styles of American ethnic minority peoples.

A sequential offering of courses has been made possible through the presentation of courses in existing academic departments and through special interdisciplinary courses presented directly through the ethnic studies program. Special advising schedules of ethnic studies course offerings are made available to advisers and students each semester. Further information may be obtained by consulting directly with the ethnic studies faculty members. Students interested in obtaining a special ethnic studies major can do so by consulting directly with the Director of Ethnic Studies.

DEGREE MINOR IN ETHNIC STUDIES

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

DEGREE MINOR IN CHICANO STUDIES

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

DEGREE MINOR IN BLACK STUDIES

18 units in the ethnic studies program in Black 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

Units

Lower Division, one course selected from:

Category I ........................................... 3

Upper Division, 17 units as approved by the major adviser,
to include:

Course work from Categories II-IV .................... 6-11
Course work from Category V ......................... 6-11
Total ............................................... 20

The following is a list of the courses that are offered in
Asian American Studies, Black Studies, Chicano Studies and Native
American Studies, and may be designated according to the following
categories:

Category I
An introduction to the study of the role, function, and life
styles of American ethnic groups.

ETHS 2000. Contemporary Black Studies, 3 units
ETHS 2100. Contemporary Chicano Studies, 3 units
ETHS 2200. Contemporary Asian American Studies, 3 units
ETHS 2300. Contemporary Native American Studies, 3 units

Category II
A detailed study of the cultural development of ethnic groups
in America.

ANTH 3070. Peoples of Africa, 3 units
ANTH 3350. The North American Indian, 3 units
ANTH 3360. The Indians of California and Western North
America, 3 units
ANTH 3370. Native Peoples of Mexico, 3 units

Category III
A detailed study of the historical development of each
minority group in America.

HIST 3510. Latin America in Colonial Times, 3 units
HIST 3710. Mexican American History, 3 units
HIST 3860. Africa Before 1800, 3 units
HIST 3870. Africa, 1800-1945, 3 units
HIST 3880. Contemporary Africa, 1945 to the Present, 3 units
Ethnic Studies

Category IV

A study of the psychological, sociological, economic, educational, and political adjustments necessary for members of each of these groups to function in American society.

EDUC 4200. Teaching the Culturally Different, 3 units
ETHS 3000. Mexican American Politics Since 1850, 3 units
ETHS 4000. Mexican American Family, 3 units
ETHS 4010. The Black American Family, 3 units
ETHS 4020. The Black Woman (Soul Sister), 4 units
SOCL 3010. Race & Ethnic Relations, 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 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
or
ANTH 4050. Ethnographic Research Methods, 3-4 units
ETHS 4970. Winter Term Ethnic Studies Courses, 4 units
ETHS 4980. Individual Study, 1-4 units

COURSE DESCRIPTIONS

Lower Division

ETHS 1100. Communication Skills and the Minority Student (3)

Sociolinguistic approach to academic problems peculiar to the minority student, emphasizing the structural differences between ordinary speech and the written "University Dialect", and focusing on academic modes of argument, tools and techniques of research and readings in the rich and varied modes of expression created by minorities.

ETHS 1200. Higher Education and the Minority Student (3)

Social psychological approach to identifying individual and group characteristics of the minority student as a subculture on the college campus. Socio-economic background, parents' level of education, interests, attitudes, and values of the nontraditional student in postsecondary settings will be investigated. Reports on relevant research will be reviewed, assessed, and considered for application purposes.

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Ethnic Studies

ETHS 2000. Contemporary Black Studies (3)

A survey of the Black experience, a look at the distinctive Black 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.

ETHS 2100. Contemporary Chicano Studies (3)

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 bilinguality.

ETHS 2200. Contemporary Asian American Studies (3)

A survey of the Asian American experience, a look at the various 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 2300. Contemporary Native American Studies (3)

A survey of the Native American experience, a look at the various Native 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 problems encountered on the reservations, Bureau of Indian Affairs policies, and the "new Indian".

ETHS 2950. Selected Topics in Ethnic Studies (Topics to be specified in Class Schedule) (1-5)

ETHS 2970. Selected Topics offered during Winter Term (4)

Upper Division

ETHS 3000. Mexican American Politics Since 1850 (3)

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)

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. Prerequisite: ETHS 2100.

ETHS 4010. The Black American Family (3)

A social psychological approach to studying the Black 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 is also considered.

ETHS 4020. The Black Woman (Soul Sister) (4)

A review of popular notions about the identity of the black 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 black woman's behavior will be offered from a social psychological perspective. Prerequisite: None.

ETHS 4200. The Minority Experience (3)

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., Black, Chicano, Asian American, and Native American.

ETHS 4940. Field Work in Ethnic Studies (4)

Work in ethnic relations performed in a community, an institution, or an agency setting is arranged. 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.

ETHS 4950. Selected Topics in Ethnic Studies (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of ethnic studies. Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

ETHS 4960. Seminar in Ethnic Studies (5)

A synthesis of existing knowledge from ethnic studies material; relating pertinent background information to special independent
Ethnic Studies

projects. Prerequisites: Course work in ethnic studies and consent of instructor.

ETHS 4970. Selected Topics offered during Winter Term (4)

ETHS 4980. Individual Study (1-4)

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.
Exceptional Children and Youth
A Degree Minor or Liberal Studies Concentration
David E. Lema, Ed.D., Coordinator

The Liberal Studies concentration and degree minor in Exceptional Children and Youth were developed primarily for students interested in teaching the learning handicapped at the elementary and secondary levels, but all undergraduates may find the programs valuable in better understanding exceptionality.

The 15 upper division units common to both minor and concentration satisfy the generic requirements for State teacher certification in exceptionality. In order to complete the advanced requirements leading to the learning handicapped teaching credentials, students must also obtain the basic elementary (MS) or secondary (SS) teaching credential. See the Education section of the Catalog for descriptions of these programs. The Coordinator for the Exceptional Children and Youth minor/concentration will provide guidance to those students interested in becoming teachers.

The minor requires the 15 upper division units shown.

The Liberal Studies concentration requires a minimum of 20 units including the 15 upper division units shown. Required courses taken to satisfy the Area A through D of the Liberal Studies major may be double counted for the concentration.

Winter Term courses normally will not substitute for minor or concentration required courses. Maintain contact with the minor/concentration coordinator in the event of any course work changes in the generic area of the credential program.

Lower Division

Prerequisite to the required psychology courses:

PSYC 2010. Introduction to Psychology, 3 units

Upper Division

(Generic) Requirements minor/concentration:

EDUC 4310. Intro to Special Education Programs, 3 units
PSYC 3130. Human Development, 3 units
PSYC 4150. Learning Disabilities, 3 units
SPCH 3010. Language and Speech Development, 3 units
SPCH 4721. Practicum in Development Assessment, 3 units

Recommended Electives:

EDUC 4200. Teaching the Culturally Different, 3 units
PHED 3800. Adapted Physical Education, 3 units
PHED 4200. Motor Learning, 3 units
PSYC 4130. Psychological Disorders of Children, 3 units
PSYC 4750. Applied Behavior Analysis for Severely and Learning Handicapped, 3 units

Other courses from ethnic studies, sociology, and communication studies by advisement.
Geography

Leon S. Pitman, Ph.D., Associate Professor, Chair
Melvin H. Aamodt, Ph.D., Professor
Walter Olson, Ph.D., Professor
Ida I. Bowers, Ph.D., Associate Professor

Geography is concerned with the interrelationships between the environmental characteristics of the earth and man's 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 offers the degree Bachelor of Arts, Geography, as well as courses for a concentration in the liberal studies major, or as one of three fields of interest in the social sciences major. A minor in geography is also available. In addition, its courses are open to all students interested in obtaining a better understanding of the world in which they live.

Requirements for the Bachelor of Arts, Geography

Geography majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites for the major.
3. Complete the major of not less than 27 upper division units as approved by the major adviser. Eight units of Winter Term CR-graded course work may apply toward the major.

Completion of a minor is recommended but not required.

Degree Major in Geography

Prerequisites to the Major:

1. One of the following courses:
   GEOG 2000. Interaction: Man and the Earth, 3 units
   GEOG 2010. Introduction to the Physical Environment, 3 units

2. And any one of the following:
   GEOG 2020. Introduction to Cultural Geography, 3 units
   GEOG 2500. Eurasia and Africa, Lands and Cultures (3)
   GEOG 2510. New World Lands and Cultures (3)
3. And the following course which should be taken early in the program of the student:

MDIS 2000. Library Resources, 2 units

Students are expected to take additional courses in supporting fields that relate to their career interests. See your adviser for further information.

The Major

A minimum of 27 upper division semester units in geography selected as specified in the following:

A. Any combination of 8 or more units from the following two categories of Geography, but including at least one course from Group 1 and one from Group 2.

1. Topical Human Geography
   - GEOG 3020. Human Ecology, 3 units
   - GEOG 3070. Agricultural Geography, 3 units
   - GEOG 3300. Geography of Economic Activities, 3 units
   - GEOG 4301. Geography and Environmental Planning, 3 units
   - GEOG 4350. Urban Geography, 3 units

2. Topical Physical Geography
   - GEOG 3100. Climatology, 3 units
   - GEOG 3120. Geomorphology, 3 units

B. Any combination of 6 or more units from the following:

Regional Geography
   - GEOG 3510. Geography of North America, 4 units
   - GEOG 3550. Geography of Europe, 3 units
   - GEOG 3570. Geography of the Soviet Union and its Satellites, 3 units
   - GEOG 3590. Geography of Asia, 4 units
   - GEOG 4200. Geography of Developing Areas, 3 units
   - GEOG 4510. Geography of California, 3 units
   - GEOG 4650. Seminar in Regional Geography, 1-3 units

C. Six units or two courses from the following of which one course must be selected from Group 1 and one course from Group 2. Students preparing for a career in teaching may take GEOG 4840 in lieu of courses in Group 1.

Methodology in Geography

1. Applied Methods
   - GEOG 3700. Cartographic Presentation, 3 units
   - GEOG 3710. Remote Sensing of the Environment, 2 units
Geography

2. Research and Writing
   GEOG 4710. Field Studies, 3 units
   GEOG 4990. Senior Thesis, 3 units

3. Other Methodology
   GEOG 4840. Geography & Earth Sciences for Teachers, 3 units

D. Upper division electives in geography to make a total of at least 27 units, including those upper division units listed above.

ELECTIVE CONCENTRATIONS IN THE MAJOR

If a student so desires, he or she may include a concentration in one of three areas as part of the major. Concentrations are offered in applied geography, human geography, and physical geography. Requirements for each are listed below.

CONCENTRATION IN APPLIED GEOGRAPHY

This concentration is designed to provide a core of geography courses which have a practical concern with current environmental, urban and regional problems or which provide tools for the study of such problems. The concentration is especially useful to students who plan on careers in planning, public administration, resource management, etc.

Complete the requirements for the major so as to include the following:

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3020</td>
<td>Human Ecology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3700</td>
<td>Cartographic Presentation</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4301</td>
<td>Geography and Environmental Planning</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4350</td>
<td>Urban Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Courses** (A minimum of two courses from the following)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3300</td>
<td>Geography of Economic Activities</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3710</td>
<td>Remote Sensing of the Environment</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 4200</td>
<td>Geography of Developing Areas</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4710</td>
<td>Field Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 17-18 units

Appropriate Winter Term or special seminar courses may be substituted in the elective category upon prior approval by adviser. Qualified students are also encouraged to complete a period of internship with a public or private agency. GEOG 4940, Internship in Geography, is available only to students who have been admitted to the Internship Program of the Anthropology/Geography Department. Contact the secretary of the department for further details.
CONCENTRATION IN HUMAN GEOGRAPHY

Complete the requirements for the major so as to include the following:

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3020</td>
<td>Human Ecology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3300</td>
<td>Geography of Economic Activities</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses: (A minimum of 9 units from the following) 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3070</td>
<td>Agricultural Geography, 3 units</td>
<td></td>
</tr>
<tr>
<td>GEOG 4200</td>
<td>Geography of Developing Areas, 3 units</td>
<td></td>
</tr>
<tr>
<td>GEOG 4301</td>
<td>Geography and Environmental Planning, 3 units</td>
<td></td>
</tr>
<tr>
<td>GEOG 4350</td>
<td>Urban Geography, 3 units</td>
<td></td>
</tr>
</tbody>
</table>

Total .................................................................. 15

Appropriate Winter Term or special seminar courses may be substituted in the elective category by prior advisement.

CONCENTRATION IN PHYSICAL GEOGRAPHY

Complete the requirements for the major so as to include the following:

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3100</td>
<td>Climatology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3120</td>
<td>Geomorphology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3700</td>
<td>Cartographic Presentation, 3 units</td>
<td></td>
</tr>
<tr>
<td>OR GEOG 3710. Remote Sensing of the Environment, 2 units</td>
<td>2-3</td>
<td></td>
</tr>
</tbody>
</table>

Total .................................................................. 8-9

Elective Courses: (A minimum of two courses from the following) 2-3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 4301</td>
<td>Geography and Environmental Planning, 3 units</td>
<td></td>
</tr>
<tr>
<td>GEOG 4710</td>
<td>Field Studies, 3 units</td>
<td></td>
</tr>
<tr>
<td>GEOG 3700</td>
<td>Cartographic Presentation, 3 units</td>
<td></td>
</tr>
<tr>
<td>OR GEOG 3710. Remote Sensing of the Environment, 2 units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Whichever one was not used as the required course above.)

Total .................................................................. 14-15

Appropriate Winter Term or special seminar courses may be substituted in the elective category by prior advisement.
DEGREE MINOR IN GEOGRAPHY

Sixteen semester units approved by the minor adviser are required, including at least 12 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

(See the listing above for courses in each of these categories.)

LIBERAL STUDIES CONCENTRATION IN GEOGRAPHY

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.

1. Complete one of the following lower division courses: 3 units
   - GEOG 2000. Interaction: Man & the Earth
   - GEOG 2010. Introduction to the Physical Environment
   - GEOG 2020. Introduction to Cultural Geography
   - GEOG 2500. Eurasia and Africa, Lands and Cultures
   - GEOG 2510. New World Lands and Cultures

2. Complete one of the following courses in the methodology of geography: 3 units
   - GEOG 3700. Cartographic Presentation
   - GEOG 4710. Field Studies
   - GEOG 4840. Geography & Earth Science for Teachers

3. Complete the following regional course: 4 units
   - GEOG 3510. Geography of North America

4. Additional units in geography: 10 units
   Total: 20 units

Course work selection should be based on student's interest and career goals.

It is recommended that students planning on a teaching career include GEOG 4840, Geography and the Earth Sciences for Teachers, in their electives.

REQUIREMENTS FOR GEOGRAPHY AS A FIELD OF INTEREST IN THE SOCIAL SCIENCES MAJOR

Students may choose to study geography as part of a Social Sciences major. See Social Sciences, Requirements for the Bachelor of Arts.

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TEACHING CREDENTIALS

Majors in Geography interested in a Social Sciences major for a single subject credential should review Plan II of the Social Sciences waiver described in the Social Sciences section of the catalog. Please refer to the Education section of the catalog for a description of other requirements to be completed for the single subject credential.

COURSE DESCRIPTIONS

Lower Division

GEOG 2000. Interaction: Man and the Earth (3)

A synthesis of basic concepts in human and physical geography. Analysis and description of spatial distributions; patterns of human population and cultures; man's role in changing earth environments.

GEOG 2010. Introduction to the Physical Environment (3)

Analysis of the distribution and character of the major elements of the physical environment, including landforms, climates, soils, vegetation, significance and meaning to man; man's impact on and use of these elements.

GEOG 2020. Introduction to Cultural Geography (3)

Study of the cultural elements of geography such as language, religion, land tenure systems, migrations of people, plants, and animals, dispersals of ideas and techniques, transformations of natural to cultural landscapes; consideration of how man interacts with and modifies his environment.

GEOG 2500. Eurasia and Africa, Lands and Cultures (3)

A survey of the major culture regions of the Old World, including Asia, Europe, and Africa, with an 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. (Formerly 2400).

GEOG 2510. New World Lands and Cultures (3)

A survey of the major culture regions of the New World including North America, Latin America, and the Pacific, 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. (Formerly 2410).
GEOG 2970. Selected Topics offered during Winter Term (4)

Upper Division

GEOG 3020. Human Ecology (3)

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 mankind's relationship to nature. Prerequisite: Any 2000-level geography course or consent of instructor.

GEOG 3070. Agricultural Geography (3)

An examination of agricultural systems in the world today and the environmental factors, both physical and cultural, which interact to produce them. Prerequisite: GEOG 2010 or equivalent.

GEOG 3100. Climatology (3)

The elements and controls of weather and climate; analysis of climatic regions of the world. Prerequisite: GEOG 2010 or consent of instructor.

GEOG 3120. Geomorphology (3)

Study and interpretation of the earth's landscapes; includes consideration of the processes acting on landforms under diverse climatic conditions. Prerequisites: An introductory course in physical geography or geology or equivalent.

GEOG 3300. Geography of Economic Activities (3)

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: Consent of instructor.

GEOG 3510. Geography of North America (4)

A topical and regional survey and analysis of physical and cultural factors responsible for present patterns in land use and settlement in the United States and Canada; considers changes in regional patterns, including agriculture, industry, transportation, urbanization. Prerequisite: Consent of instructor.
GEOG 3550. Geography of Europe (3)

The regional geography of Europe, exclusive of the Soviet Union, with emphasis on the historical development of present-day patterns. Prerequisite: Consent of instructor. (Offered alternate years)

GEOG 3570. Geography of the Soviet Union and its Satellites (3)

A survey of the physical, cultural, and economic landscapes of the Soviet Union and its satellites. Covers the physical features, resources, agriculture, industry, people, potential, and problems of this vast area. Prerequisite: Consent of instructor. (Offered alternate years)

GEOG 3590. Geography of Asia (4)

A comprehensive survey of the physical, cultural, and economic geography of Asia excluding Asiatic Russia. Prerequisite: Consent of instructor.

GEOG 3650. Selected Topics in Regional Geography (1-3)

Analysis of a selected region of the world. Topic or emphasis varies each semester. Course may be repeated. Prerequisite: Any 2000-level geography course or consent of instructor.

GEOG 3700. Cartographic Presentation (3)

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: Six units of geography or consent of instructor.

GEOG 3710. Remote Sensing of the Environment (2)

A survey of the essentials of aerial photographic interpretation; the uses of aerial photography and other remote sensing imagery as tools in the comprehension of spatial phenomena. Prerequisite: Six units of geography or consent of instructor. (Offered alternate years)

GEOG 3940. A Self-Guided Field Trip of the Southern Mother Lode (1)

Historical geography of the Southern Mother Lode: Self-guided field trip. Involves following a prepared itinerary and playing recorded tapes at designated sites. Takes about 2-1/2 days. Student arranges own departure and return dates. Must provide own transportation.
GEOG 3950. A Self-Guided Field Trip of the Northern Mother Lode (1)

Historical geography of the Northern Mother Lode including Folsom, Coloma, Grass Valley, Nevada City and Malakoff Diggins. Involves following an itinerary and playing tape recorded lectures at designated sites. Takes 2 days. Student arranges own departure and return dates. Must provide own transportation. Prerequisite: None

GEOG 4140. Natural Regions of the United States (3)

A detailed examination of the physiographic provinces of the United States with respect to (1) their structure, (2) the role of climate and vegetation in altering the landform surface, and (3) the resultant regional patterns. Prerequisite: GEOG 3120 or consent of instructor.

GEOG 4200. Geography of Developing Areas (3)

Analysis of man-land relationships and physical and cultural distributions pertinent to development. Consideration of the role of geography in solution of development problems. Prerequisite: Six units in geography. (Offered alternate years)

GEOG 4301. Geography and Environmental Planning (3)

A survey of the linkages between geography and planning; emphasis on planning needs of non-urban regions; delineation of regions and regional interdependencies in the small-town setting; provision of human services; maps as planning tools; despoliation and preservation of rural areas. (Formerly 4300). Prerequisite: Consent of instructor.

GEOG 4350. Urban Geography (3)

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: Consent of instructor.

GEOG 4510. Geography of California (3)

An interpretative description of the natural environment of the State with an analysis of past and present settlement patterns and current utilization of natural resources. Prerequisite: Consent of instructor.
GEOG 4650. Seminar in Regional Geography (1-3)

Topic or emphasis varies each semester; course may be repeated. Prerequisite: Six units of geography or consent of instructor.

GEOG 4710. Field Methods (3)

Methods of field observation; techniques of data collection and analysis; investigations of rural and urban land use in the San Joaquin Valley. Prerequisite: Eight units in Geography or consent of instructor.

GEOG 4720. Local Field Excursions (1-2)

A course designed to provide students with an opportunity to participate in local directed field experiences. Involves travel to and study of areas of special geographic significance in the local area. Prerequisite: Consent of instructor.

GEOG 4840. Geography & the Earth Sciences for Teachers (3)

For in-service teachers and teacher trainees who are or will be teaching geographic and earth science concepts at the elementary, high school, or college level; a survey of the concepts, tools, and methods of modern geography and related earth science. Prerequisite: Six units of geography.

*GEOG 4940. Internship in Geography (1-6)

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)

Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

GEOG 4970. Selected Topics offered during Winter Term (4)

GEOG 4980. Individual Study (1-4)

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 4940. Internship in Geography, is available only to students who have been admitted to the Internship Program of the Anthropology/Geography Department. Contact the secretary of the department for further details.
Geography

GEOG 4990. Senior Thesis (3)

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.

NOTE: The following courses have been offered in the past and will be offered in the future if demand is sufficient. Course descriptions are available from the Anthropology/Geography Department on request.

GEOG 3650. Selected Topics in Regional Geography (1-3)
GEOG 4000. Current Trends in Geography (1-2)
GEOG 4140. Natural Regions of the United States (3)
GEOG 4610. Historical Geography of the United States (3)
GEOG 4960. Senior Seminar (3)

GEOG 5800. Survey of Geographic Thought & Literature (3)

Seminar in the history and philosophy of geography; its place among the science and humanities and the major contributors to the development of modern scientific geography.

GEOG 5900. Directed Field Research (1-5)

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 postbaccalaureate credit.

GEOG 5950. Selected Topics in Geography (1-5)

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)

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)

Thesis research. May be repeated for a total of 6 units. Prerequisite: Consent of graduate adviser.
Gerontology
An Interdisciplinary Minor

Walter E. Doraz, Ph.D., Coordinator
Fred P. Hilpert, Ph.D., Coordinator

Gerontology is the study of aging with a particular focus on the latter part of the life cycle. It is an interdisciplinary degree minor open to students in any major. The primary objective of the gerontology minor 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 especially designed to serve individuals majoring in the various 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.

**DEGREE MINOR IN GERONTOLOGY**

Seventeen to nineteen units as specified below:

**Required course:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDIS 3000</td>
<td>Introduction to Gerontology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective courses:**

Select at least five courses from the following electives as specified, with not more than two (2) courses from any one discipline.

1. One course from the following . . . . . . . . . . . . . . . . . . . . . . . . . . 2-3
   - BIOL 3810. Evolution 2 units
   - PSYC 3130. Human Development, 3 units

2. One course from the following . . . . . . . . . . . . . . . . . . . . . . . . . . 3
   - SOCL 4710. Sociology of Aging, 3 units
   - SPCH 3130. Communication and Aging, 3 units

3. One course from the following . . . . . . . . . . . . . . . . . . . . . . . . . . 3
   - ETHS 4000. The Mexican-American Family, 3 units
   - ETHS 4010. The Black American Family, 3 units
   - PSYC 3320. Introduction to Personality, 3 units
   - SOCL 3150. The Family, 3 units
Gerontology

4. Two courses from the following .......................... 6-7

- ANTH 4163. The Family in Cross-Cultural Perspective, 3 units
- EDUC 4620. Death Education and Counseling, 3 units
- PSCI 4330. Urban Politics, 4 units
- PSCI 4953. Health Care Services Administration, 3 units
- PSYC 3340. Environmental Psychology, 3 units
- REC 3200. Community Recreation, 3 units
- SOCL 4700. Medical Sociology, 3 units
- SOCL 4720. Sociology of Death, 3 units
- SOCL 4730. Alcohol and Alcoholism, 3 units
- SOCL 4790. Social Welfare Services, 3 units

Total ..................................................... 17-19

NOTE: It is strongly recommended that students complete an internship or immersion program in their major which compliments their interest in gerontology.

COURSE DESCRIPTION

MDIS 3000. Introduction to Gerontology (3)

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.
Students enrolled at California State College, Stanislaus may prepare themselves 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.

To aid students to organize a program of studies qualifying them for admission to these professional schools, a Health Sciences Advisory Committee has been established. Students should register with the committee as soon as possible by contacting the Chair of the Health Sciences Advisory Committee. A committee member will prepare a suggested basic course program to supplement the curriculum outlined by the major adviser.

The Health Sciences Advisory 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 that the Health Sciences Advisory Committee be contacted as soon as possible (preferably before interview with the major adviser) so that the student can be properly advised. Registration with the Health Sciences Advisory 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 1100, 1110), during their freshman and sophomore years. Mathematics to the level of precalculus (MATH 1050 or 1100) should be attained by this time. Normally dental and medical school admission tests are taken in the spring of the student's 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 this committee and the major adviser.

The College also offers preprofessional course work for areas such as laboratory technology, cytotechnology, nursing, and other paramedical and health-related fields.
History

Ronald J. VanderMolen, Ph.D., Professor, Chair
John E. Caswell, Ph.D., Professor Emeritus
Britten Dean, Ph.D., Professor
Curtis R. Grant, Ph.D., Professor
Franklin B. Holder, Ph.D., Professor
Samuel A. Oppenheim, Ph.D., Professor
John P. Rasmussen, Ph.D., Professor
J. W. Smurr, Ph.D., Professor
David Bentheim Stenzel, Ph.D., Professor
Austin Metumara Ahanotu, Ph.D., Associate Professor

History provides the general student with a 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 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 College also offers the degree Bachelor of Arts, Liberal Studies, with a concentration in History for those seeking a Multiple Subject Credential.

REQUIREMENTS FOR BACHELOR OF ARTS, HISTORY

History majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of 30 upper division units.
   No CR units are counted, except for 8 taken in Winter Term.
   Completion of a minor is not required.

   Reading knowledge of a foreign language is desirable for the Bachelor's degree and is required for some in the Graduate History programs here and in most other schools.

Prerequisites to the major:

A one-year sequence in American, European, or non-Western history, 6 units.

HIST 2900. Library Resources and Bibliographical Control for Historical Research, 2 units
## The Major

### Units

<table>
<thead>
<tr>
<th>A. One course in upper division European history from the following list</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>*HIST 3120. Ancient Mediterranean World II, 4 units</td>
<td></td>
</tr>
<tr>
<td>*HIST 3140. Medieval Europe I, 3 units</td>
<td></td>
</tr>
<tr>
<td>*HIST 3150. Medieval Europe II, 3 units</td>
<td></td>
</tr>
<tr>
<td>*HIST 3210. Renaissance &amp; Reformation, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3220. Absolutism and Revolution, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3230. Nineteenth Century Europe, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3240. Twentieth Century Europe, 3 units</td>
<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th>B. One course in upper division American history from the following list</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3610. Colonial America, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3620. Ante-Bellum American, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3630. America after the Civil War, 3 units</td>
<td></td>
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<tr>
<td>HIST 3640. Contemporary America, 3 units</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Two courses in upper division non-Western history from the following list</th>
<th>6-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>*HIST 3110. Ancient Mediterranean World I, 4 units</td>
<td></td>
</tr>
<tr>
<td>*HIST 3510. Latin America in Colonial Times, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3520. Latin America States since Independence, 3 units</td>
<td></td>
</tr>
<tr>
<td>*HIST 3800. East Asia in Traditional Times, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3810. East Asia in the Modern World, 3 units</td>
<td></td>
</tr>
<tr>
<td>*HIST 3860. Africa before 1800, 3 units</td>
<td></td>
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<tr>
<td>HIST 3870. Africa, 1800-1945, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 3880. Contemporary Africa, 3 units</td>
<td></td>
</tr>
<tr>
<td>HIST 4041. Colonialism and Nationalism in Asia and Africa, 3 units</td>
<td></td>
</tr>
</tbody>
</table>

| D. At least two courses from A, B, & C, 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 |     |

<table>
<thead>
<tr>
<th>E. One of the following courses</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 4961. Directed Reading Seminar, 4 units</td>
<td></td>
</tr>
<tr>
<td>HIST 4990. Senior Thesis, 4 units</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Unstructured electives in History</th>
<th>12-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL UNITS IN HISTORY MAJOR</td>
<td>30</td>
</tr>
</tbody>
</table>
History

DEGREE CONCENTRATION AND MINOR IN HISTORY OF RELIGIONS

The Bachelor of Arts degree in History with a concentration in History of Religions is designed for those who have an interest in the academic study of religions and for those who want to prepare to teach about religions in the schools. The transcripts of history majors completing the program will note the concentration in History of Religions, while those who have other majors will be credited with a minor in History of Religions. Courses taken in the program are divided among the following areas: history of predominantly religious cultures (when students choose to apply these courses to the minor or concentration, their outside reading will be done in religion); specialized courses in the history of world religions; and courses which analyze religion. Further, the religions of at least two different societies are to be studied. Complete requirements are listed below.

I. Recommended lower division work

These courses and competencies are not prerequisites, but will give the student adequate background for upper division study.

A. Recommended Courses, 12 units recommended

ANTH 2060. Introduction to Cultural Anthropology, 3 units
HIST 1010, 1020. Western Civilization, 6 units
HIST 2050. Third World I, 4 units
SOCL 1010. Introduction to Sociology, 3 units

B. Recommended Competencies

Library skills
Reading knowledge of a foreign language

II. Required Courses: Twenty-one units, distributed as below:

A. Analytical Studies, 6 units (must be taken in two different departments)

ANTH 4150. Religion in Anthropological Perspective, 4 units
PHIL 4450. Philosophy of Religion, 4 units
PSYC 3200. Psychology of Religion, 3 units
SOCL 4320. Sociology of Religion, 3 units

B. Historical Studies, 9 units

Religions in at least two different cultures must be studies, and at least one course must be taken which emphasizes non-Christian religion (HIST 3110, 3890, 4870,
or, when applicable, 4961). When research projects or analytical studies are required in the below courses, the student is to pursue topics which center on religious studies (copies of the results will be kept by the adviser) until the student has completed his minor or concentration.

HIST 3110. Ancient Mediterranean World I, 4 units
HIST 3120. Ancient Mediterranean World II, 4 units
HIST 3140. Medieval Europe I, 3 units
HIST 3150. Medieval Europe II, 3 units
HIST 3210. Renaissance and Reformation, 3 units
HIST 3300. History of Western Christianity, 3 units
HIST 3310. Judaism and Jewish History, 3 units
HIST 3890. The Oriental Mind, 4 units
HIST 4370. History of Religion in Africa, 3 units
HIST 4961. Directed Reading Seminar in History, 4 units

C. Electives upon Advisement, 6 units

Courses listed above or courses approved by the adviser and meeting the following criterion: major emphasis is given to the history or analysis of man's religious experience. Such courses may be used to substitute for the above lists upon approval of the adviser.

DEGREE MINOR IN HISTORY

Eighteen units in history, of which 12 units must be upper division history courses. All but Winter Term courses are to be taken ABCDF.

The courses for the degree minor in history are to be selected in consultation with and are to be approved beforehand by the minor adviser.

TEACHING CREDENTIALS

The major requirements in History for students interested in obtaining a single subject teaching credential are the same as those listed for the History major. Please refer to the Education section of the Catalog for a description of other requirements to be completed in obtaining a single subject credential.

LIBERAL STUDIES CONCENTRATION IN HISTORY

The Liberal Studies concentration in History consists of 20 units, at least 17 of which must be upper division units, chosen from both Western (American and European) and non-Western courses, in approximately equal amounts, by advisement.

MASTER OF ARTS DEGREE PROGRAMS IN HISTORY

There are three choices within the Master of Arts degree:

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History

1. **MASTER OF ARTS**

   This is the customary degree program. It is appropriate for persons interested in pursuing the study of history whether for college teaching or 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 credentialed for junior or senior high school teaching 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. Due to the experience factor in admission to the Secondary School Teachers and the International Relations Concentrations, students applying for admission in those concentrations who lack the 3.0 GPA may petition for admission on Conditionally Classified Status.

2. Satisfactory performance in the General Aptitude section of the Graduate Record Examination.

**MASTER OF ARTS:**

   Complete prerequisites for admission (#1 and #2) listed above, as well as the following:

3. Twenty-four units of upper division history, including a senior thesis or equivalent.

4. Satisfactory performance in the History section of the Graduate Record Examination.

5. Reading knowledge of an appropriate foreign language.

**SECONDARY SCHOOL TEACHERS CONCENTRATION:**

   Complete prerequisites for admission (#1 and #2) listed above, as well as the following:
3. The applicant must have a valid California single-subject teacher's credential. The credential shall be in Social Sciences, History, or Government, or the applicant shall have a teaching minor therein.

4. Adequate academic background as evaluated by the Graduate Committee.

INTERNATIONAL RELATIONS CONCENTRATION:

Complete prerequisites for admission (#1 and #2) listed above, as well as the following:

3. 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 work out a program adapted to the specific goals of the student. On being promoted to "candidate for the degree" following completion of a minimum of 10 units, an examining committee will be appointed for the candidate.

ALL PROGRAMS:

1. Twenty-four units are to be taken in courses offered by CSCS.
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 CR-graded courses applicable.
4. When enrolled in a 4000-level (senior) course, the graduate student must do an appropriate paper or equivalent exercise above and beyond those 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 is required to submit through his adviser at least two substantial papers. The thesis or papers will be read by his 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:
History

Ability to perform research operations
Analytical skills
Literary skills

MASTER OF ARTS:

Complete all of above requirements, as well as the following:

9. At least 15 graduate units from the following:
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 5900. Graduate Studies (two four-unit sections required)</td>
<td>8</td>
</tr>
<tr>
<td>HIST 5930. History of Historical Writing (required)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5970. Selected Topics offered during Winter Term</td>
<td>2-4</td>
</tr>
<tr>
<td>HIST 5980. Individual Study</td>
<td>1-6</td>
</tr>
<tr>
<td>HIST 5990. Thesis</td>
<td>3-6</td>
</tr>
</tbody>
</table>

10. Additional units to complete a minimum of 30 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 above requirements, as well as the following:

9. HIST 4910. Introduction to the Graduate Study of History (required; may be waived by the Graduate Committee)

At least 15 graduate units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 5900. Graduate Studies (1 section required)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5930. History of Historical Writing (required)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5970. Selected Topics offered during Winter Term</td>
<td>2-4</td>
</tr>
<tr>
<td>HIST 5980. Individual Study</td>
<td>1-6</td>
</tr>
<tr>
<td>HIST 5990. Thesis</td>
<td>3-6</td>
</tr>
</tbody>
</table>

10. Additional units to complete a minimum of 30 selected from the 4000- and 5000-level courses listed in the catalog, except for HIST 4970 and 4980. Up to 9 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 above requirements, as well as the following:

9. At least 15 graduate units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST/PSCI 5000</td>
<td>International Relations Seminar (required)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5930</td>
<td>History of Historical Writing (required)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5900</td>
<td>Graduate Studies (may be repeated)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5950</td>
<td>Selected Topics in History (may be repeated)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 5970</td>
<td>Selected Topics during Winter Term</td>
<td>2-4</td>
</tr>
<tr>
<td>HIST 5980</td>
<td>Individual Study</td>
<td>1-6</td>
</tr>
<tr>
<td>HIST 5990</td>
<td>Thesis</td>
<td>3-6</td>
</tr>
</tbody>
</table>

10. Additional units to complete a minimum of 30 selected from the following:

a. Up to 6 units of appropriate postgraduate work from other institutions of higher learning may apply toward this requirements.

b. 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 4041</td>
<td>Colonialism and Nationalism in Asia and Africa, 1800-1965</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4330</td>
<td>Modern France</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4340</td>
<td>Modern Germany</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4360</td>
<td>British Culture, 1603 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4430</td>
<td>Soviet Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4600</td>
<td>American Diplomatic History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4800</td>
<td>Modern China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4840</td>
<td>Modern Japan</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4950</td>
<td>Selected Topics (when an international relations topic is taught)</td>
<td>1-5</td>
</tr>
<tr>
<td>HIST 4961</td>
<td>Directed Reading Seminar in History</td>
<td>4</td>
</tr>
<tr>
<td>PSCI 4450</td>
<td>Political Elites</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 4620</td>
<td>International Dimensions of National Security Policy</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 4650</td>
<td>Inter-American Affairs</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4050</td>
<td>Comparative Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4415</td>
<td>International Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4420</td>
<td>Soviet Economics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4200</td>
<td>Geography of Developing Areas</td>
<td>3</td>
</tr>
</tbody>
</table>
History

COURSE DESCRIPTIONS

Lower Division

HIST 1010. Western Civilization I (3)

Intellectual, political, and social history of Western man from the earliest civilizations to 1500. Examination of man's past efforts to organize his society, to understand the nature of his universe, and to interpret the riddle of human destiny.

HIST 1020. Western Civilization II (3)

Continuation of HIST 1010. The modern world since 1500.

HIST 2050. Third World I (4)

An integrated history of the premodern civilizations of Africa, the Americas, East Asia, and the Middle East, stressing comparisons of socio-economic patterns, governmental theory and practice, and intellectual traditions.

HIST 2060. Third World II (4)

An integrated history of the civilizations of Africa, the Americas, East Asia, and the Middle East, focusing on a comparative analysis of their struggles for liberation and independence.

HIST 2600. Problems in U.S. History (3)

Review of American history from 1609: American, historical, political and economic concepts, main trends, and recurring issues. Open only to freshmen and sophomores.

HIST 2900. Library Resources and Bibliographical Control for Historical Research (2)

Survey of abstracts, bibliographies, biographical directories, book review indexes, dictionaries, documents, encyclopedias, and indexes for historical research; and the application of footnote and bibliographical methods for history majors. Same as PSCI 2900)

HIST 2950. Selected Topics in History (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of history. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

HIST 2970. Selected Topics offered during Winter Term (4)
History

Upper Division

HIST 3000. Introductory Seminar in History (3)

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.

HIST 3090. Contemporary World History (3)

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 détente. Prerequisite: Sophomore standing.

HIST 3110. Ancient Mediterranean World I (4)

From early Sumer to Alexander the Great. Prerequisite: Sophomore standing. HIST 1010 or 2050 or equivalent.

HIST 3120. Ancient Mediterranean World II (4)

The Hellenistic Age, Roman Republic and Empire, and the triumph of Christianity. Prerequisite: Sophomore standing. HIST 3110 recommended.

HIST 3140. Medieval Europe I (3)

Western Europe as an underdeveloped area from the fading of Roman rule to 1100. Prerequisite: Sophomore standing. HIST 1010 recommended.

HIST 3150. Medieval Europe II (3)

Western Europe from 1100 to 1500. Prerequisite: Sophomore standing. HIST 1010 recommended. HIST 3140 should precede HIST 3150 when possible.

HIST 3210. Renaissance and Reformation (3)

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)

European social, political, economic, and intellectual changes: royal absolutism; the scientific revolution; seventeenth-century revolutions; the Enlightenment; the French Revolution. Prerequisite: Sophomore standing.
History

HIST 3230. Nineteenth Century Europe (3)

Democratization in the age of nationalism; Napoleon to Sarajevo. Prerequisite: Sophomore standing.

HIST 3240. Twentieth Century Europe (3)

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.

HIST 3300. History of Western Christianity (3)

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.

HIST 3310. Judaism and Jewish History: An Introductory Survey (3)

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.

HIST 3400. The Great Teachings (3)

Historical description and analysis of major world religious systems: Buddhism, Hinduism, Judaism, Christianity, and Islam. Prerequisite: Sophomore standing.

HIST 3510. Latin America in Colonial Times (3)

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.

HIST 3520. Latin American States Since Independence (3)

From the struggle for independence to the mid-twentieth century. Prerequisite: Sophomore standing.

HIST 3610. Colonial America (3)

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.
HIST 3620. Ante-Bellum America (3)

United States, 1789-1865. Founding of the Union through the Civil War; quest for cultural independence; interaction, popular democracy and economic growth; slavery, sectionalism, and nationalism. Prerequisite: Sophomore standing.

HIST 3630. America After the Civil War (3)

United States, 1865-1914. Reconstruction through Progressivism: development of a complex urban-industrial society; coming of world power. Prerequisite: Sophomore standing.

HIST 3640. Contemporary America (3)

United States since 1914. World War I to the present: America's role as a great power; problems of welfare capitalism. Prerequisite: Sophomore standing.

HIST 3680. Women in American History (3)

Traditional and modern roles for women in American history, with emphasis on the forces making for change. Prerequisite: Consent of instructor.

HIST 3710. Mexican-American History (3)

The role of the Mexican-American in the 19th and 20th centuries with emphasis on the modern period. Prerequisite: Sophomore standing.

HIST 3800. East Asia in Traditional Times (3)

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.

HIST 3810. East Asia in the Modern World (3)

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.

HIST 3860. Africa Before 1800 (3)

Historical development of social, political and economic institutions of traditional African societies and relations with classical antiquity, Asia, Europe and America. Prerequisite: Sophomore standing.
HIST 3870. Africa, 1800-1945 (3)

Establishment of 19th century state systems, the economic, cultural, and ideological context of African resistance movements and their later reactions to the colonial situation. Prerequisite: Sophomore standing.

HIST 3880. Contemporary Africa, 1945 to the Present (3)

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.

HIST 3890. The Oriental Mind (4)

Historical survey of the major works of Chinese and Japanese thought illustrating the main tenets and evolution of Confucianism, Taoism, Buddhism, Shintoism, and Maoism. Prerequisite: Sophomore standing.

HIST 4030. Age of Exploration (3)

Exploration since Henry the Navigator; search for gold and spices. Establishment of trading factories and mercantilist colonies in Asia and Africa. Fall of the old colonial empires. Prerequisite: One year of college-level history or consent of instructor.

HIST 4041. Colonialism & Nationalism in Asia and Africa 1800-1965 (3)

19th century colonialism and 20th century revolutions in Africa, South and Southeast Asia. (Formerly 4040) Prerequisite: One year of college-level history or consent of instructor.

HIST 4210. European Intellectual History: Renaissance to the Present (3)

A study of the major ideologies in modern Europe and the means by which these ideologies were institutionalized. (Formerly 4300) Prerequisite: One year of college-level history or consent of instructor.

HIST 4330. Modern France (3)

Development of the French nation, with emphasis on the period since 1870. Prerequisite: One year of college-level history or consent of instructor.
HIST 4340. Modern Germany (3)

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.

HIST 4350. English Culture to 1603 (3)

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.

HIST 4360. British Culture, 1603 to the Present (3)

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.

HIST 4420. Russia to 1917 (3)

Russia from earliest times to the revolutions of 1917. Prerequisite: One year of college-level history or consent of instructor.

HIST 4430. Soviet Russia (3)

Russia and the Soviet Union from the revolution of 1917 to the end of the Brezhnev era. Prerequisite: One year of college-level history or consent of instructor.

HIST 4500. History of Mexico (3)

From independence to the mid-twentieth century. Prerequisite: One year of college-level history or consent of instructor.

HIST 4600. American Diplomatic History (3)

U.S. foreign relations from the colonial period to the present. Prerequisite: One year of college-level history or consent of instructor.

HIST 4620. American Civilization and the Future (3)

The American experience in historical perspective: the transformation of a small rural-agrarian nation into a huge urban-technological superpower. Exploration of the forces shaping our future: energy, population, raw materials, environment, alienation, and the rapid growth of science and technology. Does not apply to history major or minor. Fulfills G.E. requirement for U.S. History. Prerequisite(s): Upper division standing.
HIST 4640. Constitutional History of the United States (3)

The theory of limited government, and how the American people have applied it. Prerequisite: One year of college-level history or consent of instructor.

HIST 4670. California History (3)

Indian culture; Spanish exploration and settlement; environment; political, economic, and social factors which give California its unique character. (Formerly 3670) Prerequisite: One year of college-level history or consent of instructor.

HIST 4680. The American Mind (3)

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.

HIST 4800. Modern China (3)

Analysis of the main trends of nineteenth and twentieth century imperialism in China and the consequent rise of Chinese anti-imperialism; 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.

HIST 4840. Modern Japan (3)

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)

A comprehensive survey of the economic, political, and cultural relations between China and the United States from the 18th century to the present. (Formerly 3850) Prerequisite: One year of college-level history or consent of instructor.

HIST 4870. History of Religion in Africa (3)

Historical study of African religious systems, their impact on African political theory, their socio-economic dimensions, and their interaction with Islam and Christianity. Prerequisite: One year of college-level history or consent of instructor.
HIST 4910. Introduction to Graduate Studies in History (4)

Graduate level introduction to (1) the techniques of historical research: bibliography, sources, methodology, and (2) theories of the nature of history or historical investigation. Prerequisite: Graduate status in the MA/SST program.

HIST 4950. Selected Topics in History (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

HIST 4961. Directed Reading Seminar in History (4)

Reading on a theme or period of the student's choice. Prerequisite: Consent of instructor.

HIST 4970. Selected Topics offered during Winter Term (4)

HIST 4980. Individual Study (1-4)

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.

HIST 4990. Senior Thesis (Topics to be specified in Class Schedule) (4)

Methodology of history. Research techniques applied to investigation of original source material. May be repeated for a maximum of 8 units. Prerequisites: Senior standing, advanced course work in history, and consent of instructor. Under exceptional circumstances, juniors may be admitted.

Graduate

HIST 5000. International Relations Seminar (4)

Research on an international relations topic, using history and political science methodology. (Topics to be specified in the Class Schedule) To be taken concurrently with PSCI 5000, International Relations Seminar. This course is primarily for the International Relations/History M.A. concentration, but is open to all qualified students.

HIST 5900. Graduate Studies (4)

Reading of major secondary works on intensive original research in American or European history. Prerequisites: Advanced course work in American or European history as appropriate, and consent of instructor.
HIST 5930. The History of Historical Writing (4)

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.

HIST 5950. Selected Topics in History (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. Different topics may be taken for credit. Prerequisite: Consent of instructor.

HIST 5970. Selected Topics offered during Winter Term (4)

HIST 5980. Individual Study (1-4)

For qualified graduate students in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

HIST 5990. Thesis (3-6)

Thesis research. Prerequisite: Consent of instructor.
International Studies

A Concentration Within the Social Sciences Major

Steven W. Hughes, Ph.D., Director

The International Studies program provides a framework of study for those 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 with regard to 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.), or on international organizations and their functions, or aspects of intercultural communication, etc. To identify the most appropriate pattern of courses, the student will prepare his program in close consultation with the program director. The director should also be consulted regarding career opportunities.

Requirements for the Bachelor of Arts, Social Sciences, with a Concentration in International Studies

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the lower division breadth requirements, as specified below.
3. Complete the major of not less than 35 upper division units, as approved by the adviser, and distributed as follows:

   SSCI 3000. Library Resources for the Social Sciences, 2 units
   SSCI 4960. Social Sciences Interdisciplinary Seminar, 3 units
   4 courses in the discipline of student's major interest
   3 courses in a second discipline
   3 courses in a third discipline

   12 courses of not less than 35 upper division units; of these no more than 8 units of CR-graded Winter Term course work may apply toward the major.

A student on entering the International Studies concentration should work out with the Director a tentative program for the remainder of his or her undergraduate course work. Henceforth, the student 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 if mistakes are to be avoided.
International Studies

A. Lower division breadth requirements:
Students will take courses to satisfy all areas.

1. Environment: (one of the following)
   - GEOG 2010. Introduction to the Physical Environment, 3 units
   - GEOG 2500. Eurasia and Africa Lands and Cultures, 3 units
   - GEOG 2510. New World Lands and Cultures, 3 units

2. Culture:
   - ANTH 2060. Introduction to Cultural Anthropology, 3 units

3. Social Organization:
   - SOCL 1010. Introduction to Sociology, 3 units

4. Personality: (either of the following)
   - PSYC 2010. Introduction to Psychology, 3 units
   - PSYC 3200. Psychology of Religion, 3 units

5. Social Control: (either of the following)
   - SPCH 2011. Approaches to Human Communication, 4 units
   - SPCH 2102. Group Discussion Processes, 3 units

6. Economic Organization: (either of the following)
   - ECON 2500. Principles of Economics I, 4 units
   - ECON 2510. Principles of Economics II, 4 units

7. The Social Sciences as science: (one of the following)
   - 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 3034. Research Methods, 4 units
   - SSCI 3010. Introduction to Social Science Methodology, 3 units

B. Upper division major
Complete 4 courses in one of the following disciplines and 3 courses each in two others, as approved by the adviser.
Note: Some of these disciplines require additional lower division introductory course work not already specified in Section A above. Students will select courses from the 3 preferred disciplines according to the following rules:

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**International Studies**

1. **ANTHROPOLOGY**, Prerequisite: ANTH 2060, Introduction to Cultural Anthropology, 3 units

   **Upper Division Courses:**
   - ANTH 3001. Anthropological Perspective, 3 units
   - ANTH 3050. Cultures of the Middle East, 3 units
   - ANTH 3061. Pacific Islands and Australia, 3 units
   - ANTH 3070. Peoples of Africa, 3 units
   - ANTH 3100. East and South Asia, 3 units
   - ANTH 3111. Circumpolar People, 3 units
   - ANTH 3370. Native Peoples of Mexico, 3 units
   - ANTH 3400. Modern Ethnographic Studies, 1-4 units
   - ANTH 3900. Women: A Cross-Cultural View, 3 units
   - ANTH 4010. Culture and Personality, 3 units
   - ANTH 4100. Studies in Social Anthropology, 1-4 units
   - ANTH 4200. Applied Anthropology & Social Change, 4 units
   - ANTH 4211. The World in Change, 3 units
   - ANTH 4220. Folk Literature & Arts in Anthropological Perspective, 4 units
   - ANTH 4980. Individual Study, 1-4 units

2. **ECONOMICS**, Prerequisite: ECON 2500, Principles of Economics I or equivalent, 4 units

   **Upper Division Courses:**
   - 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 4415. International Economics, 3 units
   - ECON 4420. Soviet Economics, 3 units
   - ECON 4450. Economic Planning, 3 units
   - ECON 4540. Public Finance & Fiscal Policy, 3 units
   - ECON 4980. Individual Study, 1-4 units

3. **GEOGRAPHY**, Prerequisite: One of the following:

   - GEOG 2010. Introduction to the Physical Environment, 3 units
   - GEOG 2020. Introduction to Cultural Geography, 3 units
   - GEOG 2500. Eurasia and Africa, Lands and Cultures, 3 units
   - GEOG 2510. New World Lands and Cultures, 3 units

   **Upper Division Courses:**
   - GEOG 3020. Human Ecology, 3 units
   - GEOG 3070. Agricultural Geography, 3 units
   - GEOG 3300. Economic Geography, 3 units
   - GEOG 3550. Geography of Europe, 3 units
   - GEOG 3570. Geography of the Soviet Union and Its Satellites, 3 units
   - GEOG 3590. Geography of Asia, 4 units
   - GEOG 4200. Geography of Developing Areas, 3 units
   - GEOG 4301. Geography and Environmental Planning, 3 units
   - GEOG 4980. Individual Study, 1-4 units
International Studies

4. HISTORY. Prerequisite: One year of lower division history, United States History, Western Civilization, or non-Western History.

Upper Division Courses:

HIST 3000. Introductory Seminar in History, 3 units
HIST 3090. Contemporary World History, 3 units
HIST 3230. 19th Century Europe, 3 units
HIST 3240. 20th Century Europe, 3 units
HIST 4210. European Intellectual History: Renaissance to the Present, 3 units
HIST 4330. Modern France, 3 units
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. Soviet Russia, 3 units
HIST 4600. American Diplomatic History, 3 units
HIST 4850. China and the United States, 3 units
HIST 4961. Directed Reading Seminar in History, 4 units

Non-Western:

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 1800, 3 units
HIST 3870. Africa 1800-1945, 3 units
HIST 3880. Contemporary Africa, 1945 to the Present, 3 units
HIST 3890. The Oriental Mind, 4 units
HIST 4800. Modern China, 3 units
HIST 4840. Modern Japan, 3 units
HIST 4870. History of Religion in Africa, 3 units
HIST 4980. Individual Study, 1-4 units

5. POLITICAL SCIENCE. Prerequisite: PSCI 1201, American Government, 3 units

PSCI 3400. Comparative Politics: Europe, 4 units
PSCI 3410. Comparative Politics: Latin America, 4 units
PSCI 3450. Comparative Politics: USSR and Eastern Europe, 3 units
PSCI 3600. International Relations, 4 units
PSCI 4420. Comparative Bureaucracies, 3 units
PSCI 4450. Political Elites, 3 units
PSCI 4620. International Dimensions of National Security Policy, 3 units
PSCI 4630. Inter-American Affairs, 3 units
PSCI 4980. Individual Study, 1-4 units
6. SOCIOLOGY. Prerequisite: SOCL 1010, Introduction to Sociology, 3 units

Upper Division Courses:

SOCL 3200. Social Change, 3 units
SOCL 3430. Population, Resources, and the American Future, 3 units
SOCL 4320. Sociology of Religion, 3 units
SOCL 4400. Political Sociology, 3 units
SOCL 4520. Personality and Society, 3 units
SOCL 4600. Industrial Sociology, 3 units
SOCL 4980. Individual Study, 1-4 units
Journalism
A Degree Minor
Randall C. Ruechelle, Ph.D., Acting Coordinator
Professor of Speech Communication

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 services organizations. Opportunities for practical media experience and internship training are a feature of the curriculum in the minor.

DEGREE MINOR IN JOURNALISM

Eighteen units, to include at least 12 upper division units. Up to 6 units may be taken CR/NC.

<table>
<thead>
<tr>
<th>Lower Division</th>
<th>Units</th>
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<tbody>
<tr>
<td>JOUR 2150. Newswriting</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Upper Division</th>
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</thead>
<tbody>
<tr>
<td>JOUR 3021. Journalism Laboratory</td>
</tr>
<tr>
<td>JOUR 3022. Editing and Ethics</td>
</tr>
<tr>
<td>JOUR 3032. Press Law, 3 units</td>
</tr>
<tr>
<td>OR JOUR 3024. History of Journalism</td>
</tr>
<tr>
<td>ENGL 4960. Seminar: Problems in Mass Media</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

Lower Division

JOUR 2150. Newswriting (3)

A basic newswriting course for beginning journalists: reporting techniques, interviewing, introduction to communication theory, interpretive and investigative writing. (Formerly ENGL 2150)
Journalism

Upper Division

JOUR 3021. Journalism Laboratory (3)

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. Prerequisites: JOUR 2150 or equivalent, and typing. May be repeated no more than three times for credit. Offered every fall and spring. (Formerly ENGL 3021)

JOUR 3022. Editing and Ethics (3)

A laboratory-seminar in editing and news ethics: the canons of journalism, responsibility in the newsroom, how the newsroom works, duties of the editor and copyreader, newspaper layout and design, and slanted versus objective reporting. (Formerly ENGL 3022)

JOUR 3023. Press Law (3)

A case study course in the law and mass communication, exploring the First Amendment right of freedom of the press, limitations on that right, censorship, the right to privacy, the people's right-to-know, regulation of broadcasting, and legal constraints on media advertising. (Formerly ENGL 3023)

JOUR 3024. History of Journalism (3)

A historical survey of the evolution of American journalism from the colonial period to the present. (Formerly ENGL 3024)

JOUR 3025. Photo-Journalism (2)

Theory and practice of photo-journalism. 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. (Formerly ENGL 3025) Prerequisite: Consent of instructor.

JOUR 3026. Journalism Internship (3)

Field experience in journalism. Apprenticeship experience with public relations offices and radio and television stations. May be repeated for credit. (Formerly ENGL 3026)
Latin American Studies

A DEGREE MINOR

Robert K. Anderson, Ph.D., Director
Professor of Spanish

The minor in Latin American Studies is a multidisciplinary program for the student seeking an in-depth knowledge of Latin American society. The program is designed to provide the student with an understanding of a variety of aspects of Latin America including the language, literature, and social, economic, and political development. The minor will be useful to students planning careers in education and foreign service, international organizations, as well as for those who simply desire a better understanding of Latin America.

DEGREE MINOR IN LATIN AMERICAN STUDIES

Twenty units, of which at least 12 must be upper division.

Required courses:

**Lower Division**

SPAN 1010. Elementary Spanish I, 4 units
SPAN 1020. Elementary Spanish II, 4 units
or equivalent course work in Portuguese

**Upper Division**

1. At least one course from the following:
   - HIST 3510. Latin America in Colonial Times, 3 units
   - SPAN 3300. Literature of Spanish America I, 3 units
   - SPAN 3610. History and Civilization of Spanish America, 3 units

2. At least one course from the following:
   - HIST 3520. Latin American States Since Independence, 3 units
   - PSCI 3410. Comparative Politics: Latin America, 4 units
   - SPAN 3310. Literature of Spanish America II, 3 units

*A student possessing equivalent competency in the language may gain credit for this requirement by a challenge examination. The student wishing to challenge should consult the program director.*
Elective Courses:

The student shall take elective courses to complete the 20 required units, with the minor adviser's approval. The courses must be selected with attention to gaining breadth of experience, so that in the minor the student will have taken courses from at least three disciplines. The elective courses may be additional ones taken from the "Required Courses" section above, or other appropriate courses, such as:

- ANTH 3370. Native Peoples of Mexico, 3 units
- ETHS 2100. Contemporary Chicano Studies, 3 units
- HIST 4500. History of Mexico, 3 units
- PSCI 4630. Inter-American Affairs, 3 units
- SPAN 3934. Latin American Literature in Translation, 3 units
- SPAN 4600. Literatura mexicana, 3 units

Three units of the required 12 upper division units may be taken by means of courses numbered 4980, Individual Study. Where appropriate, and as approved by the minor adviser, Winter Term courses are also applicable.
Liberal Studies *

Charles C. Hanna, Ed.D., Professor of Education Coordinator

The Bachelor of Arts degree program in Liberal Studies is a multidisciplinary curriculum designed to enable a student 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 non-technical 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.

REQUIREMENTS FOR THE BACHELOR OF ARTS, LIBERAL STUDIES

The Bachelor of Arts, Liberal Studies degree requires completion of the following:

1. A Liberal Studies major including a minimum of 18 units in each of the four subject matter areas A, B, C, D, with a maximum of 24 units in any one area and a total of 84 units among the four areas;
2. A physical education activity course;
3. A 20-unit area of concentration;
4. Upper division electives to total 124 units.

The program must include 40 upper division units for graduation; 9 of these upper division units must be applicable to Liberal Studies areas A, B, C, or D, and must be completed at the College. Winter term courses approved for Liberal Studies application will satisfy these requirements. Completion of the Liberal Studies program meets General Education requirements. Additional details follow.

*Students wishing to pursue the Liberal Studies degree program with a Bilingual/Cross-Cultural emphasis and concentration or on the Applied Studies track are referred to the Bilingual/Cross-Cultural Studies or Applied Studies program sections of the Catalog.
### Liberal Studies:

#### A. SOCIAL SCIENCES (minimum of 18 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 1201</td>
<td>3</td>
</tr>
<tr>
<td>History (one of the following)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2600, 3610, 3620, 3650, 3640, or a comparable survey of U.S. History</td>
<td></td>
</tr>
<tr>
<td>Introductory psychology course</td>
<td>3</td>
</tr>
<tr>
<td>Introductory cross-cultural course</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2060, 2091, 3070, 3100, 3350, 3360, 3370</td>
<td></td>
</tr>
<tr>
<td>ETHS 2000, 2100, 2200, 2300</td>
<td></td>
</tr>
<tr>
<td>GEOG 2000, 2020, 2500, 2510</td>
<td></td>
</tr>
<tr>
<td>Electives selected from the following</td>
<td>6</td>
</tr>
<tr>
<td>ANTH 2060, 2091, 3070, 3100, 3350, 3360, 3370</td>
<td></td>
</tr>
<tr>
<td>ECON 2500, 2510</td>
<td></td>
</tr>
<tr>
<td>ETHS 2000, 2100, 2200, 2300</td>
<td></td>
</tr>
<tr>
<td>GEOG 2000, 2010, 2020, 2500, 2510</td>
<td></td>
</tr>
<tr>
<td>HIST 1010, 1020, 2050, 2060 or some non-U.S. History course</td>
<td></td>
</tr>
<tr>
<td>PSCI 2020, 3400, 3410, 3450</td>
<td></td>
</tr>
<tr>
<td>PSYC 2020, 3120, 3130*, 3170, 3700</td>
<td></td>
</tr>
<tr>
<td>SOCL 1010, 3150, 3160, 4010</td>
<td></td>
</tr>
<tr>
<td><strong>Total.</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

#### B. MATHEMATICS-SCIENCE (minimum of 18 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two introductory mathematics courses***</td>
<td>6</td>
</tr>
<tr>
<td>Introductory biology, botany, or zoology course, with lab.</td>
<td>4</td>
</tr>
<tr>
<td>Introductory chemistry course****</td>
<td>3-4</td>
</tr>
<tr>
<td>Introductory physics course****</td>
<td>3-4</td>
</tr>
<tr>
<td>Electives from: astronomy, biology chemistry, geology, physics, or physical sciences</td>
<td>0-2</td>
</tr>
<tr>
<td><strong>Total.</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

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* Required of Multiple Subject Credential applicants.

** At least 1 science course must have an environmental orientation (courses which meet the environmental requirements include BIOL 1010 or 2650, CHEM 1000, PHSC 1000, or PHSC 1300).

*** A student must not enroll in both MATH 1600 and MATH 1610.

**** Either the introductory chemistry course or the introductory physics course must include lab.

NOTE: 5 quarter units meet the 4 semester unit requirement above.
**Liberal Studies**

C. **ARTS-HUMANITIES** (minimum of 18 units)

1. Art (one of the following) ........................................ 3
   ART 1000, 1010, 1100, 1200, 2100, 2110, 3400, 3410, 3420, 4430

2. Drama (one of the following) .................................... 3
   DRAM 1010, 1112 and 1114, 3020, 3510, 3520

3. Music (one of the following) .................................... 3
   MUS 1000, 1190, 3340, 3400

4. One course in philosophy ........................................ 3

5. A course in foreign language or foreign literature,
   either in the original or in translation .......................... 3

6. Electives from: art, drama, foreign languages,
   music, or philosophy ............................................ 3

   Total .................................................................. 18

D. **ENGLISH-SPEECH** (minimum of 18 units)

1. ENGL 1003 and PHIL 1001, taken concurrently;
   ENGL 1004 and DRAM 1001, taken concurrently;
   and ENGL 3000, taken concurrently with any
   3999 companion course ........................................... 9

2. SPCH 2002, 2011, 2050, 2102, 2400, 3000, 3010, 3100,
   3400, or 3610 ..................................................... 3

3. One course in literature (English or foreign
   language) ........................................................... 3

4. Electives from: English or speech (exclusive of
   composition courses) ............................................. 3

   Total .................................................................. 18

E. Physical education activity course ............................... 1

F. Concentration: A student must complete a 20-unit concentra-
   tion, at least 15 of which are upper division. Courses
   counted in areas A-D above may also be included in the area
   of concentration.

G. Electives to total 124 selected in consultation with an adviser.
   (Multiple Subject Credential candidates are encouraged to
   enroll in PHED 3401 and 3402 to prepare for motor development
   training.)
OPTIONS AVAILABLE

1. A Bachelor of Arts in Liberal Studies with a concentration from among the following:

   Anthropology  
   Art  
   Bilingual/Cross-Cultural  
   Biological Sciences  
   Chemistry  
   Child Development  
   Drama  
   Economics  
   English  
   Ethnic Studies  
   Exceptional Children and Youth*  
   French  
   Geography  
   German  
   History  
   Mathematics  
   Music  
   Philosophy  
   Physical Education  
   Physical Sciences  
   Physics  
   Political Science  
   Psychology  
   Sociology  
   Spanish  
   Speech Communication

2. Upper Division Electives

   Students may utilize these units to complete one of the other academic majors offered by the College, as a second major, or may choose to distribute them as broadly as they choose.

   Students electing to complete a Preliminary Multiple Subject Credential within four years must use these units for professional education, including student teaching. Students electing to complete a Clear Multiple Subject Credential within five years may use the upper division electives to complete a minor or a second major in lieu of an area of concentration.

   Students seeking a multiple Subject Credential should consult the Education section of this catalog for professional education requirements. Application to the credential program requires meeting credential requirements outlined in the catalog current at the time of application and admission to the credential program.

*This concentration is the generic program for the Learning Handicapped Credential.
Marine Sciences

The California State University and Colleges operate the Moss Landing Marine Laboratories at Moss Landing, California. This marine facility functions as a seaside extension of the campuses of six cooperating State University and Colleges (Stanislaus, Fresno, Hayward, Sacramento, San Francisco, and San Jose) and offers course work in marine biology, geology, meteorology, 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 College, 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 223, 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 SCIENCE

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 Moss Landing 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 Science program is administered through MLML and a consortium campus' Department of Biology, Department of Geology or Department of Chemistry, 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 (refer to campus catalogue for complete information). The student will become classified upon completion of MLML's requirements.
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. Courses in General Oceanography (MSCI 3010), Marine Science Techniques (MSCI 3020), and Quantitative Marine Science (MSCI 3040) are prerequisites for classified graduate standing. Up to 4 units of these courses may be included in the required 30 units with the permission of the student's graduate committee.

3. Pass a qualifying written examination designed by the faculty of MLML in cooperation with the home campus department. The written examination will substitute for the examinations given in the home campus department and will test background knowledge in biology, physical sciences and some aspects of marine sciences. The examination will normally be taken at the end of the student's first academic semester. The examination may be repeated once and must be passed before the student may be classified.

ADVANCEMENT TO CANDIDACY

In order to be advanced to candidacy, the student must have:

1. attained classified standing and
2. selected a thesis problem and selected a graduate committee.

The composition of the student's graduate committee must include one faculty member from MLML, one faculty representative from the home campus and one member from either MLML, the home campus or elsewhere with the approval of the thesis adviser.

REQUIREMENTS FOR THE MASTERS OF SCIENCE
IN MARINE SCIENCE

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:
MARINE BIOLOGY CONCENTRATION

A minimum total of 15 units of 5000-level courses is required (including 2 units of MSCI 5850 and 4 units of MSCI 5990) and 15 units or more of elective courses in marine sciences (courses numbered 3000 or above).

OCEANOGRAPHY CONCENTRATION

A minimum total of 15 units of 5000-level courses is required (including 2 units of MSCI 5870 and 4 units of MSCI 5990) and 15 units or more of elective courses in marine sciences (courses numbered 3000 or above).

List of elective courses by catalog number, title, and semester units of credit, which can be used to satisfy requirements for the major:

- MSCI 3030 Marine Ecology 4
- MSCI 3060 Subtidal Ecology 4
- MSCI 3110 Zoology of Marine Vertebrates 4
- MSCI 3120 Marine Birds and Mammals 4
- MSCI 3130 Marine Ichthyology 4
- MSCI 3220 Marine Invertebrate Embryology 4
- MSCI 3230 Marine Invertebrate Physiology 4
- MSCI 3240 Marine Invertebrate Zoology I 4
- MSCI 3250 Marine Invertebrate Zoology II 3
- MSCI 3310 Marine Phycology 4
- MSCI 3320 Introduction to Marine Plankton 4
- MSCI 3410 Geological Oceanography 4
- MSCI 3510 Marine Meteorology 3
- MSCI 3610 Marine Fisheries 4
- MSCI 3750 Topics in Marine Sciences 3-4
- MSCI 3770 Microscopic Techniques 3
- MSCI 5020 Marine Instrumental Analysis 4
- MSCI 5030 Advanced Marine Ecology 4
- MSCI 5110 Behavior of Marine Animals 4
- MSCI 5120 Topics in Marine Vertebrates 4
- MSCI 5210 Topics in Marine Invertebrates 4
- MSCI 5220 Biology of the Mollusca 4
- MSCI 5310 Advanced Marine Phycology 4
- MSCI 5320 Advanced Marine Plankton 4
- MSCI 5410 Marine Microorganisms 3
- MSCI 5420 Plate Tectonics 3
- MSCI 5450 Coastal Geomorphology 4
- MSCI 5440 Marine Biogenic Sedimentation 4
- MSCI 5510 Marine Geochemistry 4
- MSCI 5520 Topics in Marine Chemistry 4
- MSCI 5610 Descriptive Physical Oceanography 4
- MSCI 5710 Population Biology 3
- MSCI 5750 Advanced Topics in Marine Sciences 3-4
Other electives, including courses from the home campus departments, may be included in consultation with the graduate committee. The combination of required units (seminar and thesis) and elective units must total at least 30 semester units.

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.

COURSE DESCRIPTIONS

MSCI 3010. General Oceanography (4)

An interdisciplinary examination of physical and chemical characteristics of seawater, distribution and effects of ocean currents, waves and tides, geology of the ocean floor and relations of organisms to the marine environment. (Lecture, 3 hours; lab or field, 3 hours) Prerequisites: College chemistry and mathematics, concurrent registration in MSCI 3020. (MLML 101)

MSCI 3020. Marine Science Techniques (4)

Introductory field and laboratory practice in the techniques for collection, analysis, and interpretation of data on the marine environment. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: College chemistry and mathematics, concurrent registration in MSCI 3010. (MLML 102)

MSCI 3030. Marine Ecology (4)

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)

MSCI 3040. Quantitative Marine Science (4)

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)
MSCI 3050. Marine Science Diving (3)

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)

MSCI 3060. Subtidal Ecology (4)

Studies of communities in the sublittoral zone, stressing application of ecological research techniques by the diver. Field exercises in sampling, community analysis, and ecological surveys in space and time will be carried out. Students will present a seminar and plan, execute, and report the results of a research project. (Lec/discussion, 2 hours; lab/field, 6 hours) Prerequisites: MLML Diver Certification, MSCI 3030, and MSCI 3210 or 3310. (MLML 106)

MSCI 3110. Zoology of Marine Vertebrates (4)

A field-oriented study of natural history, ethology, physiology, identification, and systematics of vertebrates living in or associated with marine, estuarine, and shore communities; emphasis upon interrelationships of organisms within these environments. (Lecture, 2 hours; lab or field, 6 hours) Prerequisite: College zoology or equivalent. MSCI 3030 recommended. (MLML 111)

MSCI 3120. Marine Birds and Mammals (4)

Systematics, morphology, ecology, and biology of marine birds and mammals. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: Upper division college vertebrate zoology, MSCI 3110, or consent of instructor. MSCI 3030 recommended. (MLML 112)

MSCI 3130 Marine Ichthyology (4)

A description of the taxonomy, morphology, 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 surroundings. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: College zoology or equivalent; MSCI 3110 or consent of instructor. MSCI 3030 recommended. (MLML 113)

MSCI 3220. Marine Invertebrate Embryology (4)

Survey of principles of developmental biology, concentrating on experimental evidence obtained using invertebrate material. Laboratory observations will cover the embryology of lower invertebrates, molluscs, crustacea, echinoderms, and protocordates. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MSCI 3240, 350
Marine Sciences

cell biology or biochemistry strongly recommended, or consent of instructor. (MLML 122)

MSCI 3230. Marine Invertebrate Physiology (4)

Comparative physiology of the invertebrates; laboratory problems on nutrition, respiration, osmotic regulation, coordination, and other physiological functions. General principles of physiology will be discussed using examples from the invertebrate phyla. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MSCI 3210, general physiology, or consent of instructor. (MLML 123)

MSCI 3240. Marine Invertebrate Zoology I (4)

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) (Formerly 3210) Prerequisites: College zoology or consent of instructor; MSCI 3030 recommended.

MSCI 3250. Marine Invertebrate Zoology II (3)

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.

MSCI 3310. Marine Phycology (4)

Introduction to the plants of the sea, with emphasis on taxonomy, natural history, ecology and economic significance of the larger marine algae. (Lecture, 2 hours; lab or field, 6 hours) Prerequisite: College botany. MSCI 3030 recommended. (MLML 131)

MSCI 3320. Introduction to Marine Plankton (4)

Identification, distribution, and ecology of phytoplankton and zooplankton. Introduction to sampling and analytical procedures. (Lecture, 2 hours; lab or field, 6 hours) Prerequisite: MSCI 3010. 3050 recommended. (MLML 132)

MSCI 3410. Geological Oceanography (4)

A study of the structures, physiography, and sediments of the sea bottom and shoreline. (Lecture, 3 hours; lab or field, 3 hours) Prerequisites: MSCI 3010 and 3020 (concurrent registration satisfactory). (MLML 141)

MSCI 3510. Marine Meteorology (3)

Introductory discussion of the interaction between ocean and atmosphere including exchange of heat, momentum and particles and
Marine Sciences

their influence on waves and currents and on weather and climate.
(Lecture, 2 hours; lab or field, 3 hours) Prerequisite: MSCI 3010.
(MLML 151)

MSCI 3610. Marine Fisheries (4)

An introduction to fishery biology, including the concepts of 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, 3110, or consent of instructor. MSCI 3030 recommended.

MSCI 3750. Topics in Marine Sciences (3-4)

The study of a selected area in the marine sciences. The subjects vary from one offering to the next depending on demand and availability of instructors. Prerequisite: Consent of instructor. Offered only on demand. (MLML 175)

MSCI 3770. Microscopic Techniques (3)

Principles and techniques of light 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.

MSCI 4980. Individual Study (1-4)

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)

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 3010, 3020, and quantitative analysis. (MLML 202)

MSCI 5030. Advanced Marine Ecology (4)

Advanced considerations of marine populations, communities and ecosystems with emphasis on current literature. (Lecture, 3 hours; lab or field, 3 hours) Prerequisites: MSCI 5030 and consent of instructor; MSCI 3040 recommended. (MLML 203)
MSCI 5110. Behavior of Marine Animals (4)

The causation, development, and evolution of the behavior of marine animals. (Lecture, 3 hours; lab or field, 3 hours) Prerequisite: MSCI 3040 or statistics or consent of instructor. (MLML 211)

MSCI 5120. Topics in Marine Vertebrates (4)

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 once for credit. (Lecture, 2 hours; lab and field, 6 hours) Prerequisites: MSCI 3110, 3120, or 3130 and consent of instructor. (MLML 212)

MSCI 5210. Topics in Marine Invertebrates (4)

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 once for credit. (Lecture, 2 hours; lab and field, 6 hours) Prerequisites: MSCI 3210 and consent of instructor. (MLML 221)

MSCI 5220. Biology of the Mollusca (4)

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 3210 or consent of instructor. (MLML 222)

MSCI 5310. Advanced Marine Phycology (4)

Lecture-discussions in algal development, reproduction, and ecology. Extensive reading of original literature. Ecologically oriented individual research projects involving laboratory culture and field experimentation. (Lecture, 2 hours; lab or field, 6 hours) Prerequisite: MSCI 3310 or consent of instructor. (MLML 231)

MSCI 5320. Advanced Marine Plankton (4)

Course emphasis on the physiology of phytoplankton and zooplankton. Students undertake individual research projects that include literature review, laboratory work, and oral and written reports. (Lecture, 2 hours; lab or field, 6 hours) Prerequisite: MSCI 3320 or consent of instructor. (MLML 232)

MSCI 5410. Marine Microorganisms (3)

A study of living and fossil microorganisms with emphasis on environmental significance. (Lecture, 2 hours; lab or field 6 hours) Prerequisites: MSCI 3210 and college geology or consent of instructor. (MLML 241)
MSCI 5420. Plate Tectonics (3)

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. (MLML 242)

MSCI 5430. Coastal Geomorphology (4)

Study of the world oceans' shoreline resulting from the supply of materials and energy to the coast. Consideration is given to modification due to eustatic and tectonic sea level changes. (Lecture, 3 hours; lab or field, 3 hours) (Formerly 3430) Prerequisite: Physical geology or physical geography. (MLML 243)

MSCI 5440. Marine Biogenic Sedimentation (4)

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, 3 hours; lab or field, 3 hours) (Formerly 3420) Prerequisites: MSCI 3010, 3410, and college geology and biology or consent of instructor. (MLML 244)

MSCI 5510. Marine Geochemistry (4)

Geochemical processes in the oceans: thermodynamics of low-temperature aqueous reactions, weathering, oxidation-reduction and biologically mediated reactions, processes occurring at the sea floor and air-sea interface. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MSCI 3010, quantitative analysis, one year calculus, or consent of instructor. (MLML 251)

MSCI 5520. Topics in Marine Chemistry (4)

Selected topics dealing with the biochemistry or geochemistry of the oceans. May be repeated for credit. (Lecture, 2 hours; lab or field, 6 hours) Prerequisites: MSCI 3010 and consent of instructor. (MLML 252)

MSCI 5610. Descriptive Physical Oceanography (4)

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 3010, one year calculus, or consent of instructor. (MLML 261)
MSCI 5710. Population Biology (3)

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)

MSCI 5750. Advanced Topics in Marine Sciences (3-4)

The study of a selected area in the marine sciences. The subjects vary from one offering to the next depending on demand and availability of instructors. Prerequisite: Consent of instructor. Offered only on demand. (MLML 275)

MSCI 5850. Graduate Seminar in Marine Biology (2)

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)

MSCI 5860. Graduate Seminar in Marine Geology (2)

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)

MSCI 5870. Graduate Seminar in Oceanography (2)

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)

MSCI 5980. Research in the Marine Sciences (1-4)

Independent investigations of an advanced character for the graduate student with adequate preparation. Prerequisite: Consent of instructor. (MLML 298)

MSCI 5990. Thesis (1-4) (MLML 299)
Mathematics

Narendra L. Maria, Ph.D., Professor, Chair
Chester W. Dyche, M.A., Professor
Louis A. Feldman, Ph.D., Professor
Ralph L. James, Ph.D., Professor
James N. Javaher, Doctorat d'Université, Professor
Shang-Wang Chang, Ph.D., Associate Professor
Sadrudin S. Fazal, Ph.D., Associate Professor
Kent E. Wooldridge, Ph.D., Associate Professor
Viji K. Sundar, Ph.D., Assistant Professor

The Department of Mathematics offers courses in computer science, mathematics, operations research, and statistics. Courses 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.

The department 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. The Bachelor of Science degree program is oriented more towards the various applications of mathematics. The department offers concentrations in Computer Science and Operations Research-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 Computer Science and 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 economic theory or one year of general physics.
Mathematics

REQUIREMENTS FOR THE BACHELOR OF ARTS OR THE BACHELOR OF SCIENCE IN MATHEMATICS

Mathematics majors are to:
1. Complete the college requirements for a bachelor's degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 24 upper division units.
   No more than 8 units of Winter Term or CR graded course work may apply toward the major.
Completion of a minor is not required.

DEGREE MAJOR FOR THE BACHELOR OF ARTS, MATHEMATICS

Prerequisites to the major:
MATH 1151. Programming in BASIC, 3 units
MATH 1410, 1420. Calculus I, II, 8 units
MATH 1600. Statistics, 4 units
MATH 2410. Multivariate Calculus, 4 units
MATH 2500. Elementary Linear Algebra, 3 units

The Major

MATH 3060. Modern Geometry .................. 3
MATH 3500, 3501. Modern Algebra I, II .......... 6
MATH 4100, 4101. Analysis I, II ............... 6
MATH 4960. Seminar in Mathematics ............ 1

Upper division courses in mathematics
as approved by the major advisor ................ 8

Total ........................................... 24

DEGREE MAJOR FOR THE BACHELOR OF SCIENCE, MATHEMATICS

Prerequisites to the major:
MATH 1151. Programming in BASIC, 3 units
MATH 1410, 1420. Calculus I, II, 8 units
MATH 2000. FORTRAN Programming, 3 units
MATH 2410. Multivariate Calculus, 4 units
MATH 2500. Elementary Linear Algebra, 3 units

Additional prerequisite to the major with an elective concentration in Computer Science:
MATH 2011. Computer Programming, 3 units

Additional prerequisite to the major with an elective concentration in Operations Research-Statistics:
MATH 1600. Statistics, 4 units

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Mathematics

The Major

Two of the following year sequences of courses as approved by the major adviser: 16

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3250, 3260</td>
<td>8</td>
</tr>
<tr>
<td>MATH 3651, 3661</td>
<td>8</td>
</tr>
<tr>
<td>MATH 4350, 4360</td>
<td>8</td>
</tr>
<tr>
<td>MATH 4451, 4461</td>
<td>8</td>
</tr>
</tbody>
</table>

Upper division courses in mathematics as approved by the major adviser: 7

Total: 24

Elective Concentrations within the Degree Major for the Bachelor of Science, Mathematics

A student who elects to have a concentration in Computer Science or Operations Research-Statistics may do so by completing the prerequisites to the major, the additional prerequisite to his elective concentration, the requirements for the major, and the requirements for this concentration.

Computer Science Concentration

Complete the requirements for the major so as to include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3100</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3200</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4001</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4201</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4350, 4360</td>
<td>8</td>
</tr>
<tr>
<td>MATH 4960</td>
<td>1</td>
</tr>
</tbody>
</table>

Additional year sequence of courses from the requirements for the major: 8

Total: 29
OPERATIONS RESEARCH-STATISTICS CONCENTRATION

Complete the requirements for the major so as to include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3200. Computer Simulation Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3651, 3661. Statistical Inference, Modern Probability Theory</td>
<td>8</td>
</tr>
<tr>
<td>MATH 4451, 4461. Linear Programming and Applications, Introduction to Operations Research</td>
<td>8</td>
</tr>
<tr>
<td>MATH 4960. Seminar in Mathematics</td>
<td>1</td>
</tr>
<tr>
<td>Upper division courses in mathematics as approved by the major adviser</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
</tr>
</tbody>
</table>

DEGREE MINOR IN COMPUTER SCIENCE

Twenty-one units, to include at least 9 upper division units.

**Lower Division**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any two of the following three courses</td>
<td>6</td>
</tr>
<tr>
<td>MATH 1151. Programming in BASIC, 3 units</td>
<td></td>
</tr>
<tr>
<td>MATH 2000. FORTRAN Programming, 3 units</td>
<td></td>
</tr>
<tr>
<td>MATH 2011. Computer Programming, 3 units</td>
<td></td>
</tr>
<tr>
<td>One of the following year sequence of courses</td>
<td>6-8</td>
</tr>
<tr>
<td>MATH 1410, 1420. Calculus I, II, 8 units</td>
<td></td>
</tr>
<tr>
<td>MATH 1910, 1920. Calculus with Applications I, II, 6 units</td>
<td></td>
</tr>
</tbody>
</table>

**Upper Division**

Any three courses selected from the following . . 9-11

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3100. Assembly Language Programming, 3 units</td>
<td></td>
</tr>
<tr>
<td>MATH 3200. Computer Simulation Techniques, 3 units</td>
<td></td>
</tr>
<tr>
<td>MATH 4001. Programming Languages, 3 units</td>
<td></td>
</tr>
<tr>
<td>MATH 4201. Data Structures and Algorithms, 3 units</td>
<td></td>
</tr>
<tr>
<td>MATH 4350. Numerical Analysis I, 4 units</td>
<td></td>
</tr>
<tr>
<td>MATH 4360. Numerical Analysis II, 4 units</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21-25</td>
</tr>
</tbody>
</table>

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Mathematics

DEGREE MINOR IN MATHEMATICS

Eighteen units, including at least 10 units in upper division.

MATH 1410, 1420. Calculus I, II, 8 units.

Upper division courses in mathematics as approved by the minor adviser, 10 units.

TEACHING CREDENTIALS

Majors in mathematics interested in multiple subject or single subject credentials are referred to the Education section of the catalog for a description of teaching credential programs.

The major requirements in Mathematics for students interested in obtaining a single subject teaching credential are the same as those listed for the Bachelor of Arts degree, Mathematics major. Please refer to the Education section of the catalog for a description of other requirements to be completed in obtaining a single subject credential.

LIBERAL STUDIES CONCENTRATION IN MATHEMATICS

Twenty units in mathematics as approved by the major adviser. At least 15 units must be upper division

MATHEMATICS SUB-AREAS

COMPUTER SCIENCE

MATH 1151. Programming in BASIC, 3 units
MATH 2000. FORTRAN Programming, 3 units
MATH 2011. Computer Programming, 3 units
MATH 3100. Assembly Language Programming, 3 units
MATH 3150. Computers and Society, 3 units
MATH 3200. Computer Simulation Techniques, 3 units
MATH 3201. Computer Graphics, 3 units
MATH 4001. Programming Languages, 3 units
MATH 4201. Data Structures and Algorithms, 3 units
MATH 4300. Compiler Theory, 3 units
MATH 4350. Numerical Analysis I, 4 units
MATH 4360. Numerical Analysis II, 4 units

OPERATIONS RESEARCH

MATH 4451. Linear Programming and Applications, 4 units
MATH 4461. Introduction to Operations Research, 4 units
MATH 4471. Graphs and Computing, 3 units

STATISTICS

MATH 1600. Statistics, 4 units
MATH 1610. Statistics for Decision Making, 3 units
MATH 3651. Statistical Inference, 4 units
MATH 3661. Modern Probability Theory, 4 units
Mathematics

COURSE DESCRIPTIONS

Lower Division

MATH 0100. Mathematics Workshop (3)

A review of arithmetic, algebra, and geometry to prepare the student for college-level courses in mathematics.

MATH 1000. Math for Liberal Arts Students (3)

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.

MATH 1030. Elementary Foundations of Mathematics I (3)

Elementary set theory, number systems, properties of real numbers, solutions of equations and inequalities. Recommended for students seeking an elementary teaching credential.

MATH 1040. Elementary Foundations of Mathematics II (3)

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.

MATH 1050. Basic College Algebra (3)

Exponents, fractions, radicals, elementary inequalities, polynomials, logarithmic and exponential equations, arithmetic and geometric series, binomial theorem. Prerequisite: One year of high school algebra or MATH 1000 or 1050.

MATH 1100. Precalculus (3)

Coordinate systems, relations, functions, composite and inverse functions, introduction to analytic geometry, mathematical induction, circular and trigonometric functions, complex numbers, fundamental theorem of algebra. Prerequisite: Two years of high school algebra or MATH 1050.

MATH 1151. Programming in BASIC (3)

An introduction to computer programming using BASIC. Students will have the option of using the campus' timesharing computer or their own micro-computer. (Lecture, 2 hours, laboratory, 2 hours) (Formerly 1150) Prerequisite: None.
Mathematics

MATH 1410. Calculus I (4)

Inequalities, functions and graphs, limits and continuity, the derivative, differentiation of algebraic functions, applications of differentiation, the definite integral, conic sections. Prerequisite: MATH 1100 or equivalent.

MATH 1420. Calculus II (4)

Trigonometric and exponential functions, parametric equations, thorough techniques of integration, applications of the definite integral, L'Hopital's rule, infinite series. Prerequisite: MATH 1410.

MATH 1500. Finite Mathematics (3)

Algebra of sets, theory of partitions and counting, elementary probability theory, vectors and matrices, Markov chains. Prerequisite: Two years of high school algebra or MATH 1050.

MATH 1600. Statistics (4)

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) Prerequisite: One year of high school algebra or MATH 1000 or 1030.

MATH 1610. Statistics for Decision Making (3)

Introductory course for students in business administration. Data summarization, review of probability distributions, estimation, hypothesis testing, correlation, regression, index number, time series. Use of statistical computer packages. Prerequisite: Two years of high school algebra or MATH 1050.

MATH 1910. Calculus with Applications I (3)

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. Prerequisite: MATH 1050.
MATH 1920. Calculus with Applications II (3)

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 2000. FORTRAN Programming (3)

Design and construction of FORTRAN programs to solve problems in various computer applications. The principles of operation and history of computers are briefly covered. (Lecture, 2 hours; laboratory, 2 hours) Prerequisite: MATH 1050 or two years of high school algebra.

MATH 2011. Computer Programming (3)

Computer programming in a selected high level language. The language taught may change from year to year. The choice of languages, among others, may include Pascal, APL, LISP, ALGOL, and SNOBOL. May be repeated for credit with consent of instructor. (Lecture, 2 hours; laboratory, 2 hours) (Formerly MATH 2010) Prerequisite: MATH 1151 or equivalent.

MATH 2410. Multivariate Calculus (4)

Vectors in three dimensions, solid analytic geometry, partial differentiation, multiple integration, differentiation under the integral sign, vector field theory. Prerequisite: MATH 1420.

MATH 2500. Elementary Linear Algebra (3)

Vector spaces, matrices, linear transformations, determinants, systems of linear equations, selected applications. (Formerly 2420) Prerequisite: MATH 1420.

MATH 2970. Selected Topics offered during Winter Term (4)

MATH 3060. Modern Geometry (3)

Axiom systems for Euclidean and non-Euclidean geometries, construction of geometries from fields, isometries in the Euclidean plan, geometric constructions. Prerequisite: MATH 1420.
MATH 3100. Assembly Language Programming (3)

Computer programming at the machine level. Machine language and basic machine architecture, addressing modes, sub-program linkage, program sectioning and overlays, I/O programming, macros, and interrupts. Prerequisite: MATH 2000 or 2011.

MATH 3150. Computers and Society (3)

An introduction to computer, information and word processing systems with emphasis on microcomputer systems including home computers. The social, political, and philosophical implications of these systems for society. An introduction to an elementary programming language and canned programs. Not applicable to major or minor in mathematics or computer science. (Lecture, 2 hours; laboratory, 2 hours) (Formerly 1200)

MATH 3200. Computer Simulation Techniques (3)

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. (Lecture, 2 hours; laboratory, 2 hours) Prerequisites: MATH 1600 or 1610 or ECON 3205, and MATH 2000 or 1151.

MATH 3201. Computer Graphics (3)

An introduction to two- and three-dimensional computer graphics using the HI-PLOT plotter and TEKTRONIX graphics terminal. Prerequisite: MATH 1151 or 2000.

MATH 3250. Ordinary Differential Equations (4)

Linear ordinary differential equations, existence and uniqueness, series solutions, special functions, Laplace transforms, systems of linear equations. Prerequisite: MATH 1420.

MATH 3260. Partial Differential Equations (4)

Basic concepts, first order partial differential equations, classification of second order equations, initial value problems for wave equation, boundary value problems for Laplace and heat equations, maximum principle, existence and uniqueness theorems, applications. Prerequisite: MATH 2410 or 3250.

MATH 3500. Modern Algebra I (3)

Naive set theory, groups, rings, integral domains, polynomials, fields, introduction to vector spaces. Prerequisite: MATH 1420.
MATH 3503. Discrete Structures (3)

Discrete mathematical structures and their application in computer science—the mathematical background needed for systematic study in computer science, partially ordered sets, graphs, groups, Boolean algebra, coding theory. Prerequisite: MATH 1420.

MATH 3651. Statistical Inference (4)

Review of relevant probability distributions. Estimation theory, hypothesis testing, regression, correlation, and an introduction to nonparametric statistics with special emphasis on application of data. Students will be encouraged to use statistical packages; i.e. BMD, SPSS, etc. (Formerly 3650) Prerequisite: MATH 1420 or consent of instructor. MATH 2000 recommended.

MATH 3661. Modern Probability Theory (4)

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. (Formerly 3660) Prerequisite: MATH 1420 or consent of instructor.

MATH 4001. Programming Languages (3)

Study of programming language concepts such as binding, data structures, string handling, control structures, as embodied in various programming languages. (Formerly 4000) Prerequisites: MATH 1151, and MATH 2000 or 2011.

MATH 4100. Analysis I (3)

Completeness of the real number system, sequences, limits, metric spaces, point set topology, continuity, differentiation, integration. Prerequisite: MATH 2410.

MATH 4101. Analysis II (3)

Reimann-Stieltjes integral, sequences and series of functions, uniform convergence, inverse and implicit function theorems; introduction to Lebesgue integral. Prerequisite: MATH 4100.

MATH 4201. Data Structures and Algorithms (3)

Basic concepts of data structures: arrays, lists, trees, graphs, files. Storage allocation and collection, access methods, sorting, and searching. Analysis and design of algorithms for the above topics. Techniques for analyzing computer programs in terms of run time and computer storage are developed. (Formerly 4200) Prerequisites: MATH 1151, and MATH 2000 or 2011.
Mathematics

MATH 4300. Compiler Theory (3)
Lexical and syntactic analyses, push-down and parsing techniques, syntax directed translation, symbol tables construction, error diagnostics, code generation. Prerequisite: MATH 2000 or 2011.

MATH 4350. Numerical Analysis I (4)
Floating point arithmetic, errors, the solution of nonlinear equations, matrices and systems of linear equations, nonlinear systems, interpolation. Prerequisites: MATH 1420 and 2000.

MATH 4360. Numerical Analysis II (4)
Numerical differentiation and integration, numerical solution of differential equations and boundary value problems, approximation. Prerequisite: MATH 4350.

MATH 4451. Linear Programming and Applications (4)
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. (Formerly 4450) Prerequisites: MATH 1420, and MATH 1151 or 2000, or consent of instructor.

MATH 4461. Introduction to Operations Research (4)
Special types of linear programming, dynamic programming, network analysis, project planning and scheduling techniques, inventory theory, introduction to waiting line models. (Formerly 4460) Prerequisites: MATH 1420, and MATH 1151 or 2000, or consent of instructor.

MATH 4471. Graphs and Computing (3)
Graphs, speed of algorithms, shortest path algorithms, maximal flow algorithms, the transhipment problem, the simple assignment problem, the selection problem with shared costs, the precedence relation problems, the Edmunds-Karp Theorem, the minimal cost flow problems, detection of negative cost cycles, minimal cost flow algorithms. Prerequisites: MATH 1151, 1420, and 2000.

MATH 4500. Theory of Numbers (3)
Euclid's algorithm and fundamental theorems on divisibility, prime numbers, congruence of numbers, theorems of Fermat, Euler, and Wilson, congruence of first and higher degrees, Lagrange's theorem and its applications, quadratic residues. Prerequisite: MATH 1420.
MATH 4600. Complex Variables (3)

Complex numbers, analytic functions. Cauchy-Riemann equations, Cauchy theorem, Laurent series, calculus of residues, selected applications. Prerequisite: MATH 2410.

MATH 4840. Mathematics for Business (3)

Selected topics in linear algebra, statistics, and differential calculus, which have applications in business administration, with emphasis on optimization and forecasting. Computer packages will be used. This course is not applicable to the major or minor in mathematics. Prerequisite: Two years of high school algebra or MATH 1050.

MATH 4940. Internship in Mathematics (1-4)

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. Students serve internships as arranged by the agency and the department. Prerequisite: Consent of the Department Internship Coordinator.

MATH 4950. Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5)

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. Seminar in Mathematics (1)

Presentation and discussion of selected topics in mathematics from the current literature. Prerequisite: Consent of instructor.

MATH 4970. Selected Topics offered during Winter Term (4)

MATH 4980. Individual Study (1-4)

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.

MATH 5950. Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5)

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)

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 6030. Foundations of Mathematics (3)

Elementary set theory, mappings, elementary number theory, structure of the real number system, equations, and inequalities. Recommended for elementary teachers who hold the bachelor degree and who wish to qualify for the Standard Teaching Credential.

MATH 6980. Individual Study (1-4)

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.
Multidisciplinary Studies

The College offers multidisciplinary courses outside the departmental and school structure. These courses are given the MDIS prefix.

COURSE DESCRIPTIONS

Lower Division

MDIS 2000. Library Resources (2)

This course provides students with the essential background for effective use of libraries, the basic college library reference materials, and the fundamental library resources for their subject majors.

MDIS 2500. Student Government (1)

In-service training in the workings of student government (large group activities: board of directors meetings; small group communications: commission meetings). Communication workshops will be an integral part of the class activity. May be repeated for a total of 4 units. Prerequisite: Consent of instructor.

MDIS 2800. American Musical Theatre (3)

Analysis of historical development of musical theatre in America, with emphasis on both theatrical and musical values; to include study of performers as well as of writers and composers.

MDIS 2950. Selected Topics in Multidisciplinary Studies (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in multidisciplinary study. Topics vary each term. Different topics may be taken for credit.

MDIS 2970. Selected Topics offered during Winter Term (4)

Upper Division

MDIS 3000. Introduction to Gerontology (3)

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.
MDIS 3100. Women in America (3)

An overview of the role of women in contemporary American society. An interdisciplinary approach to the study of women is stressed. Topics to be examined include perspectives and images of women in society, the role of women in society, and the issue of sex role innovation.

MDIS 3500. The Technological Society (3)

An interdisciplinary analysis of the social and ecological crises caused by the exponential growth of science and technology. The issues—population, energy, alienation, pollution, etc.—are examined on the global, national, and local levels.

MDIS 4000. Women's Studies Colloquium (2)

This course covers a range of areas and issues concerning women in contemporary American society. Selected topics are presented by guest speakers who are experts in various areas of women's studies. Class discussion follows presentations by guest speakers. Prerequisite: Upper division standing.

MDIS 4500. Student Government (1)

In-service training in the workings of student government (large group activities: board of directors meetings; small group communications: commission meetings). Communication workshops will be an integral part of the class activity. May be repeated for a total of 4 units. Prerequisite: Consent of instructor.

MDIS 4950. Selected Topics in Multidisciplinary Studies (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in multidisciplinary study. Topics vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MDIS 4960. Seminar in Technology and Society (3)

Readings, papers, and discussion on the societal, ecological, and philosophical issues raised by contemporary science and technology. Prerequisite: MDIS 3500 or consent of instructor.

MDIS 4970. Selected Topics offered during Winter Term (4)

MDIS 4980. Individual Study (1-4)

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.
**Multidisciplinary Studies**

MDIS 5960. Graduate Project (1-6)

A terminal graduate project; intended for M.A. Special Majors. Prerequisite: Consent of instructor and major adviser.

MDIS 5970. Selected Topics offered during Winter Term (4)

MDIS 5980. Individual Study (1-4)

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)

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

Donald A. Williams, D.M.A., Associate Professor, Chair
Joseph E. Bruggman, Ed.D., Professor
Paul O. Harder, Ph.D., Professor
Gary L. Unruh, D.M.A., Professor
Gene C. Wisler, Ed.D., Professor
Sylvia M. Ghiglieri, M.M., Professor
Deborah H. Kavasch, Ph.D., Visiting Lecturer

The Department of Music offers the degree, Bachelor of Arts, Music. It is a program 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.

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 area 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.

The Department of Music also offers courses which provide cultural and aesthetic enrichment for the general college student and the college-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 Fine Arts departments of the College to stage major performances and workshops.

The degree, Bachelor of Arts, Liberal Studies, is also offered with music as an area of concentration. (For further information see Liberal Studies.)

REQUIREMENTS FOR THE BACHELOR OF ARTS, MUSIC

Music majors are to:
1. Complete the general requirements for the Bachelor of Arts degree.
2. Complete the lower division component of the major.
3. Complete the upper division component of the major including either an approved Senior Recital or Senior Project.
Completion of minor is not required.
Music

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. 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 may include 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 Departmental Requirement.

3. All music majors and minors will be evaluated by a faculty committee at the end of each semester of applied study in their performing medium.

4. Students are required to perform in recital each semester as part of a course in applied music as determined by the instructor.

5. Music majors are required to attend departmental recitals and concerts as announced at the beginning of each semester.

6. All music majors are required to demonstrate an acceptable level of performance skill in both piano and voice. 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 at least one major performing group (chorale, symphonic wind ensemble, college choir or orchestra) each term, utilizing their major performing medium. Keyboard majors must consult their adviser regarding this requirement. 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.)

SENIOR YEAR REQUIREMENT

The music major is a four year course of study culminating in the presentation of a solo or ensemble recital, or the completion of a faculty approved project. The decision as to which option to follow will normally be made at the end of the junior year of study.

1. The Recital Track includes, in addition to the recital requirement, two semesters of applied study at the 4000 level and a full 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 forty 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 necessary requisite for graduation.

2. Students selecting the Project Track must have successfully completed two semesters of applied study at the 3000 level to continue study at that level during their senior year. 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 his or her senior year. Unit credit for the project is earned through registering in MUS 4910, Senior Project.

DEGREE MAJOR IN MUSIC

LOWER DIVISION

MUS 1020. Freshman Music Seminar, 1 unit
MUS 1220, 1230. Theory I, II, 6 units
MUS 1320, 1330. Musicianship Lab I, II, 2 units
MUS 2220, 2230. Theory III, IV, 6 units
MUS 2320, 2330. Musicianship Lab III, IV, 2 units
MUS 2400, 2410, 2420, 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

Demonstration of functional proficiency in basic voice and basic piano (see No. 6 under "General Requirements for Music Majors and Minors").

UPPER DIVISION

MUS 3100, 3200. Music History & Literature II, III... 6
MUS 3250. 18th Century Counterpoint ....... 2
MUS 3260. Form and Analysis ........... 2
MUS 3270. Basic Conducting ............. 2
MUS 4400, 4410, 4420, 4440. Major Group Performance.... 4
MUS 3610, 3640, 3670. Junior Level applied study .... 2
MUS 4610, 4640, 4670. Senior Level applied study--Recital Track only

OR MUS 4951. Selected Topic: Senior Project, 1 unit/semester (repeated for a total of 2 units... 2

Complete one of the following Areas of Concentration:

(A music major pursuing work toward a teaching credential
Music

must complete an area of concentration with either a vocal or an instrumental emphasis) ........................................ 10

Choral/Vocal Emphasis

Under the direction of his/her major adviser, the student will select 10 units of study from the following list of courses:

- MUS 4280. Advanced Choral Conducting, 2 units
- MUS 4570. Vocal/Choral Literature Seminar, 3 units
- MUS 4571. Vocal Diction and Pedagogy, 3 units
- Electives as approved by adviser, up to 4 units

(The single subject credential student in music must consult the faculty adviser in Music Education for details regarding specific music education courses.)

Instrumental Emphasis

Under the direction of his/her adviser, the student will select 10 units of study from the following list of courses:

- MUS 3240. Orchestration, 2 units
- MUS 4290. Advanced Instrumental Conducting, 2 units
- Electives as approved by major adviser, 6 units

(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 the 6 units of electives.)

Keyboard Emphasis

- MUS 3460. Harpsichord Literature, 2 units
- MUS 3620. Accompanying, 2 units
- MUS 4451. Piano Literature, 2 units
- Electives as approved by major adviser, 4 units

(The single subject credential student in music must consult the faculty adviser for details regarding specific education courses.)

Total ......................................................... 30

DEGREE MINOR IN MUSIC

Thirty units, of which 8 units must be in upper division.

Lower Division

- MUS 1000. Introduction to Music, 3 units
- MUS 1220, 1230. Theory I, II, 6 units
- MUS 1320, 1330. Musicianship Lab I, II, 2 units
- MUS 2900. Music History & Literature I, 3 units
- MUS 2400, 2410, 2420, 2440. Major Group Performance, 4 units
- MUS 2600, 2630, 2670. Sophomore Level applied study, 2 units
Music

MUS 1600, 1630, 1670. Freshman Level applied study, 2 units
(Applied Music may be fulfilled at upper division level by
students who qualify at that level.)

Upper Division

MUS 3100, 3200. Music History & Literature II, III, 6 units
Electives as approved by the minor adviser, 2 units

LIBERAL STUDIES CONCENTRATION IN MUSIC

Twenty units, of which 15 units must be upper division.

Lower Division

Five units selected from the following and approved
by the concentration adviser. ............... 5

*MUS 1000. Introduction to Music, 3 units
MUS 1600. Basic Class Piano, 1 unit
MUS 1620. Basic Folk Guitar, 1 unit
MUS 1630. Basic Class Voice, 1 unit
MUS 2000. Music in World Cultures, 3 units
MUS 2400, 2410, 2420, 2440. Major Group
Performance, 1 unit each
MUS 2651. Basic Classical Guitar, 1 unit
Electives in music

Upper Division

Fifteen units selected from the following and
approved by the concentration adviser. .......... 15

MUS 3270. Basic Conducting, 2 units
MUS 3340. Music in Elementary School, 3 units
MUS 3341. Music for the Classroom Teacher, 2 units
MUS 3400. American Music, 3 units
MUS 3650, 3660. String Technique I, II, 1 unit each
MUS 3670. Instrumental Techniques, 1 unit
MUS 4400, 4410, 4420, 4440. Major Group
Performance, 1 unit each
Electives in music

Total .......... 20

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 Education

*MUS 1000 may not apply toward the twenty units of the concentra-
tion if used to satisfy Liberal Studies Area C requirements.
section of the catalog for a description of other requirements to be completed in obtaining a single subject credential.

It is possible to complete the credential program (preliminary credential) in four years by following the general program listed below.

General Education ...................................... 40
Music Major ............................................ 58
Education (includes student teaching & course work) .......... 24
Music Education:
  MUS 3340. Music in Elementary Schools .............. 3
  MUS 3370. Music in Secondary Schools ............ 3

Total .................................................. 128

(Note: The single subject credential student in instrumental music is also required to complete MUS 4550, Instrumental Literature Seminar, 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
  MUS 1190. Music Fundamentals
  MUS 1600. Basic Class Piano
  MUS 1620. Basic Folk Guitar
  MUS 1630. Basic Class Voice
  MUS 2000. Music of World Cultures
  MUS 2651. Basic Classical Guitar
  MUS 3341. Music for Classroom Teacher
  MUS 3400. American Music
  MUS 3410. History of Jazz

The general student is welcome to participate in the various performance courses (chorale, college choir, symphonic wind ensemble, jazz ensemble, orchestra and small ensembles).

COURSE DESCRIPTIONS

Lower Division

MUS 1000. Introduction to Music (3)

A course for the general student, tracing the growth and development of music through history from early times to the present. Emphasis is placed on becoming acquainted through listening and analysis with representative forms, styles, and techniques of the various historical periods in music. Prerequisite: None
MUS 1020. Freshman Music Seminar (1)

Introducing the freshman music student to standard concert repertoire. Prerequisite: Music major or minor.

MUS 1190. Music Fundamentals (3)

A beginning course in music reading, notation, intervals, scales, and theory. 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. No prerequisite.

MUS 1220. Theory I (3)

Review and study of rudiments of music notation, scales, key signatures, intervals, triads, and inversion of triads. Emphasis is placed on analysis and creation of melodies based upon techniques of the various musical periods. To be taken concurrently with MUS 1320. Prerequisite: Ability to read treble and bass clefs.

MUS 1230. Theory II (3)

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.

MUS 1320. Musicianship Laboratory I (1)

Diatonic melodic dictation, four-part choral-style dictation, sightsinging and rhythmic studies. To be taken concurrently with MUS 1220.

MUS 1330. Musicianship Laboratory II (1)

Continuation of MUS 1320. Diatonic melodic dictation, four-part chorale-style dictation, sightsinging in clefs and rhythmic studies. To be taken concurrently with MUS 1230. Prerequisite: MUS 1320 or equivalent.

MUS 1600. Basic Class Piano (1)

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 4 units. (Formerly 1610) Prerequisite: None
Music

MUS 1610. Freshman-Level Keyboard (1)

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.

MUS 1620. Basic Folk Guitar (1)

A basic course in folk guitar skills designed for those who may or may not have any previous musical training. May be repeated for a total of 2 units. Prerequisite: None.

MUS 1630. Basic Class Voice (1)

Introduction to singing and vocal technique, posture, breathing, and tone production. Problems of tension and relaxation. May be repeated for a total of 4 units. Prerequisite: None

MUS 1640. Freshman-Level Voice (1)

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 of instructor.

MUS 1670. Freshman-Level Orchestral Instruments (1)

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.

MUS 2000. Music of World Cultures (3)

Introduction to the music of various world cultures, with particular attention to the music of non-western peoples. Prerequisite: None

MUS 2220. Theory III (3)

Continuation of MUS 1230. Emphasis will be on an understanding of 19th century harmonic practice; i.e., utilization of varied seventh and ninth 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 Franck 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. (Formerly 3220) Prerequisite: MUS 1230.
MUS 2230. Theory IV (3)

Continuation of MUS 2220. Completed exploration of tertial harmony; ninth, eleventh, and thirteenth chords. 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. (Formerly 3230) Prerequisite: MUS 2220.

MUS 2320. Musicianship Laboratory III (1)

Continuation of MUS 1330. Diatonic and chromatic melodic dictation, four-part choral-style dictation, sightsinging easier standard choral literature, sightsining in clefs and more advanced rhythmic studies. To be taken concurrently with MUS 2220. Prerequisite: MUS 1330 or equivalent.

MUS 2330. Musicianship Laboratory IV (1)

Continuation of MUS 2320. Two-and three-part contrapuntal dictation; advanced four-part choral-style dictation; sightsinging more advanced choral literature and advanced rhythmic studies. To be taken concurrently with MUS 2230. Prerequisite: MUS 2320 or equivalent.

MUS 2400. Orchestra (1-2)

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.

MUS 2410. Chorale (1)

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 9 units. Prerequisites: Ability to read music and an acceptable singing voice.

MUS 2420. College Choir (1)

A general chorus open to all students. Study of standard choral literature: classical, semi-classical, popular. Field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: None

MUS 2430. Chamber Singers (1)

Study and performance of choral works for small chamber ensemble, including the motets and madrigals of Renaissance and early Baroque
Music

composers. Selected works from other musical periods will also be studied and performed; field trips and off-campus performances may be required by the instructor. Student conducting will be encouraged. May be repeated for a total of 8 units. Prerequisites: Ability to read music and consent of instructor.

MUS 2440. Symphonic Wind Ensemble (1)

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.

MUS 2480. Jazz Ensemble (1)

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.

MUS 2490. Vocal Ensemble (1)

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. Prerequisites: Consent of instructor.

MUS 2500. Instrumental Chamber Ensemble (1)

Study and performance of materials for small brass and woodwind 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. (Formerly 2460 and 2470) Prerequisites: An acceptable degree of performance skill and consent of instructor.

MUS 2600. Intermediate Class Piano (1)

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, sonatinas, and easier sonatas. May be repeated for a total of 4 units. (Formerly 2620) Prerequisite: Consent of instructor.

MUS 2610. Sophomore-Level Keyboard (1)

Continuation of 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.
MUS 2630. Intermediate Class Voice (1)

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 instructor.

MUS 2640. Sophomore-Level Voice (1)

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 2651. Basic Classical Guitar (1)

A course for the student with a fundamental background in guitar playing. Prerequisite: MUS 1620 or equivalent or consent of instructor.

MUS 2670. Sophomore-Level Orchestral Instruments (1)

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.

MUS 2900. Music History and Literature I (3)

A survey of music history and literature spanning antiquity through the Renaissance. Designed primarily for music majors and minors. Prerequisite: Consent of instructor.

MUS 2950. Selected Topics in Music (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of music. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MUS 2970. Selected Topics during Winter Term (4)

Upper Division

MUS 3100. Music History and Literature II (3)

A survey of music history and literature spanning the Baroque and Classical periods. (Formerly 2910) Prerequisite: Consent of instructor.
Music

MUS 3200. Music History and Literature III (3)

A survey of music history and literature spanning the Romantic period and the twentieth century. (Formerly 3380) Prerequisite: Consent of instructor.

MUS 3240. Orchestration (2)

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.

MUS 3250. 18th Century Counterpoint (2)

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. Prerequisite: MUS 2230. Transfer students who have completed the equivalent of MUS 1220, 1230, 2220 and 2230 at some other institution upon enrolling for the 18th Century Counterpoint must exhibit competency through written and aural examination in materials normally covered in the theory sequence offered at this college. Thus enrollment may be initiated but not confirmed until successful passage of the required examination.

MUS 3260. Form and Analysis (2)

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. Prerequisite: MUS 2230.

MUS 3270. Basic Conducting (2)

The study and development of basic elements of conducting and fundamental score reading applicable to both vocal and instrumental ensembles. Prerequisites: Ability to read music and consent of instructor.

MUS 3340. Music in Elementary School (3)

A study of music experience for children, preschool through sixth grade. (Formerly 3350 and 3360) Prerequisite: MUS 1190 or ability to read music.

MUS 3341. Music for the Classroom Teacher (2)

Musical activities suitable for children in grades K-6. Singing, movement, listening, and instrumental activities appropriate to child growth and development. A course for upper division and graduate non-music majors. Prerequisite: None
MUS 3370. Music in Secondary Schools (3)

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.

MUS 3400. American Music (3)

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. Prerequisite: None.

MUS 3410. History of Jazz (2)

An introduction to jazz with concentration on its evolution and its development in the United States. Prerequisites: MUS 1000 or equivalent, junior standing.

MUS 3460. Harpsichord Literature (2)

A study of the various styles and forms of harpsichord literature from the 16th century through the 18th century with some performance of smaller pieces. Prerequisite: Consent of instructor.

MUS 3610. Junior-Level Keyboard (1)

Continuation of 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.

MUS 3620. Accompanying (1)

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.

MUS 3640. Junior-Level Voice (1)

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.
Music

MUS 3650. String Technique I (1)

Development of basic technique of playing violin and viola. Prerequisite: Consent of instructor.

MUS 3660. String Technique II (1)

Continuation of MUS 3650; emphasis will be on technique of playing cello and double bass. Prerequisite: MUS 3650 or consent of instructor.

MUS 3670. Junior-Level Orchestral Instruments (1)

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.

MUS 3680. Instrumental Techniques (1)

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. (Formerly 3670) Prerequisite: Consent of instructor.

MUS 4200. Composition (2)

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. (Formerly 4210 and 4220) Prerequisites: Consent of instructor.

MUS 4210. Advanced Composition (2)

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.

MUS 4220. Advanced Theory Project (2)

For qualified students in need of advanced or specialized study in theory. May be repeated for a total of 6 units. Prerequisite: Senior or graduate standing, or consent of instructor.
MUS 4280. Advanced Choral Conducting (2)

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 up to 4 units with consent of instructor. (Formerly 3280) Prerequisites: MUS 3270 and consent of instructor.

MUS 4290. Advanced Instrumental Conducting (2)

A continuation of MUS 3270 with emphasis on performance of standard instrumental literature. Study and application of the interpretive aspect of conducting. May be repeated for up to 4 units with consent of instructor. (Formerly 3290) Prerequisites: MUS 3270 and consent of instructor.

MUS 4400. Orchestra (1-2)

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.

MUS 4410. Chorale (1)

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. Prerequisites: Ability to read music and an acceptable singing voice.

MUS 4420. College Choir (1)

A general chorus open to all students. Study of standard choral literature: classical, semi-classical, popular. Field trips and off-campus performances may be required by the instructor. May be repeated for a total of 8 units. Prerequisite: None.

MUS 4430. Chamber Singers (1)

Study and performance of choral works for small chamber ensemble including the motets and madrigals of Renaissance and early Baroque composers. Selected works from other musical periods will also be studied and performed; field trips and off-campus performances may be required by the instructor. Student conducting will be encouraged. May be repeated for a total of 8 units. Prerequisites: Ability to read music and consent of instructor.
Music

MUS 4440. Symphonic Wind Ensemble (1)

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.

MUS 4451. Piano Literature (2)

Study of selected major piano works of representative master composers from Bach to the present. Discussion of the practical procedures for teaching piano in the smaller works of piano repertoire. (Formerly 3450) Prerequisite: Consent of instructor.

MUS 4480. Jazz Ensemble (1)

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.

MUS 4490. Vocal Ensemble (1)

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.

MUS 4500. Instrumental Chamber Ensemble (1)

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. (Formerly 4460 and 4470) Prerequisites: An acceptable degree of performance skill and consent of instructor.

MUS 4550. Instrumental Literature Seminar (3)

Study of literature for orchestra, band, chamber groups, and solo playing, elementary through advanced levels. Attention given to both class and private instructional needs. Prerequisite: Consent of instructor.

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MUS 4570. Vocal/Choral Literature Seminar (3)

A comprehensive survey of vocal music suitable for large and small choral organizations; music for madrigal groups and glee clubs, plus solo material for various vocal categories. Prerequisite: Consent of instructor.

MUS 4571. Vocal Diction and Pedagogy (3)

Study of diction for singers of the English, French, German, and Italian languages, as well as the study of voice teaching techniques. Prerequisite: Consent of instructor.

MUS 4610. Advanced Keyboard (1)

For music majors whose performance medium is a keyboard instrument. Study and performance of 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 junior-level performance examination and consent of instructor.

MUS 4640. Advanced Voice (1)

Vocal technique for the advanced student; study of German lieder, French and Italian repertoire, and solo material in cantata, oratorio, and opera. For music majors whose performance medium is voice. May be repeated for a total of 8 units. Prerequisite: Successful completion of junior-level performance examination.

MUS 4670. Advanced Orchestral Instruments (1)

Advanced instruction in orchestral instruments: strings, woodwinds, brasses, and percussion. For music majors whose performance medium is in one of these categories. May be repeated for a total of 8 units. Prerequisite: Successful completion of junior-level performance examination.

MUS 4910. Senior Project (1)

The Senior Project is a two-semester program designed to prepare the student for the presentation of a special project. The nature and scope of the work 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 his/her senior year. Prerequisites: Senior standing and completion of two semesters of applied study at the 3000 level.
Music

MUS 4950. Selected Topics in Music (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of music. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor.

MUS 4970. Selected Topics offered during Winter Term (4)

MUS 4980. Individual Study (1-4)

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.

MUS 5950. Selected Topics in Music (Topics to be specified in Class Schedule) (2-4)

Development of a selected branch of music. Topics may vary each term. Different topics may be taken for credit. Prerequisites: Graduate standing and consent of instructor.

MUS 5960. Graduate Project (2-4)

For qualified postbaccalaureate students.

MUS 5980. Individual Study (1-4)

For qualified postbaccalaureate students in need of advanced or specialized study. Prerequisite: Consent of instructor.

MUS 5990. Thesis (2-3)

For qualified postbaccalaureate students preparing a thesis or lecture-recital as a thesis project as a culmination to their graduate project.
The Department of Nursing offers the Bachelor of Science, Nursing. The purpose of the upper division nursing major is to provide diploma and associate degree graduates with the broadened educational base necessary for professional practice and for pursuing graduate education in nursing. The program is designed to enable nurses to expand their scope of practice, to function both independently and interdependently with other health care professionals in a wide variety of settings, and to assume greater responsibility in meeting present and future health care needs of society.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE, NURSING

Nursing majors are to:

1. Complete requirements for the Bachelor of Science degree.
2. Complete the major of 34 upper division units. Nursing 3500 may be taken CR/No Credit. All other courses must be taken for a letter grade.
3. Complete 9 upper division units in related supporting fields on advisement (determined by student's professional goals).

Completion of a minor is not required.

MINIMUM ADMISSION REQUIREMENTS TO THE UPPER DIVISION NURSING MAJOR:

1. Have completed 60 semester units of baccalaureate-level transferable college credit.
2. Have an Associate Degree with a major in nursing that includes a minimum of 30 semester units of registered nursing course work.
3. Have completed at least half of the College's General Education breadth requirement, including completion of a college-level English composition course.
4. Have 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. Have a current license as a Registered Nurse in California.
6. Have a minimum of one year's experience working as a Registered Nurse.
Nursing

7. Achieve at least the 45th percentile on National League for Nursing Achievement Tests in Maternal-Child, Medical-Surgical and Psychiatric nursing.
8. File an application to the College.
9. File an application to the Department of Nursing.

By the time classes begin in the Fall semester, students who are admitted to the nursing major must have individual professional malpractice insurance in force. The minimum coverages must be at least $200,000 each claim and $500,000 aggregate per year.

The College reserves the right to limit the enrollment of students in the nursing major to available space and clinical facilities. All nursing courses except those with a clinical component are open to Registered Nurses not admitted to the nursing major, subject to availability of space and consent of instructor.

CONTINUANCE IN THE NURSING MAJOR

Students must maintain a minimum grade of "C" in courses constituting the nursing major. Nursing 3500 may be taken CR/No Credit. All other courses in the major must be taken for a letter grade.

With Department approval, a student may repeat a nursing course one time. However, if class enrollment is limited, priority will be given to those students in regular progression in the program. When a student is allowed to repeat a nursing course, a grade of "C" or better must be earned to remain in the program.

DEGREE MAJOR IN NURSING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>NURS 3000</td>
<td>Health Assessment</td>
<td>3</td>
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<tr>
<td>NURS 3100</td>
<td>Health Teaching</td>
<td>2</td>
</tr>
<tr>
<td>NURS 3200</td>
<td>Science Applied to Nursing</td>
<td>3</td>
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<tr>
<td>NURS 3300</td>
<td>Dynamics of Nursing Leadership I, II</td>
<td>5</td>
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<tr>
<td>NURS 3400</td>
<td>Community Health Nursing</td>
<td>3</td>
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<tr>
<td>NURS 3410</td>
<td>Community Health Nursing Practicum</td>
<td>4</td>
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<tr>
<td>NURS 3500</td>
<td>Clinical Nursing Contract Preparation</td>
<td>1</td>
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<tr>
<td>NURS 4000</td>
<td>Issues Facing the Profession</td>
<td>2</td>
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<tr>
<td>NURS 4100</td>
<td>Introduction to Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NURS 4200</td>
<td>Advanced Clinical Nursing I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 4210</td>
<td>Advanced Clinical Nursing Practicum I, II</td>
<td>6</td>
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</tbody>
</table>

Total: 34

To complete major requirements, a student must fulfill 9 units of upper division electives in a related field on advisement (determined by student’s professional goals).
Those students expecting to pursue graduate education in nursing should take Statistics as one of their electives, since it is required for admission.

### TYPICAL STUDENT PROGRAM

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<tr>
<th></th>
<th>Junior Year</th>
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<td>Term</td>
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<tr>
<td>NURS 3000</td>
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<td>NURS 3100</td>
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### COURSE DESCRIPTIONS

#### Upper Division

**NURS 3000. Health Assessment (3)**

Assists the student in assuming new responsibilities for determining health status of individuals. Focus is on history taking and physical examination. (Lecture, 2 hours; laboratory, 3 hours)

**NURS 3100. Health Teaching (2)**

Basic principles of teaching, learning, and measurement. Includes theories of learning, behavioral objectives, and teaching strategies relevant to nursing. (Lecture, 2 hours)

**NURS 3200. Science Applied to Nursing (3)**

Advanced and updated concepts of physiology and pathophysiology applied to nursing. Focus is upon scientific principles and physiological interpretation of signs and symptoms. (Lecture, 3 hours)
Nursing

NURS 3300. Dynamics of Nursing Leadership I (3)

Identification and practice of communication skills and theories of group dynamics applied to nursing. Small groups are used as a basis for increasing self awareness and understanding of others in one-to-one and small group interaction. The nursing process as a method of problem solving is applied clinically. Philosophies of nursing are explored and individual nursing philosophies emerge. (Lecture, 3 hours)

NURS 3311. Dynamics of Nursing Leadership II (2)

The focus is on the function of the professional nurse as a leader, manager, and a change agent. (Lecture, 2 hours) (Formerly 3310) Prerequisite: NURS 3300.

NURS 3400. Community Health Nursing (3)

Theory and principles applied to the nursing role in promotion of health and prevention of disease. Beginning focus is on the family unit and then shifts to broader community-based problems of delivery of health care services. (Lecture, 3 hours) Concurrent enrollment in NURS 3410 is required. Prerequisites: NURS 3000, 3100, 3200, 3300.

NURS 3410. Community Health Nursing Practicum (4)

Clinical experience in community health agencies under the leadership of nursing faculty. (Laboratory, 12 hours) Concurrent enrollment in NURS 3400 is required. Prerequisites: NURS 3000, 3100, 3200, 3300, nursing liability insurance, current California driver's license, and access to transportation.

NURS 3500. Clinical Nursing Contract Preparation (1)

Students will prepare a formal contract for use in the Advanced Clinical Nursing Practicum. (Seminar, 1 hour). Prerequisites: Completion of NURS 3000, 3100, 3200, 3300. Completion of or concurrent enrollment in NURS 3311.

NURS 4000. Issues Facing the Profession (2)

Examines issues central to the profession of nursing. Students will study historical perspectives and make proposals for future direction of nursing. Advocacy and socio-political awareness for nurses is stressed. (Lecture, 2 hours) Prerequisite: Senior standing in the nursing major or consent of instructor.
NURS 4100. Introduction to Nursing Research (3)

Introduction to basic concepts of nursing research. Emphasis on evaluating research and application of findings in nursing practice. (Lecture, 3 hours) Prerequisite: Senior standing in the nursing major or consent of instructor. Statistics is strongly recommended.

NURS 4200. Advanced Clinical Nursing I (1)

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) Concurrent enrollment in NURS 4210 is required.

NURS 4210. Advanced Clinical Nursing Practicum I (3)

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: Nursing liability insurance, current California driver's license, senior standing in nursing program.

NURS 4300. Advanced Clinical Nursing II (1)

Continuation of NURS 4200. (Seminar, 1 hour) Concurrent enrollment in NURS 4310 is required.

NURS 4310. Advanced Clinical Nursing Practicum II (3)

Continuation of NURS 4210. (Laboratory, 9 hours) Concurrent enrollment in NURS 4300 is required. Prerequisites: Nursing liability insurance, current California driver's license, senior standing in nursing program.

NURS 4950. Selected Topics in Nursing (Topics to be specified in Class Schedule) (1-5)

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.

NURS 4960. Senior Seminar (1-4)

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.
Nursing

NURS 4970. Selected Topics offered during Winter Term (4)

NURS 4980. Individual Study (1-4)

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.

NURS 5980. Individual Study (1-4)

For qualified postbaccalaureate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.
Physical Education and Health

James K. Hanny, Ed.D., Professor, Chair
James C. Bowen, Ph.D., Professor
Richard D. Conant, Ph.D., Professor
Zaki I. Habashi, Ed.D., Professor
William M. Morris, Ed.D., Professor
Wayne E. Nelson, Ed.D., Professor
Martha M. Seban, M.S., Associate Professor
Albert W. Biancani, Ed.D., Coach

The Department of Physical Education and Health offers the degree Bachelor of Arts, Physical Education; the Bachelor of Arts degree, Physical Education, with a concentration in Recreation; and a Single Subject Waiver program in Physical Education. Courses are designed to 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.

REQUIREMENTS FOR THE BACHELOR OF ARTS, PHYSICAL EDUCATION

Physical education majors are to:
1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the prerequisites to the major including required courses in related fields.
3. Complete the major of not less than 38 upper division units; of these no more than 8 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.

Completion of a minor is not required.

DEGREE MAJOR IN PHYSICAL EDUCATION

Prerequisites to the Major:

The following courses, which are among the choices applicable to the general education requirements, are required for physical education majors.

- 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
- HLTH 2100. First Aid/Safety in Sports, 2 units
- PHED 1000. Physical Education Activity, 1 unit
Technology and Change

COURSE DESCRIPTIONS

MDIS 3500. The Technological Society (3)

An interdisciplinary analysis of the social and ecological crises caused by the exponential growth of science and technology. The issues—population, energy, alienation, pollution, etc.—are examined on the global, national, and local levels.

MDIS 4960. Seminar in Technology and Society (3)

Reading, papers, and discussion on the societal, ecological, and philosophical issues raised by contemporary science and technology. Prerequisite: MDIS 3500 or consent of instructor.
Technology and Change
A DEGREE MINOR
John P. Rasmussen, Ph.D., Director

Technology and Change is a multidisciplinary degree minor especially designed for the non-science student. The program is concerned with the social impact of science and technology on the world today and the world of the future. This minor will be useful to the student planning a career in education or administration as well as to all those seeking a broad understanding of the implications of technological and social change.

DEGREE MINOR IN TECHNOLOGY AND CHANGE

Eighteen units, of which at least 10 must be upper division.

Required courses:

MDIS 3500. The Technological Society, 3 units
MDIS 4960. Seminar in Technology and Society, 3 units

Elective courses:

In consultation with and upon approval of the minor adviser, the student is to select at least 12 units of supporting courses which contribute to his or her ability to understand the cultural implications of science and technology. At least 2 of these courses are to be selected from the Natural Sciences. Courses useful in fulfilling elective requirements include, but are not limited to, the following:

ANTH 4200. Applied Anthropology and Social Change, 4 units
ASTR 2100. Descriptive Astronomy, 3 units
BIOL 2650. Environmental Biology, 2 units
GEOG 3020. Human Ecology, 3 units
HIST 3640. Contemporary America, 3 units
SOCL 3200. Social Change, 3 units

Up to 6 units of the required 12 units of supporting course work in the minor may be taken by means of courses numbered 4980, Individual Study. Such course work must clearly focus on the topic of technology and change and must be approved by the minor adviser. Where appropriate, Winter Term courses are also applicable.

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Sociology

SOCL 5000. Seminar in Criminology (3)

Advanced study of crime causation and criminal classification; specialized group and individual treatment approaches. Prerequisite: Graduate standing.

SOCL 5940. Field Work (1-4)

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 College 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 Graduate Dean). Prerequisites: Graduate standing and consent of instructor.

SOCL 5950. Selected Topics in Sociology (Topics to be specified in Class Schedule) (1-5)

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.

SOCL 5960. Graduate Project (3-6)

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.

SOCL 5970. Selected Topics offered during Winter Term (4)

SOCL 5980. Individual Study (1-4)

For students capable of independent study in sociology. Topics and supervising instructors may vary. May be repeated for a total of 6 units. Available for postbaccalaureate credit only. Prerequisite: B.A. in Sociology or other social science.

SOCL 5990. Thesis (3-6)

Thesis research. Prerequisites: Graduate standing and consent of instructor.
SOCL 4800. Formal Organizations (3)

Analysis of modern bureaucratic organizations like hospitals, prisons, welfare, schools, etc. Examination of organizational effects on members, clients, and other organizations will be stressed. Prerequisite: Consent of instructor.

SOCL 4810. Urban Sociology (3)

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 4850. The Community (3)

A sociological exploration of past and present theories surrounding the emergence and development of the community. Emphasis will be placed on the complexities of population, organization, technology, and environmental factors and their impact on individual and institutional adaptive mechanisms and approaches. (Formerly 4840) Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4940. Field Experience--Immersion Semester (3-6)

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. Prerequisite: Consent of instructor.

SOCL 4950. Selected Topics in Sociology (Topics to be specified in Class Schedule) (1-5)

Topics vary each term, thus different topics may be taken for credit. Prerequisite: Consent of instructor.

SOCL 4960. Senior Seminar (4)

Review and discussion of the contemporary issues facing sociology. Each student prepares an individual report. Prerequisite: Consent of instructor.

SOCL 4970. Selected Topics offered during Winter Term (4)

SOCL 4980. Individual Study (1-4)

For students capable of independent work at an advanced level. May be repeated up to 6 units. Prerequisite: Consent of instructor.
SOCL 4600. Industrial Sociology (3)

Sociological analysis of industrial and other institutions of employment and work; work relations, labor unions, management policies, and industrialization as a world-wide phenomena. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4700. Medical Sociology (3)

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)

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.

SOCL 4720. Sociology of Death (3)

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.

SOCL 4730. Alcohol and Alcoholism (3)

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.

SOCL 4740. Sociology of Mental Health (3)

Students will identify community-based programs for treatment and prevention of mental illness. They will develop knowledge and understanding of the importance of sociological variables in identifying mental health. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4790. Social Welfare Services (3)

Historical development of welfare services; analysis of the structure, policies, and issues of public and private welfare services. (Formerly 3720) Prerequisite: SOCL 1010 or consent of instructor.
SOCL 4180. White Collar Crime (3)

Sociological analysis of the historical and current bases of white collar crime; the extent, costs (economic and social), and the law enforcement of white collar crime; and the relationship between the social class structure and white collar crime. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4190. Treatment of the Offender (3)

Sociological analysis of symbolic interactionist/social reactionist theories and research; definitions of "treatments" and "offenders"; consequences of treatment programs; the role of the offender; community responses to offenders. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4240. Social Deviance (3)

Theories of deviant behavior and relevant research. Study of the processes by which deviance occurs and the reactions of society. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4260. Social Justice Seminar (3)

Sociological analysis of the history, politics, and economics of social justice. Course will focus on theory and research, ideology of crime control, and criminal justice reform. (Formerly 4250) Prerequisite: SOCL 2250 or consent of instructor.

SOCL 4320. Sociology of Religion (3)

Sociological analysis of religious belief, behavior, and organization; classical and current theory and research. Prerequisite: Consent of instructor.

SOCL 4400. Political Sociology (3)

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)

Relations between personality, social structure, and culture. Primary emphasis on rules, socialization, aggression, affiliation, leadership, and norms. (Formerly 4510) Prerequisite: SOCL 1010 or consent of instructor.
Sociology

SOCL 4020. Sociology of Small Group Dynamics (3)

Structure and processes of small human groups, theory, research methods, and empirical findings. (Formerly 3610) Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4034. Research Techniques and Analytical Procedures (4)

Social measurement, data analysis and interpretation, formulation of research designs, and application of research techniques. Includes understanding and performing basic research. (Formerly 3030) Prerequisite: SOCL 3034.

SOCL 4120. Sociology of Crime and Delinquency (3)

Theories of crime and delinquency; acquisition of criminal behavior patterns by individuals; distribution of crime among societal groups; description of crime patterns cross culturally. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4130. Sociology of Correction (4)

Theories of punishment and treatment of criminals and juvenile delinquents. Effects of probation, parole, and prison behavior modification programs. Study of social systems within correctional facilities. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4140. Sociology of Law (3)

Sociological analysis of legal principles and rules, law and culture, social organization, social change, administration of justice. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4150. Sociology of Probation and Parole (3)

The uses of probation, parole, and other non-institutional programs in correctional systems. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4160. Police Behavior (3)

Sociological analysis of historical trends in police work (ideology, origins of administration of justice and progressivism) as well as contemporary aspects (socialization, context, strategies and practice). Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4170. Victimology (3)

This course analyzes historical and contemporary theories and research of victims, victim compensation programs, spouse and child abuse programs, and community responses to crime. Prerequisite: SOCL 1010 or consent of instructor.
SOCL 3240. Contemporary Social Issues (1-3)

Study of current social issues or problems that have captured the attention of various publics. Course topics and content may vary from term to term. The course will include topics in Latin America, Africa, the Middle East, Asia, Europe, as well as the United States. Different topics may be taken for a total of six units. (Formerly 2240) Prerequisite: Consent of instructor.

SOCL 3310. Social Stratification (3)

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. Modern Sociological Theory (4)

Major contributions to systematic sociological theory. Critical analysis of selected works from Comte, Pareto, Weber, Durkheim, Sorokin, Parsons, and other classical and contemporary sociologists. (Formerly 3410 and 4410) Prerequisite: SOCL 3000 or consent of instructor.

SOCL 3430. Population, Resources, and the American Future (3)

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 non-renewable resources both now and in the future. (Formerly 3420) Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3900. Sociological Colloquium (1-2)

Depending on the instructor, the Colloquium will focus on specific areas of sociological concern. Such areas may include an analysis of deviance, stratification, race, sex roles, population, religion, etc. May be repeated for a maximum of 4 units. No prerequisite.

SOCL 4000. Sociology of Education (3)

The changing character of education in complex societies, its effect on individual and community behavior and development. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 4010. Race and Ethnic Relations (3)

Sociological analysis of minority group relations; attention to specific racial, ethnic, and religious minorities. (Formerly 3010) Prerequisite: SOCL 1010 or consent of instructor.
Sociology

Upper Division

SOCL 3000. History of Sociology (3)

The emergence of sociology from social philosophy and the historical development of sociological thought. Prerequisite: SOCL 1010 or consent of instructor.

SOCL 3020. Social Justice Research (3)

Basic social science research methods applied to gathering data in criminal justice and criminological research. The focus will be on the special problems encountered in research settings and groups where information about crime is to be gathered and analyzed. Includes review of research in this area. Prerequisite: Consent of instructor.

SOCL 3034. Research Methods (4)

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. (Formerly 2030) Prerequisite: SOCL 1010 or equivalent.

SOCL 3150. The Family (3)

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)

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. Women in the Labor Force (3)

This course explores the distribution of women in various segments of the American labor force and compares this distribution to ones in other societies, including Israel, Japan, China, England, and Russia. Prerequisite: Sophomore standing.

SOCL 3200. Social Change (3)

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.
TEACHING CREDENTIALS

Majors in Sociology interested in a Social Sciences waiver for a single subject credential should review Plan II of the Social Sciences waiver described in the Social Sciences section of the catalog. Please refer to the Education section of the catalog for a description of other requirements to be completed for the single subject credential.

LIBERAL STUDIES CONCENTRATION IN SOCIOLOGY

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 3160, Sociology of Youth; SOCL 4000, Sociology of Education; SOCL 4010, Race and Ethnic Relations; and SOCL 4800, Formal Organizations.

COURSE DESCRIPTIONS

LOWER DIVISION

SOCL 1010. Introduction to Sociology (3)

Basic concepts and perspectives in sociological analysis. Prerequisite to other sociology courses.

SOCL 2000. Intergenerational Experiences and Life Course Developments (2)

This course will provide students with the background for understanding life span development of the "self" and "others" as integrated social, psychological, and physiological beings. Specifically, the course will focus on cross-generational experiences encompassing post-adolescence, 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.

SOCL 2250. Introduction to Social Justice (3)

A sociological analysis of criminal justice institutions and the process of social justice in the United States. (Formerly 3250)
b. Select at least one course from each of the following groups:

1) Politics and Public Administration
   - PSCI 3220. Constitutional Law, 4 units
   - PSCI 3225. Civil Liberties, 3 units
   - PSCI 4210. The Judicial Process, 3 units
   - PSCI 4220. Simulation--Supreme Court Decision Making, 3 units
   - PSCI 4315. Public Policy Making, 3 units
   - PSCI 4330. Urban Politics, 4 units

2) Psychology
   - PSYC 3130. Human Development, 3 units
   - PSYC 3160. Introduction to Psychological Testing, 3 units
   - PSYC 3320. Introduction to Personality, 3 units
   - PSYC 3350. Introduction to the Study of Abnormal Behavior, 3 units
   - PSYC 3790. Introduction to Counseling Theory, 3 units

3) Sociology
   - SOCL 3020. Social Justice Research, 3 units
   - SOCL 3160. Sociology of Youth, 3 units
   - SOCL 3310. Social Stratification, 3 units
   - SOCL 4010. Race and Ethnic Relations, 3 units
   - SOCL 4130. Sociology of Correction, 4 units
   - SOCL 4150. Sociology of Probation and Parole, 3 units
   - SOCL 4240. Social Deviance, 3 units
   - SOCL 4400. Political Sociology, 3 units
   - SOCL 4810. Urban Sociology, 3 units

Students who elect the Social Justice concentration may substitute Winter Term courses and/or related courses (e.g., Court Systems of Central California, Sociology of Terrorism, Seminar in Clinical and Abnormal Psychology, etc.) for the elective courses on an ad hoc basis with their adviser's consent.

**DEGREE MINOR IN SOCIOLOGY**

Nineteen units approved by the adviser, including SOCL 1010, either 3000 or 3400, 3034, and 8 or 9 units of upper division electives.
Sociology

SOCL 4130. Sociology of Correction, 4 units
SOCL 4150. Sociology of Probation and Parole, 3 units
SOCL 4190. Treatment of the Offender, 3 units
SOCL 4740. Sociology of Mental Health, 3 units

b. Select at least one course from each of the following groups:

1) Politics and Public Administration
   PSCI 3220. Constitutional Law, 4 units
   PSCI 3225. Civil Liberties, 3 units
   PSCI 4210. The Judicial Process, 3 units
   PSCI 4220. Simulation--Supreme Court Decision Making, 3 units
   PSCI 4315. Public Policy Making, 3 units
   PSCI 4330. Urban Politics, 4 units

2) Psychology
   PSYC 3130. Human Development, 3 units
   PSYC 3160. Introduction to Psychological Testing, 3 units
   PSYC 3320. Introduction to Personality, 3 units
   PSYC 3350. Introduction to the Study of Abnormal Behavior, 3 units
   PSYC 3790. Introduction to Counseling Theory, 3 units

3) Sociology
   SOCL 3020. Social Justice Research, 3 units
   SOCL 3160. Sociology of Youth, 3 units
   SOCL 3310. Social Stratification, 3 units
   SOCL 4010. Race and Ethnic Relations, 3 units
   SOCL 4160. Police Behavior, 3 units
   SOCL 4170. Victimology, 3 units
   SOCL 4240. Social Deviance, 3 units
   SOCL 4400. Political Sociology, 3 units
   SOCL 4810. Urban Sociology, 3 units

2. POLICING OPTION

   a. Select at least two courses from the following group:
      SOCL 4140. Sociology of Law, 3 units
      SOCL 4160. Police Behavior, 3 units
      SOCL 4170. Victimology, 3 units
      SOCL 4180. White Collar Crime, 3 units
Sociology

A. GENERAL MAJOR OPTION

1. SOCL 4960. Senior Seminar, 4 units

2. Select 15 units of upper division sociology electives as approved by major adviser.

B. HUMAN SERVICES CONCENTRATION

1. SOCL 4790. Social Welfare Services, 3 units
   SOCL 4946. Field Experience--Immersion Semester, 6 units

2. Select at least one course from each of the following groups:
   a. SOCL 3150. The Family, 3 units
      SOCL 3160. Sociology of Youth, 3 units
   b. SOCL 4600. Industrial Sociology, 3 units
      SOCL 4800. Formal Organizations, 3 units
      SOCL 4850. The Community, 3 units

3. Select at least three courses from the following group:
   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

C. SOCIAL JUSTICE CONCENTRATION

SOCL 2250. Introduction to Social Justice, 3 units
SOCL 4120. Sociology of Crime and Delinquency, 3 units
SOCL 4260. Social Justice Seminar, 3 units
*SOCL 4943. Field Experience--Immersion Semester, 3 units

Select either option (1) Corrections, or (2) Policing:

1. CORRECTIONS OPTION

   a. Select at least two courses from the following group:

*May be repeated once for credit. (This course is designed for students without career-related experience. For students with career-related experience, three units of upper division courses must be substituted as approved by the major adviser.)
In addition to providing students with a solid background in sociological theory and methods, the concentration allows students to examine the nature of institutions and social organizations and its influence on current problem areas such as social welfare and alcoholism.

Students must (a) complete the prerequisite to the sociology major, (b) complete the core courses required for all sociology majors, and (c) complete the required courses and electives in the concentration.

CONCENTRATION IN SOCIAL JUSTICE WITHIN THE DEGREE MAJOR

The Social Justice concentration offers students sociologically focused analysis of and specialized preparation for careers within the criminal justice system. Students in this concentration will have the opportunity to develop research skills, study and work in police departments and correctional institutions, and take courses which analyze the struggle for social justice.

Depending on their career objectives, students are to (a) select either the corrections option or the policing option, (b) complete the prerequisites to the major, (c) complete the core courses required of all sociology majors, and (d) complete the required courses in the concentration, option, and electives.

DEGREE MAJOR IN SOCIOLOGY

Prerequisites to the major:

SOCL 1010. Introduction to Sociology, 3 units

Recommended course:

MATH 1600. Statistics, 4 units

The Major

SOCL 3000. History of Sociology, 3 units
SOCL 3034. Research Methods, 4 units
SOCL 3400. Modern Sociological Theory, 4 units
SOCL 4034. Research Techniques and Analytical Procedures, 4 units

Select one of the following:

A. General Major Option
B. Human Services Concentration
C. Social Justice Concentration
The Department of Sociology offers the Bachelor of Arts degree in Sociology with optional course concentrations in Human Services and Social Justice. In addition, Liberal Studies and Social Science majors may select a sociology concentration as a core area of study. Finally, the Sociology Department participates in the interdisciplinary minor in Gerontology.

The study of sociology provides students at California State College, Stanislaus with a meaningful academic experience as well as the framework for a variety of career possibilities. Recent graduates of the College who have majored in sociology have applied their training toward gaining entrance to prestigious graduate schools or in obtaining employment with such varied organizational settings as probation departments, consumer affairs departments, consumer-oriented medical groups, local welfare departments, and many other similar social service settings.

REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIOLOGY

Sociology majors are to:

1. Complete requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 34 upper division units, of which no more than 8 units of CR graded course work may apply toward the major (Winter Term CR not included as part of these 8 units). A grade of "C" or better average must be maintained in the major.

Completion of a minor is not required.

CONCENTRATION IN HUMAN SERVICES WITHIN THE DEGREE MAJOR

The concentration in Human Services brings sociological theory and methods to bear on the issues and problems of human services. The concentration supplies a valuable conceptual framework for students considering careers in such fields as mental health, rehabilitation, social gerontology, and health services utilization, and for students planning to enter graduate social work programs.
3. Complete 3 upper division courses in a second social science discipline (minimum 9 units), chosen according to the rules specified in section B above.

**COURSE DESCRIPTIONS**

SSCI 3000. Library Resources for the Social Sciences (2)

A survey of the various library resources necessary for the research of the social sciences, that is, abstracts, indexes, bibliographies, dictionaries, encyclopedias, handbooks, government documents, together with footnote and bibliographical citation techniques. Prerequisite: None.

SSCI 3010. Introduction to Social Science Methodology (3)

This course provides a general introduction to the different types of methodologies used by the various social science disciplines. An important part of the course will be the reading and critiquing of representative works of social science research in the student's areas of interest. Prerequisite: None.

SSCI 4960. Social Sciences Interdisciplinary Seminar (3)

Discussions and papers based on concepts, theories, information and techniques from several social science disciplines. Prerequisites: Completion of SSCI 3000, a social science methodology course, and 7 other upper division courses in the major.
Social Sciences

PSYCHOLOGY:

Prerequisites, both 1 and 2:
1. PSYC 2010. Introduction to Psychology, 3 units
2. PSYC 2020. Introduction to Psychological Methods, 3 units; OR
   SOCL 3034. Research Methods, 4 units

Upper division courses: Three or four courses from the following:
PSYC 3130. Human Development, 3 units
PSYC 3170. Early Cognitive Development, 3 units
PSYC 3310. Introduction to Social Psychology, 3 units
PSYC 3500. Introduction to Perception and Cognition, 3 units
PSYC 3700. Introduction to Learning and Motivation, 3 units

SOCIOLOGY:

Prerequisite: SOCL 1010, Introduction to Sociology, 3 units

Any upper division course may be selected with the adviser's consent. Options available to the student include courses in:
1. Human services
2. Social Justice
3. General sociology--theory and methods

TEACHING CREDENTIAL

Majors in Social Sciences interested in the multiple subject credential are referred to the Education section of the catalog for a description of the requirements for this teaching credential.

To qualify for a subject matter waiver for a single subject credential in the social sciences, the student may follow either Option I or Option II.

Option I:
1. Complete the social science introductory course breadth requirement by taking one course in each of the seven areas listed in section A above.
2. Complete the upper division social science major of 35 units as described in section B above, to include SSCI 3000 and SSCI 4960.

Option II:
1. Complete the social science introductory course breadth requirement by taking one course in each of the seven areas listed in section A above.
2. Complete the major in any single social science discipline for a minimum of 24 upper division units.
Upper division courses: Both 1 and 2
1. ETHS 4200. The Minority Experience, 3 units
2. Two or three of the following, to total a minimum of 6 units as approved by the adviser:
   ETHS 4000. Mexican-American Family, 3 units
   ETHS 4010. The Black American Family, 3 units
   ETHS 4020. The Black Woman, 4 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
   ETHS 4970. Selected Topics offered during Winter Term, 4 units
   ETHS 4980. Individual Study, 1-4 units

GEOGRAPHY:

Upper division courses: options available include:
1. Topical human geography
2. Topical physical geography
3. Regional geography
4. Methodology in geography

Students must take at least one course from either topical (human or physical) geography or methodology in geography, and at least one course from regional geography.

HISTORY:

Prerequisite: A one-year sequence of lower division history: U.S. History, Western Civilization, or Non-Western History.

Courses should be selected in such a way that the student will have had at least one course, in either upper or lower division, in each of the following fields:
1. European History
2. United States History
3. Non-Western History

POLITICAL SCIENCE:

Upper division courses:
1. American Politics: 2 courses
2. Additional courses are to be selected from the following:
   a. Political Theory & Methodology
   b. Comparative Politics
   c. International Relations
Social Sciences

B. Upper division major.
Complete 4 courses in one of the following disciplines and 3 courses each in two others, as approved by the adviser.
Note: Some of these disciplines require additional lower division introductory course work not already specified in section A above. Students will select courses from the 3 preferred disciplines according to the following rules:

ANTHROPOLOGY:
Any upper division course may be selected, with the adviser's consent. Note additional prerequisites to certain courses. Options available are:
1. General Anthropology
2. Ethnography
3. Ethnology
4. Advanced Prehistoric Archaeology
5. Advanced Physical Anthropology
6. Linguistics
7. Special Studies

COMMUNICATION STUDIES:
Prerequisite: SPCH 2011. Approaches to Human Communications, 4 units.
Upper division courses to be selected from the following areas:
1. Basic systems and processes: language and communication
2. Interpersonal communication

ECONOMICS:
Upper division courses: Select one course each from three or four of the following fields:
1. Economic Theory and Doctrines
2. Money and Banking
3. Public Finance and Fiscal Policy
4. Labor Economics
5. International Economics
6. Economic History
7. Quantitative Economics
8. General Courses

ETHNIC STUDIES:
Prerequisite: One of the following:
ETHS 2000. Contemporary Black Studies, 3 units
ETHS 2100. Contemporary Chicano Studies, 3 units
ETHS 2200. Contemporary Asian American Studies, 3 units
ETHS 2300. Contemporary Native American Studies, 3 units
Social Sciences

should be worked out prior to each advising appointment. In such a broad major, close cooperation between adviser and advisee is necessary if mistakes are to be avoided.

A. Introductory course breadth requirements.
Students will take one course in area 7 and one course in each of three other areas:

1. Environment:
   GEOG 2010. Introduction to the Physical Environment, 3 units, OR
   GEOG 2500. Eurasia & Africa, Lands & Cultures, 3 units, OR
   GEOG 2510. New World, Lands & Cultures

2. Culture:
   ANTH 2060. Introduction to Cultural Anthropology, 3 units

3. Social Organization:
   SOCL 1010. Introduction to Sociology, 3 units

4. Personality:
   PSYC 2010. Introduction to Psychology, 3 units, OR
   PSYC 3200. Psychology of Religion, 3 units

5. Social Control:
   SOCL 2250. Introduction to Social Justice, 3 units, OR
   SPCH 2011. Approaches to Human Communication, 4 units, OR
   SPCH 2102. Group Discussion Processes, 3 units

6. Economic Organization:
   ECON 2500. Principles of Economics I, 4 units, OR
   ECON 2510. Principles of Economics II, 4 units

7. The Social Sciences as science (one of the following):
   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 3034. Research Methods, 4 units
   SPCH 3900. Introduction to Research Methods in Communication, 3 units
   SSCI 3010. Introduction to Social Science Methodology, 3 units
The Bachelor of Arts, Social Sciences, major 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. A basic training is offered in the methods of scientific investigation in the social sciences.

A student majoring in social sciences may select one of the following options:

1. A program of courses in three fields of interest, selected as shown under "Requirements" below.
2. A program consisting of either of the following concentrations:
   - International Studies
   - Urban and Community Studies
3. A program designed for teaching credential candidates who wish to major in the social sciences.

**Requirements for Bachelor of Arts, Social Sciences**

Social sciences interdepartmental majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the introductory course breadth requirements, as specified below.
3. Complete the major of no fewer than 35 upper division units, as approved by the adviser, and distributed as follows:
   - SSCI 3000. Library Resources for the Social Sciences, 2 units
   - SSCI 4960. Social Sciences Interdisciplinary Seminar, 3 units
   - 4 courses in the discipline of student's major interest, 3 units
   - 3 courses in a second discipline
   - 3 courses in a third discipline
   - 12 courses of no fewer than 35 upper division units; of these no more than 8 units of CR-graded Winter Term course work may apply toward the major.

A student on entering the social sciences major should work out with his/her adviser a tentative program for the remainder of the undergraduate course. Thenceforth, a trial study list
PSYC 5950. School Psychology Internship (1-4)

Work experience as a supervised School Psychologist. Joint supervision by district and college personnel. May be repeated for two semesters. Prerequisites: Admission to School Psychology MS program, PPS credential, employment in approved internship program, and approval by School Psychology Coordinator.

PSYC 5960. Seminar in Applied Psychology (3)

This course is designed to provide advanced graduate students and practicing professionals with exposure to advanced counseling and diagnostic techniques. Topics will range across a broad spectrum of issues and techniques in applied psychology. Included will be such topics as advanced testing methods, program evaluation, and special therapy techniques. May be taken for a total of 6 units. Prerequisite: Consent of instructor.

PSYC 5970. Selected Topics offered during Winter Term (4)

PSYC 5980. Individual Study (1-4)

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: Prior consent of instructor.

PSYC 5990. Master's Thesis (1-6)

Preparation of a thesis in area of specialty for partial fulfillment of requirements. Prerequisite: Admission to classified graduate standing.
Psychology

PSYC 5822. Applied Group Dynamics (3)

This seminar focuses on the application of theoretical and empirical principles in group dynamics. Topics to be discussed include organizational development, small group facilitation, human resource development, and workshop design and evaluation. (Formerly 5820 and 5821) Prerequisites: PSYC 4820 or SPCH 4100.

PSYC 5900. Practicum in Marriage and Family Counseling (2)

Supervised experience in conjoint family and marriage techniques. A minimum of four counseling cases (couple or family) will be seen by each student. Emphasis will be on improved communication, goal setting, and contracts within families. Students will make a minimum of two formal written and oral presentations per semester to the faculty and fellow graduate students in case conferences. The student will also attend one formal supervision session per week with a designated instructor. Prerequisites: PSYC 5910 and classified standing.

PSYC 5910. Practicum in Counseling and Diagnostics (2)

Supervised experience in diagnostic testing and individual counseling. There will be a minimum of four diagnostic workups and two continuous individual cases. Students will make a minimum of two formal written and oral presentations per semester to the faculty and fellow graduate students in case conferences. This course is the first in a sequence to be followed by PSYC 5930 or 5970, or both. Prerequisites: PSYC 3160, 4770, 5030, classified graduate standing, and consent of instructor.

PSYC 5930. Practicum in Behavior Modification (2)

Supervised experience in the assessment and modification of behavior with an emphasis on the conditioning of the behavior of various types of clients. Cases will be seen with formal reports of assessment and change data. Students will make written and oral presentations to the faculty and fellow graduate students in case conferences. The student will also attend one formal supervision session per week with the designated instructor. Prerequisites: PSYC 5910 and classified standing.

PSYC 5940. Field Work (1-4)

Work of a psychological nature performed in schools, agencies, and institutions under joint supervision of the college and agency where assigned. May be repeated for a total of 6 units. Prerequisites: Graduate Standing and prior consent of instructor.
PSYC 5080. Legal and Ethical Issues in Psychology and Counseling (2)

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.

PSYC 5130. Advanced Human Development (3)

Empirical research on theoretical constructs of human development. Prerequisites: PSYC 3130 or equivalent, four upper division courses in psychology, and graduate standing.

PSYC 5150. Identification and Evaluation of Exceptional Children (3)

Covers information needed to identify exceptional children. Includes learning disabilities, mental retardation, emotional and behavioral problems. Intelligence, ability, and personality tests are covered.

PSYC 5640. Advanced Seminar in Behavior Change (3)

Study of current theories and research in behavior therapy. Prerequisites: PSYC 4720, consent of instructor, and graduate standing. PSYC 4750 or 4790 recommended.

PSYC 5720. Behavioral Consultation (2)

Supervised work for consultation with classroom teachers. Prerequisites: Classified graduate standing and consent of instructor.

PSYC 5780. Advanced Counseling (3)

Counseling practices including commonly used methods of psychotherapy and practice in techniques of counseling. Prerequisites: PSYC 3790, 4770, and classified graduate standing.

PSYC 5790. Family Counseling Theory and Practice (3)

Study of theory and techniques of conjoint family therapy with consideration of such topics as parent-child relationships, human sexuality, and combined families. Prerequisites: PSYC 3790, 4770, and graduate standing.

PSYC 5800. Marriage and Family Life (3)

The study of marriage with special reference to cross-cultural mores and values, marital law, communication in marriages, and current social problems relevant to the marital relationship. Prerequisite: Graduate standing.
Psychology

Graduate

PSYC 5000. Proseminar I (4)

Advanced psychological statistical methods and interpretation, and research design, stressing complex analysis of variance and multivariate methods. Laboratory involves computer analysis of statistical data. (Lecture, 3 hours; laboratory, 3 hours).
Prerequisites: PSYC 3000 or consent of instructor, and graduate standing.

PSYC 5010. Proseminar II (4)

Teaches oral and written skills important in developing and presenting masters thesis proposal. A completed thesis proposal is required. Prerequisites: Graduate standing and consent of instructor.

PSYC 5030. Psychodiagnostics I (3)

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 5040.

PSYC 5040. Psychodiagnostics I Laboratory (1)

Supervised work with the application of diagnostic strategies to representative cases. Prerequisite: Concurrent enrollment in PSYC 5030.

PSYC 5050. Psychodiagnostics II (3)

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)

Supervised work with the application of diagnostic strategies to representative cases. Prerequisite: Concurrent enrollment in PSYC 5050.

PSYC 5070. Practicum in Childhood Diagnostics & Intervention (2)

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 through the Learning Skills Clinic. Prerequisites: PSYC 5050, 5060, consent of instructor, and classified standing.

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PSYC 4910. Advanced Internship in Administration of Preschool Programs (1-6)

An internship in program administration and supervision. Participation will include head teaching, organizing a week's curriculum chart, participation in staff meetings, and staff supervision under the direct supervision of the Child Development Center Director. Two lab hours and one lecture-discussion hour per week required for each credit unit earned. (Formerly SPCH 4740) Prerequisites: PSYC 3941 and 3950.

PSYC 4930. Psychology Colloquium (1)

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.

PSYC 4940. Field Work in Psychology (1-2)

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 a total of 6 units, 2 of which can be applied to the major. Prerequisites: PSYC 2020 and prior consent of instructor.

PSYC 4950. Selected Topics in Psychology (Topics to be specified in Class Schedule) (1-5)

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: Prior consent of instructor.

PSYC 4960. Organization and Administration of Early Childhood Education Programs (4)

An overview of administration in early childhood education programs. Topics to be covered include program organization and curriculum development, staffing, budget, legal, and parent-relation responsibilities of program directors (Lecture/discussion, 3 hours; laboratory, 9 hours) Prerequisites: PSYC 3941 and 3950.

PSYC 4970. Selected Topics offered during Winter Term (4)

PSYC 4980. Individual Study (1-4)

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.
Psychology

PSYC 4720. Experimental Analysis of Behavior (3)

The study of behavior principles, emphasizing clinical and operant conditioning, and their application in various applied settings. Prerequisites: PSYC 2020 and concurrent enrollment in PSYC 4721.

PSYC 4721. Experimental Analysis of Behavior Laboratory (1)

Laboratory studies with infra-human species to demonstrate the basic principles of behavior. Prerequisites: PSYC 2020 and concurrent enrollment in PSYC 4720.

PSYC 4750. Applied Behavior Analysis for Severely and Learning Handicapped (3)

Application of learning principles to educational and behavioral problems of individuals, enabling the student to design and implement programs for the learning handicapped. Gives the student skills in program management and evaluation. Extends learning theory application past the level of expertise acquired in PSYC 4720. Prerequisite: PSYC 4150.

PSYC 4770. Introduction to Counseling Techniques (3)

Training in basic counseling skills. Prerequisites: PSYC 3790, senior standing, and consent of instructor.

PSYC 4790. Behavioral Engineering (3)

Interpretation of learning theory principles and research in the design, implementation, and evaluation of educational and pro-social programs. (Formerly 4780) Prerequisite: PSYC 4720.

PSYC 4820. Group Dynamics Seminar (3)

A critical review of theory, research, and practice related to group behavior, including factors influencing communication, decision-making, group cohesiveness, and productivity. Prerequisites: PSYC 3000 and 3310, or consent of instructor.

PSYC 4850. Psychology of Sex Differences (3)

Critical study of research and theory relating to sex differences in personality and behavior patterns, the biological and social bases for sex differences, and the potential for role change. Prerequisites: PSYC 2020 and one upper division course in psychology.

PSYC 4900. Advanced General Psychology (3)

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.
PSYC 4110. Behavior Genetics (3)

Evaluation of the genotypic contribution to human and animal behavior. Special emphasis on the interaction between genotype and environment during development. (Formerly 3110) Prerequisite: BIOL 1010 or ZOOL 1050.

PSYC 4130. Psychological Disorders of Children (3)

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 3130.

PSYC 4150. Learning Disabilities (3)

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 3130 or consent of instructor.

PSYC 4250. Drugs and Behavior (3)

The social, psychological and physiological effects of all the major therapeutic and recreational drugs will be reviewed. The issues of drug use and abuse will be studied to develop effective strategies for prevention and rehabilitation of drug dependency.

PSYC 4360. Seminar in Clinical and Abnormal Psychology (3)

Survey of theory and research in clinical and abnormal psychology, with emphasis on diagnosis and treatment systems. Prerequisites: PSYC 3130 or 3320, 3350, and consent of instructor.

PSYC 4520. Principles of Sensory Processes (4)

The psychophysical analysis of spatial and temporal properties of the human senses. (Lecture, 3 hours; laboratory, 3 hours) (Formerly 3520) Prerequisite: BIOL 1010 or ZOOL 1050.

PSYC 4550. Practicum in Direct Instruction. (2)

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: EDUC 3250 or concurrent enrollment in EDUC 3250 or consent of instructor.
Psychology

PSYC 3660. Psychology of Women (3)

A psychological examination of the nature and experiences of women. Topics to be explored include the nature of femininity, women and mental health, female sexuality, women's roles, hormones and behavior, and assertiveness in women.

PSYC 3700. Introduction to Learning and Motivation (3)

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 not required.

PSYC 3710. Learning and Motivation Laboratory (1)

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). (Formerly 3690) Prerequisites: PSYC 3000 and concurrent or prior enrollment in PSYC 3700, or consent of instructor.

PSYC 3790. Introduction to Counseling Theory (3)

Introduction to major theories of counseling. Demonstrations and review of current literature. Prerequisite: PSYC 3310 or 3320.

PSYC 3941. The Preschool Program: Curriculum Development Internship (1)

A review of preschool program development. Emphasis will be placed on the actual development, implementation, and evaluation of curriculum activities as they relate to different theories of child development. Concurrent enrollment in PSYC 3950 required. (Formerly SPCH 3940) Prerequisite: PSYC 3230.

PSYC 3950. The Preschool Program: Laboratory (2)

Laboratory work in the Child Development Center. Concurrent enrollment in PSYC 3941 required. (Formerly SPCH 3940) Prerequisite: PSYC 3230.

PSYC 4020. History of Psychology (3)

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.
PSYC 3300. Social Psychology Laboratory (1)

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, or consent of instructor.

PSYC 3310. Introduction to Social Psychology (3)

Interpersonal relations including social attitudes, opinions, social structures, and group dynamics. Prerequisite: PSYC 2010. Concurrent enrollment in PSYC 3300 not required.

PSYC 3320. Introduction to Personality (3)

Survey of the most influential approaches to the study and understanding of personality with emphasis on comparison of critical, theoretical issues. Prerequisite: PSYC 2010.

PSYC 3340. Environmental Psychology (3)

An empirical and theoretical review of the relationship between the person and the physical environment. Topics to be discussed include privacy, personal space, territoriality, and crowding. Special emphasis will be placed on practical application in the areas of architecture, environmental planning and design, and population control. (Formerly 4310) Prerequisite: PSYC 2010.

PSYC 3350. Introduction to the Study of Abnormal Behavior (3)

Abnormal behavior in man, stressing symptoms and dynamics of neuroses and psychoses. Prerequisites: PSYC 2020 plus 2 additional courses in psychology. PSYC 3130 and 3320 are recommended.

PSYC 3500. Introduction to Perception and Cognition (3)

Basic phenomena in the related areas of perception and cognition. Simple and complex responses to stimuli. Concepts such as form perception and organization, color illusions, space, attention and thinking processes, decision-making, thinking and language. Prerequisite: PSYC 2020. Concurrent enrollment in PSYC 3510 not required.

PSYC 3510. Perception and Cognition Laboratory (1)

Laboratory experience in phenomena related to perception and cognition. (Formerly 3490) Prerequisites: PSYC 3000 and concurrent or prior enrollment in PSYC 3500, or consent of instructor.
Psychology

PSYC 3100. Introduction to Physiological Psychology (4)

Relationship between behavior and physiological processes, particularly neurophysiological processes. (Lecture, 3 hours; laboratory, 3 hours). Prerequisite: BIOL 1010 or ZOOL 1050.

PSYC 3120. Human Development Laboratory (1)

Systematic observation of human behavior at various stages of development. Prerequisite: Concurrent enrollment in PSYC 3130 or consent of instructor.

PSYC 3130. Human Development (3)

The psychology of development: infancy, childhood, adolescence, and maturity. Prerequisite: PSYC 2010. Concurrent enrollment in PSYC 3120 not required.

PSYC 3160. Introduction to Psychological Testing (3)

Basic, widely applicable principles of psychological testing presented in a non-technical way, plus descriptions of representative types of psychological tests in common use. Prerequisite: PSYC 2020.

PSYC 3170. Early Cognitive Development (3)

Human behavior will be dealt with in naturalistic terms via an examination of child intellectual development, with emphasis on Piaget, Montessori, and other cognitive theorists. Prerequisite: PSYC 3150 or consent of instructor.

PSYC 3200. Psychology of Religion (3)

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. (Formerly 2800)

PSYC 3230. Preschool Development (4)

Psychological analysis of preschool development with special emphasis on application to preschool development centers. Lecture and laboratory experiences designed to prepare students to work with and design environments for children. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: PSYC 3130.
Psychology

PSYC 2020. Introduction to Psychological Methods (3)

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.

PSYC 2030. Psychology of Adjustment (2)

Primarily for non-psychology majors. A review of issues in personal and social adjustment to prepare students for a life-long understanding of themselves as integrated persons. Topics include human sexuality, family process, effective integration of work and leisure, health and stress management, death and dying, and other aspects of human development through the life cycle.

PSYC 2950. Selected Topics in Psychology (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of psychology. Topics may vary each term. Different topics may be taken for credit. Prerequisite: Consent of instructor and PSYC 2010 or equivalent.

PSYC 2970. Selected Topics offered during Winter Term (4)

Upper Division

PSYC 3000. Experimental Methods and Design (4)

Provides a working knowledge of fundamental scientific methods in psychology, stressing the integration of laboratory methods, measurement theory and inferential statistical techniques, including introduction to analysis of variance. This course is a prerequisite to the two laboratory courses, chosen from PSYC 3300, 3510, or 3710, required of psychology majors. Prerequisites: PSYC 2020 and completion of the General Education requirement in Logic-Math-Statistics. MATH 1600 is strongly recommended to meet this requirement.

PSYC 3080. Comparative Animal Behavior Laboratory (1)

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: PSYC 3090 or concurrent enrollment.

PSYC 3090. Comparative Animal Behavior (3)

A comparative study of behavior systems in animals and man. Stress is upon the social and developmental aspects of behavior. Prerequisite: BIOL 1010 or ZOOL 1050. Concurrent enrollment in PSYC 3080 not required.
Psychology

SCHOOL PSYCHOLOGY CONCENTRATION

EDUC 4200. Teaching the Culturally Different, 3 units
EDUC 5760. Pupil Personnel Services Seminar, 3 units
PSYC 4150. Learning Disabilities, 3 units
PSYC 4750. Applied Behavior Analysis for Severely and Learning Handicapped, 3 units
PSYC 5050. Psychodiagnostic II, 3 units
PSYC 5060. Psychodiagnostic II Laboratory, 1 unit
PSYC 5720. Behavioral Consultation, 2 units
PSYC 5940. Field Work, 1 unit

COUNSELING CONCENTRATION

PSYC 5050. Psychodiagnostic II, 3 units
PSYC 5060. Psychodiagnostic II Laboratory, 1 unit
PSYC 5720. Behavioral Consultation, 2 units
PSYC 5790. Family Counseling Theory & Practice, 3 units
PSYC 5800. Marriage and Family Life, 3 units
PSYC 5822. Applied Group Dynamics, 3 units
PSYC 5980. Individual Study, 1-4 units

CLINICAL PSYCHOLOGY CONCENTRATION

PSYC 4750. Applied Behavior Analysis for Severely and Learning Handicapped, 3 units
PSYC 4790. Behavioral Engineering, 3 units
PSYC 5720. Behavioral Consultation, 2 units

COURSE DESCRIPTIONS

Lower Division

PSYC 0103. Direct Instruction - Reading (3)

A course emphasizing the development of individual student's reading, comprehension, and spelling skills with intensive practice in the basic components of decoding, vocabulary, literal and inferential skills, and the principles of spelling through morphographs. Prerequisite: Consent of instructor.

PSYC 2010. Introduction to Psychology (3)

Scientific study of human behavior. This course or its equivalent is a prerequisite to all other courses in psychology, including all 2000-level courses.
A. Basic Requirements (7 units)
PSYC 5080. Legal and Ethical Issues in Psychology, 2 units
PSYC 5940. Field Work, 2 units
PSYC 5990. Master's Thesis, 3 units

B. General Principles (18 units)
PSYC 4720. Experimental Analysis of Behavior, 3 units
PSYC 4721. Experimental Analysis of Behavior Laboratory, 1 unit
PSYC 4820. Group Dynamics Seminar, 3 units
PSYC 5000. Proseminar I (Applied Research Methods), 4 units
PSYC 5010. Proseminar II, 4 units
PSYC 5130. Advanced Human Development, 3 units

C. Clinical Principles (17 units)
PSYC 4360. Seminar in Clinical & Abnormal Psychology, 3 units
PSYC 4770. Introduction to Counseling Techniques, 3 units
AND EITHER
PSYC 5030. Psychodiagnosics I, 3 units
PSYC 5040. Psychodiagnosics I Laboratory, 1 unit
OR
PSYC 5050. Psychodiagnosics II, 3 units
PSYC 5060. Psychodiagnosics II Laboratory, 1 unit
AND EITHER
PSYC 5640. Advanced Seminar in Behavior Change, 3 units
OR
PSYC 5780. Advanced Counseling, 3 units

Students are required to complete two practicum courses from the following list in consultation with his or her adviser. No more than one practicum may be taken during a single semester. Any practicum may be repeated for credit.
PSYC 4550. Practicum in Direct Instruction, 2 units
PSYC 5070. Practicum in Child Diagnostics and Intervention, 2 units
PSYC 5900. Practicum in Marriage and Family Counseling, 2 units
PSYC 5910. Practicum in Counseling and Diagnostics, 2 units (required for School Psychology concentration)
PSYC 5930. Practicum in Behavior Modification, 2 units (required for Clinical Psychology program)

Normally the student will choose the additional units to complete 50 semester hours from one of the following groups. Students interested in the School Psychology credential must complete all of the courses listed under the School Psychology heading. Students interested in the Clinical Psychology concentration must complete all of the courses listed under the Clinical Psychology heading.
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. Students without the approved courses may be accepted into unclassified graduate standing. Such students will be given the opportunity to make up background deficiencies commensurate with graduate criteria.

2. Superior performance in the undergraduate major (3.0 GPA).
3. Completion of a set of examinations which may be administered by the Psychology Department to determine those areas in which further preparation is required.
4. Approval by the Psychology Department.

Continuation in the M.S. Degree Program:
1. Maintenance of a 3.0 GPA in all courses attempted.
2. Maintenance of satisfactory progress toward the degree.
3. An unclassified graduate student will not be admitted to classified graduate standing in psychology if the student has earned more than three units of graduate study graded less than "B". 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 of graduate study graded less than "B" be counted towards a Master's Degree.

REQUIREMENTS FOR THE M.S. DEGREE

1. All students are required to complete the appropriate 50 or more semester units or their equivalent.
2. All students complete the 42 core semester units listed in sections A, B, and C.
3. All students will complete a minimum of an additional 8 semester units chosen by the student with the advising committee and approved by the Graduate Committee. These courses will usually follow one of the special emphasis areas but may be specially selected to meet the student's unique career goal if the graduate committee approves. The graduate committee may require additional units.
4. Students may satisfy any course requirement by demonstrating proficiency in the subject matter included in a required course. This will normally be done through challenge procedure or acceptable transfer credit.
1. A bachelor's degree with 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. Superior performance in the undergraduate major (3.0 GPA).

3. Satisfactory performance on the Graduate Record Exam (general portion).

4. Choose an area of interest and a faculty member with whom you would like to work. Include a brief description of a sample problem you might choose as a thesis.

5. Three letters of recommendation

6. Approval by the Psychology Department.

Continuation in the M.A. Degree Program:

1. Maintenance of a 3.0 in all courses attempted.

2. Full-time student status.


REQUIREMENTS FOR THE M.A. DEGREE

1. Completion of the appropriate 30 semester units.
   a. All students must complete:
      PSYC 5000. Proseminar I, 4 units
      PSYC 5010. Proseminar II, 4 units
      PSYC 5940. Field Work, 6 units
      PSYC 5990. Master's Thesis, 3 units
   b. The remaining 13 semester hours must be selected from the available 4000- and 5000-level catalog courses. These courses are to be selected with prior approval of the student's thesis committee. (PSYC 5780, 5900, 5910, and 5930 are not open to M.A. students.)

2. Satisfactory completion of the M.A. research including a public defense of the thesis.

MASTER OF SCIENCE IN PSYCHOLOGY

The primary purpose of the M.S. program in Psychology is to develop mastery of a substantial body of knowledge and skills for students planning careers in counseling or school psychology or clinical psychology. By selecting an emphasis in school psychology, a student can plan a program to complete requirements for the State School Psychology Credential. The student, in consultation with a faculty advising committee, develops a program of study appropriate to career interests and goals. Admission to the program is competitive. See the Psychology Department's Graduate Student Handbook for additional information.

Minimum prerequisites for Admission to the Master of Science Degree Program:

1. A bachelor's degree with 16 approved semester units in
Psychology

PSYC 3700. Learning and Motivation, 3 units
PSYC 3710. Learning and Motivation Laboratory, 1 unit
PSYC 4110. Behavior Genetics, 3 units
PSYC 4720. Experimental Analysis of Behavior, 3 units
PSYC 4721. Experimental Analysis of Behavior Lab, 1 unit
PSYC 4820. Group Dynamics Seminar, 3 units

DEGREE MINOR IN PSYCHOLOGY

Eighteen units, to include at least 12 units in upper division.

Lower Division
PSYC 2010. Introduction to Psychology, 3 units
PSYC 2020. Introduction to Psychological Methods, 3 units

Upper Division
Courses as approved by minor adviser, 12 units

LIBERAL STUDIES CONCENTRATION IN PSYCHOLOGY

A liberal arts concentration in the area of Psychology must include the following course:
PSYC 2020. Introduction to Psychological Methods, 3 units

The student must also complete a minimum of 15 units of upper division psychology courses with at least two courses to be selected from Group I and one course from each of Groups II and III or Winter Term substitutions by advisement.

TEACHING CREDENTIALS

The major requirements in Psychology for students interested in obtaining a single subject teaching credential are the same as those listed for the Psychology major. Please refer to the Education section of the Catalog for a description of other requirements to be completed in obtaining a single subject credential.

LEARNING HANDICAPPED: SPECIAL EDUCATION CREDENTIAL

Students planning careers in the field of learning handicapped should consult with the credential adviser in the Division of Education regarding program requirements.

MASTERS OF ARTS IN PSYCHOLOGY

The M.A. 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 to the Master of Arts degree Program:
450
CONCENTRATION IN EXPERIMENTAL PSYCHOLOGY WITHIN THE DEGREE MAJOR

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 his/her ability to conduct independent research which is a requirement of all graduate programs.

Complete the prerequisites to the major.

Required courses in the major

Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3000. Experimental Methods &amp; Design</td>
<td>4</td>
</tr>
<tr>
<td>At least 2 of the following courses with the associated laboratory</td>
<td>8</td>
</tr>
<tr>
<td>PSYC 3300, 3310. Introduction to Social Psychology (lec &amp; lab), 4 units</td>
<td></td>
</tr>
<tr>
<td>PSYC 3500, 3510. Perception and Cognition (lec &amp; lab), 4 units</td>
<td></td>
</tr>
<tr>
<td>PSYC 3700, 3710. Learning and Motivation (lec &amp; lab), 4 units</td>
<td></td>
</tr>
</tbody>
</table>

Upper division electives in psychology as approved by major adviser (student is expected to take a broad basic program consisting of at least 1 course from each of the three groups within the psychology major) 18

Required courses in the concentration:

Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 4020. History of Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective courses in Experimental Psychology as approved by major adviser. These courses must be in addition to those selected for upper division electives under required courses in the major. 8

Experimental Psychology courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3100. Introduction to Physiological Psychology, 4 units</td>
<td></td>
</tr>
<tr>
<td>PSYC 3130. Human Development, 3 units</td>
<td></td>
</tr>
<tr>
<td>PSYC 3120. Human Development Laboratory, 1 unit</td>
<td></td>
</tr>
<tr>
<td>PSYC 3310. Introduction to Social Psychology, 3 units</td>
<td></td>
</tr>
<tr>
<td>PSYC 3300. Social Psychology Laboratory, 1 unit</td>
<td></td>
</tr>
<tr>
<td>PSYC 3500. Perception and Cognition, 3 units</td>
<td></td>
</tr>
<tr>
<td>PSYC 3510. Perception and Cognition Laboratory, 1 unit</td>
<td></td>
</tr>
</tbody>
</table>
Psychology

PSYC 4150. Learning Disabilities, 3 units
PSYC 4750. Applied Behavior Analysis for Severely and Learning Handicapped, 3 units
PSYC 4790. Behavioral Engineering, 3 units

The following course is strongly recommended for psychology majors intending to pursue graduate training and who wish to prepare for the Graduate Record Examination. This course is also suitable for those who wish an integrative "finishing" course to the major:

PSYC 4020. History of Psychology, 3 units

CONCENTRATION IN DEVELOPMENTAL PSYCHOLOGY WITHIN THE DEGREE MAJOR

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 welfare clinics, 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 principles to various aspects of human development.

Complete the prerequisites to the major.

Required courses in the major

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3000</td>
<td>Experimental Methods &amp; Design</td>
<td>4</td>
</tr>
</tbody>
</table>

At least 2 of the following courses with the associated laboratory.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3300, 3310</td>
<td>Introduction to Social Psychology (lec &amp; lab), 4 units</td>
<td>8</td>
</tr>
<tr>
<td>PSYC 3500, 3510</td>
<td>Perception and Cognition (lec &amp; lab), 4 units</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 3700, 3710</td>
<td>Learning and Motivation (lec &amp; lab), 4 units</td>
<td>4</td>
</tr>
</tbody>
</table>

Required courses in the concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3130</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3120</td>
<td>Human Development Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 3160</td>
<td>Introduction to Psychological Testing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3170</td>
<td>Early Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3320</td>
<td>Introduction to Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4110</td>
<td>Behavior Genetics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4130</td>
<td>Psychological Disorders in Children</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4150</td>
<td>Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4850</td>
<td>Psychology of Sex Differences</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 3010</td>
<td>Language and Speech Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Total. 40
NOTE: This course is a prerequisite to many regular upper division psychology courses, but may be taken CONCURRENTLY with the following: PSYC 3700.

Required courses in supporting fields:

1. ANTH 2060. Introduction to Cultural Anthropology, 3 units
   OR SOCL 1010. Introduction to Sociology, 3 units
   OR SPCH 2011. Approaches to Human Communication, 4 units

2. BIOL 1010. Principles of Biology, 3 units
   AND BIOL 1020-1026. Special Laboratory Studies, 1 unit
   OR ZOOL 1050. Introduction to Zoology, 4 units

Recommended course in supporting field (see PSYC 3000 description):

MATH 1600. Statistics, 4 units

<table>
<thead>
<tr>
<th>The Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3000. Experimental Methods and Design</td>
<td>4</td>
</tr>
</tbody>
</table>

At least 2 of the following courses with the associated laboratory:

| PSYC 3300, 3310. Introduction to Social Psychology (lec & lab), 4 units |
| PSYC 3500, 3510. Perception and Cognition (lec & lab), 4 units |
| PSYC 3700, 3710. Learning and Motivation (lec & lab), 4 units |

Upper division courses in psychology as approved by major adviser: 18 units

Total: 30 units

Majors are normally expected to take a broad basic program consisting of at least 1 course from each of the following groups:

Group I

| PSYC 3130. Human Development, 3 units |
| PSYC 3320. Introduction to Personality, 3 units |
| PSYC 3340. Environmental Psychology, 3 units |
| PSYC 4850. Psychology of Sex Differences, 3 units |

Group II

| PSYC 3090. Comparative Animal Behavior, 3 units |
| PSYC 3100. Introduction to Physiological Psychology, 4 units |
| PSYC 4110. Behavior Genetics, 3 units |
| PSYC 4720, 4721. Experimental Analysis of Behavior (lec & lab) 4 units |

Group III

| PSYC 3160. Introduction to Psychological Testing, 3 units |
| PSYC 3350. Introduction to Abnormal Psychology, 3 units |
| PSYC 3790. Introduction to Counseling Theory, 3 units |
| PSYC 4130. Psychological Disorders of Children, 3 units |
Psychology

James A. Wakefield, Jr., Ph.D., Associate Professor, Chair
Lee Ann Elliott, Ph.D., Professor
W. Mack Goldsmith, Ph.D., Professor
Lewis E. Holt, Ph.D., Professor
V. Kenneth Shrable, Ph.D., Professor
Thomas A. Gentry, Ph.D., Associate Professor
Cynthia L. Morgan, Ph.D., Associate Professor
Gary D. Novak, Ph.D., Associate Professor
Stanley E. Sherman, Ph.D., Associate Professor
Jamie M. Yockey, Ph.D., Associate Professor
Jane S. Howard, Ph.D., Assistant Professor
Thomas M. Kimlicka, Ph.D., Assistant Professor
Lewis M. Lewin, Ph.D., Assistant Professor

The Department of Psychology offers the degrees Bachelor of Arts, Master of Arts, and Master of Science, Psychology. Concentrations in Counseling Psychology, Clinical Psychology and School Psychology are available in the M.S. program. Within the B.A. program, optional concentrations in Experimental Psychology and Developmental Psychology are offered. The objective of the major program is to provide 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. The Department of Psychology also offers a minor in Psychology.

The College 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 Social Sciences.)

REQUIREMENTS FOR BACHELOR OF ARTS, PSYCHOLOGY

Psychology majors are to:

1. Complete requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 30 upper division units, as approved by the major adviser; of these, no more than 8 units of CR graded Winter Term course work may apply toward the major.

Completion of a minor is not required.

DEGREE MAJOR IN PSYCHOLOGY

Prerequisites to the Major:

PSYC 2010. Introduction to Psychology, 3 units, or equivalent
PSYC 2020. Introduction to Psychological Methods, 3 units, or equivalent.
Politics and Public Administration

PADM 5705. County Government Administration II (3)

A field research practicum in which students will carry out a research proposal designed in PADM 5700. County Government Administration I. Prerequisite: PADM 5700.

PADM 5750. Resource Limitation and Policy Planning (3)

An analysis of resource limitations on national and local policy formation. Present and projected resource availability will be determined; present policies critiqued; and alternative policy options developed. Stress will be placed on policy formation. Prerequisite: Classified graduate standing in the MPA program.

PADM 5800. Seminar in Special Topics in Public Administration (1-5)

Analysis of selected topics in public administration. Topics may vary each semester. Such topics may include, e.g., professionalism, public policy, and politics; urban area administration and policy; social science implications in public policy. Prerequisite: Classified graduate standing in the MPA program.

PADM 5980. Individual Study (1-4)

For postbaccalaureate students in public administration who seek advanced and specialized study. Prerequisites: Consent of instructor and approval of graduate adviser.

PADM 5990. Thesis (1-6)

Thesis research. To be repeated for a total of 6 units. Prerequisites: Classified graduate standing in MPA program, consent of instructor, and approval of graduate adviser.
Politics and Public Administration

PADM 5200. Public Agency Budgeting (3)

This course will cover line-item, performance, and program budgets at various governmental levels with emphasis on the local level. Tie-ins with capital budgets, fiscal and land-use models, capital improvement master plans, and in-house as well as independent analysis will be reviewed. PADM 5005 recommended. Prerequisite: Classified standing in the MPA program.

PADM 5300. Urban/Regional Planning (3)

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 graduate standing in the MPA program.

PADM 5500. Administrative Law and Public Policy (3)

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 graduate standing in the MPA program.

PADM 5505. Inter-Governmental Relations (3)

An examination of the complex network of interrelationships of the American federal system. Focus will be on how local governments interact with other local governments and with regional, state, and federal agencies. Prerequisite: Classified graduate standing in the MPA program.

PADM 5600. Political Theory in Public Management (3)

This course will focus on the evolution of Western political ideals and values. Students will read and discuss works by such philosophers as Plato, Aristotle, Machiavelli, Locke, Marx, and Rawls. Political values and concepts discussed will be related to contemporary problems of public management. Prerequisite: Classified graduate standing in the MPA program.

PADM 5700. County Government Administration I (3)

A seminar designed to orient students with the politics, structure, and functions of county government in the United States. Particular attention will be paid to functional areas of county responsibility (e.g., budgeting, planning, personnel) and the range of current problems faced by counties. This course is the first of a two-course sequence. A letter grade for this course will be awarded upon the completion of PADM 5705. Prerequisite: Classified graduate standing in the MPA program.
PADM 5010. Quantitative Analysis (3)

A study of the basis of empirical research, and the collection and analysis of quantitative data for the purpose of decision-making. Prerequisite: An introductory course in social science methodology or statistics or consent of instructor and classified standing in the MPA program.

PADM 5015. Public Policy Analysis (3)

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 PADM 5010.

PADM 5100. Organizational and Administrative Theory (3)

Examination of the development and current emphases in organization theory from scientific management to existentialism. Focus will be on the use of theory in public management. Prerequisite: Classified standing in the MPA program. (Same as BUS 5100)

PADM 5105. Group Dynamics (3)

An experiential workshop using a skill-building approach towards improved interpersonal and group relationships and knowledge of communications theory and processes. Prerequisite: Classified standing in the MPA program.

PADM 5110. Public Personnel Administration (3)

An intensive overview of the personnel functions of public management. Topics will 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.

PADM 5120. Collective Bargaining in the Public Sector (3)

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 graduate standing in the MPA program.
Politics and Public Administration

PADM 5500. Administrative Law & Public Policy, 3 units
PADM 5505. Intergovernmental Relations, 3 units
PADM 5600. Political Theory in Public Management, 3 units
PADM 5700. County Government Administration I, 3 units
PADM 5705. County Government Administration II, 3 units
PADM 5750. Resource Limitation and Policy Planning, 3 units
PADM 5800. Seminar in Special Topics in Public Administration, 1-5 units
PADM 5980. Individual Study, 1-4 units
PADM 5990. Thesis, 1-6 units
PSCI 4110. Computers for Policy Analysis, 3 units
PSCI 4315. Public Policy Making, 3 units
PSCI 4330. Urban Politics, 4 units
PSCI 4345. Information Systems for Government and Business, 3 units
PSCI 4420. Comparative Bureaucracies, 3 units
PSCI 4940. Public Administration Internship, 3 units
ECON 4109. Labor Economics, 3 units
ECON 4300. Mathematical Economics, 3 units
ECON 4415. International Economics, 3 units
ECON 4540. Public Finance and Fiscal Policy, 3 units
ECON 4600. Urban Economics, 3 units
BUS 4780. Management Information Systems, 3 units
GEOG 4350. Urban Geography, 3 units
MATH 4461. Introduction to Operations Research, 4 units
SOCL 4140. Sociology of Law, 3 units
SOCL 4250. Criminal Justice II, 3 units

Other 4000- or 5000-level courses, besides those listed here, may also be taken as electives toward the M.P.A. degree if deemed relevant and approved in writing by your graduate adviser.

COURSE DESCRIPTIONS

PADM 5000. Administration in Public Affairs (3)

A graduate introduction to the problems, principles, and theory encountered in the profession of public administration. Specific areas that will be covered include the relationship between bureaucratic and democratic theory, organizational structure, policy-making, personnel administration, fiscal and budgetary processes, and administrative regulation. Prerequisite: Classified graduate standing in the MPA program or consent of instructor.

PADM 5005. Public Finance/Fiscal Policy (3)

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: Classified graduate standing in the MPA program.
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 will be paid by the sponsoring agency.

Interns are required to take PADM 5000, Administration in Public Affairs, and PSCI 4940, 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.

5. Thesis and Examination Requirement

All students are required to complete successfully one of the following options in partial fulfillment of the degree requirements:

   a. A written thesis with oral examination
   b. A written comprehensive examination

The option is to be selected by the student in consultation with his/her adviser.

6. Candidate Evaluation

The degree may be awarded to a student, who has advanced to candidacy, upon certification of successful completion of the required unit and course work, approval of a thesis and successfully passing the thesis oral examination or successfully passing the written comprehensive examination, and a review and approval of the candidate's overall graduate record by the Graduate Studies Committee.

MASTER OF PUBLIC ADMINISTRATION DEGREE

REQUIRED COURSES

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 & Administrative Theory, 3 units

ELECTIVE COURSES

PADM 5105. Group Dynamics/Organizational Development, 3 units
PADM 5110. Public Personnel Administration, 3 units
PADM 5120. Collective Bargaining in the Public Sector, 3 units
PADM 5200. Public Agency Budgeting, 3 units
PADM 5300. Urban/Regional Planning, 3 units

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Politics and Public Administration

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

Students who have not had formal study in politics, economics or mathematics-statistics may be advised to take basic courses in these fields prior to engaging them at the graduate level.

All students will complete in addition to the above-noted required courses a minimum of 21 elective units (up to 12 units may be 4000 series courses) chosen by the student in consultation with his/her adviser. These electives will permit some specialization and may be selected to meet each student's own career needs.

3. Grade Requirements

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.

Students must complete the MPA program with a minimum grade point average of 3.00 (both overall and at the College) on all upper division and graduate course work from the date of beginning course work toward the MPA degree.

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 his/her 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 PSCI 4940, Public Administration Internship.

4. Public Service Internship (elective)

A public service internship program is a strongly recommended part of the Graduate Studies in Public Administration especially for the "pre-service" student. Internship positions and standards of experiential internship education are coordinated with local, county, regional, state, and federal administrative agencies, non-profit organizations or the offices of elected officials.
Graduate Studies in Public Administration

Lawrence L. Giventer, Ph.D., Associate Professor, Director
Steven Hughes, Ph.D., Professor
William E. Neeley, Ph.D., Assistant Professor

Graduate Studies in Public Administration is a comprehensive program in 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 the education and training of administrators and policy analysts to pursue leadership and management careers in the public service. It is designed to meet the unique needs and challenges of public management in a regional environment characterized by pockets of urban growth within a predominantly rural region. The program serves both the public service professional who seeks additional advanced education and training and the full-time student preparing for a career in public service. Program courses are offered at two instructional centers -- on campus in Turlock and in Stockton.

ADMISSION REQUIREMENTS

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

REQUIREMENTS FOR THE MASTER OF PUBLIC ADMINISTRATION DEGREE

1. Unit Requirement
   All students are required to complete a minimum of 36 semester units of upper division and graduate courses and seminars.
   A minimum of 24 of these units must be in graduate courses and seminars.

2. Course Requirement
   All students are required to complete the following five courses:
Politics and Public Administration

PSCI 4940. Public Administration Internship (3)

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. (Formerly 4340) Prerequisites: PSCI 1201, 3300.

PSCI 4950. Selected Topics in Politics and Public Administration (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of political science. Topics will vary each term. Different topics may be taken for credit.

PSCI 4970. Selected Topics offered during Winter Term (4)

PSCI 4980. Individual Study (1-4)

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.

Graduate

PSCI 5000. International Relations Seminar (4)

Research on an international relations topic, using political science and history methodology. (Topics to be specified in the Class Schedule.) To be taken concurrently with HIST 5000, International Relations Seminar. This course is primarily for the International Relations/History M.A. concentration, but is open to all qualified students.

PSCI 5970. Selected Topics offered during Winter Term (4)

PSCI 5980. Individual Study (1-4)

For postbaccalaureate students who seek advanced and specialized study. Prerequisites: Consent of instructor and approval of graduate adviser.

PSCI 5990. Thesis (1-6)

Thesis research. May be repeated for a total of 6 units. Prerequisites: Consent of instructor and approval of graduate adviser.
Politics and Public Administration

PSCI 4345. Information Systems in Government and Business (3)

A study of techniques and theory of management information systems for both public and private sector applications. The systems approach to management will be emphasized. Topics include an introduction to electronic data processing, models, decision-making, and information system design and implementation.

PSCI 4350. Government, Business, and the Economy (3)

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 4420. Comparative Bureaucracies (3)

This course treats the administrative systems of the major western nations in terms of rules, administrative roles, recruitment patterns, supervision, and controls. Prerequisite: PSCI 1201. PSCI 3300 recommended.

PSCI 4450. Political Elites (3)

An analysis of political elites in the United States, Western Europe and Latin America. Emphasis is placed on the characteristics of elites, the means by which they become elites, and elite manipulation of power.

PSCI 4620. International Dimensions of National Security Policy (3)

Study of contemporary international tensions and conflicts in their political, economic, and military aspects; the role of alliances and other security systems; disarmament and arms control; strategic doctrines and national defense policies. Prerequisite: PSCI 1201. PSCI 3600 recommended.

PSCI 4630. Inter-American Affairs (3)

A study of political relations among the countries of the western hemisphere with particular emphasis on U.S.-Latin American relations. Prerequisite: PSCI 1201.

PSCI 4700. The Political Novel (4)

An examination of the ways in which political activity and belief give shape to certain novels, particularly in America.
Politics and Public Administration

PSCI 4210. The Judicial Process (3)

A study of judicial decision-making and of the organization and operation of American court systems. Emphasis is placed on both the federal and state courts. The course includes analyses of controversies surrounding the courts, e.g., "assembly-line justice" in the trial courts. Prerequisite: PSCI 1201. PSCI 3220 strongly recommended.

PSCI 4220. Simulation-Supreme Court Decision-Making (3).

A study of decision-making in the United States Supreme Court through the use of discussions and simulations of the decisional process. Prerequisite: PSCI 1201.

PSCI 4230. The Chief Executive (3)

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)

The study of public administration is concerned with current literature on organizational behavior. The public bureaucracy is the largest of all complex organizations. This course is designed to acquaint the student with current research in this area. Research projects required. Prerequisite: PSCI 1201. PSCI 3300 recommended.

PSCI 4315. Public Policy Making (3)

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. (Formerly 4310) Prerequisite: PSCI 1201. PSCI 3300 recommended.

PSCI 4330. Urban Politics (4)

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.
PSCI 3320. Executive Legislative Relations (3)

Examination of important concepts and issues affecting the relationship between the executive and legislative branches. The course will focus on the impact of a variety of factors including executive privilege, impoundment, congressional investigations, impeachment, the Vietnam War and Watergate. (Formerly 4240)

PSCI 3330. California Politics (3)

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 3400. Comparative Politics: Europe (4)

This course is designed to acquaint the student with the comparative approach to the study of European politics by emphasizing the similarities and differences of social and cultural variables as they impinge upon the institutions of government. Prerequisite: PSCI 1201.

PSCI 3410. Comparative Politics: Latin America (4)

A general survey of the politics of Latin America. Course includes historical factors affecting 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.

PSCI 3450. Comparative Politics: USSR & Eastern Europe (3)

An analysis of government, politics, and political development in communist political systems. Primary focus in the course will be on the USSR. Prerequisite: PSCI 1201.

PSCI 3600. International Relations (4)

Introduction to the elements of international relations. Work in lab simulation will be an integral part of the course. Prerequisite: PSCI 1201.

PSCI 4110. Computers for Policy Analysis (3)

This course teaches the computer skills necessary for research in the social sciences. Students will be introduced to the use of the "Statistical Package for the Social Sciences" (SPSS) and Inter-University Consortium for Political and Social Research (ICPSR) data bases.
Politics and Public Administration

PSCI 3050 Marxist Political Thought (3)

Examination of the foundations and philosophical assumptions of Marxist theory. PSCI 3000 recommended.

PSCI 3210. Legislative Process (3)

Analysis of the procedures and politics of legislatures with emphasis on the American Congress; executive-legislative relations, and proposals for congressional reform are also examined. Prerequisite: PSCI 1201.

PSCI 3220. Constitutional Law (4)

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, commerce, taxing and spending power, and equal protection. Prerequisite: PSCI 1201.

PSCI 3225. Civil Liberties (3)

An examination of selected issues in American civil liberties, emphasizing such areas as speech, religion, criminal procedures, public school desegregation, voting, and personal security. Designed especially for pre-law students. (Formerly 4200) Prerequisite: PSCI 1201.

PSCI 3230. Political Parties and Interest Groups (4)

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 3250. Public Opinion and Voting Behavior (4)

American voting behavior, psychological dimensions of citizen decision-making in a democracy, political attitudes and beliefs and campaign tactics. Field work. Prerequisite: PSCI 1201.

PSCI 3300. Introduction to Public Administration (3)

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. Prerequisite: PSCI 1201.
Politics and Public Administration

PSCI 2000. Introduction to Political Science (3)

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.

PSCI 2020. Politics and Society (3)

An examination of the translation of social concerns into political conflicts. The development of mass ideologies and mass political movements, both historical and contemporary, will be considered. (Formerly 2010)

PSCI 2900. Library Resources and Bibliographical Control for Research in Political Science (2)

Survey of abstracts, bibliographies, biographical directories, book review indexes, dictionaries, documents, encyclopedias, and indexes for historical research; and the application of footnote and bibliographical methods for political science majors. Prerequisite: None. (Same as HIST 2900)

PSCI 2950. Selected Topics in Political Science (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of political science. Topics may vary each term. Different courses may be taken for credit. Prerequisite: Consent of instructor.

PSCI 2970. Selected Topics offered during Winter Term (4)

Upper Division

PSCI 3000. Ancient & Medieval Political Thought (3)

Historical development of political philosophy from ancient times to seventeenth century. Prerequisite: PSCI 1201.

PSCI 3010. Modern Political Thought (3)

Political thought from seventeenth century to present, with emphasis on such European philosophers as Hobbes, Locke, Rousseau, and Marx. Prerequisite: PSCI 1201.

PSCI 3030. American Political Thought (3)

Main trends of American political thinking from colonial times to the present. PSCI 3000 recommended.
Politics and Public Administration

AMERICAN POLITICS

PSCI 3210. Legislative Process, 3 units
PSCI 3220. Constitutional Law, 4 units
PSCI 3225. Civil Liberties, 3 units
PSCI 3230. Political Parties & Interest Groups, 4 units
PSCI 3250. Public Opinion & Voting Behavior, 4 units
PSCI 3300. Introduction to Public Administration, 3 units
PSCI 3320. Executive Legislative Relations, 3 units
PSCI 3330. California Politics, 3 units
PSCI 4210. The Judicial Process, 3 units
PSCI 4220. Simulation-Supreme Court Decision-Making, 3 units
PSCI 4230. The Chief Executive, 3 units
PSCI 4300. Organization Theory, 4 units
PSCI 4315. Public Policy Making, 3 units
PSCI 4330. Urban Politics, 4 units
PSCI 4350. Government, Business and the Economy, 3 units
PSCI 4940. Public Administration Internship, 5 units

COMPARATIVE POLITICS

PSCI 3400. Comparative Politics: Europe, 4 units
PSCI 3410. Comparative Politics: Latin America, 4 units
PSCI 3450. Comparative Politics: U.S.S.R. & Eastern Europe, 3 units
PSCI 4420. Comparative Bureaucracies, 3 units
PSCI 4450. Political Elites, 3 units

INTERNATIONAL RELATIONS

PSCI 3600. International Relations, 4 units
PSCI 4620. International Dimensions of National Security, 3 units
PSCI 4630. Inter-American Affairs, 3 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

GRADUATE

PSCI 5000. International Relations Seminar, 4 units
PSCI 5990. Thesis, 1-6 units

COURSE DESCRIPTION

Lower Division

PSCI 1201. American Government (3)

Critical analysis of American political structures and processes. Meets U.S. Constitution and California state and local government requirements for General Education. (Formerly 1200)
Politics and Public Administration

ECON 4415. International Economics, 3 units
ECON 4450. Economic Planning, 3 units
ECON 4540. Public Finance & Fiscal Policy, 3 units
ECON 4600. Urban Economics, 3 units
HIST 3640. Contemporary America, 3 units
SPCH 3122. Management Communication, 3 units
SPCH 4110. Organization Communication, 3 units

5. Other electives chosen in consultation with the academic adviser to total 30 upper division units in political science. ENGL 3007, Business & Technical Communication; and BUS 2110, Financial Accounting, are highly recommended.

PRELAW COURSES
Dr. John T. Wold, Prelaw Adviser

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)

PSCI 3220. Constitutional Law, 4 units
PSCI 3225. Civil Liberties, 3 units
PSCI 4210. The Judicial Process, 3 units
PSCI 4220. Simulation - Supreme Court Decision-Making, 3 units

AMERICAN POLITICS

PSCI 3210. Legislative Process, 3 units
PSCI 3230. Political Parties and Interest Groups, 4 units
PSCI 3320. Executive Legislative Relations, 3 units
PSCI 3330. California Politics, 3 units
PSCI 4230. The Chief Executive, 3 units
PSCI 4315. Public Policy Making, 3 units
PSCI 4330. Urban Politics, 4 units

COURSES

POLITICS AND PUBLIC ADMINISTRATION: SUB-AREAS

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 3050. Marxist Political Thought, 3 units
PSCI 4110. Computers for Policy Analysis, 3 units
PSCI 4345. Information Systems in Government & Business, 3 units
Politics and Public Administration

PUBLIC ADMINISTRATION CONCENTRATION
Within the B.A. Degree, Political Science
Dr. Kenneth Entin, Concentration Adviser

Upper Division

1. Political Science Core ................. 9-11
   One upper division course in Political
   Theory, 3 units
   One upper division course in International
   Relations, 3-4 units
   One upper division course in Comparative
   Politics, 3-4 units

2. Public Administration Core ............ 10-13
   A. PSCI 3300. Introduction to Public
      Administration, 3 units
   B. Two of the following courses:
      PSCI 4315. Public Policy Making, 3 units
      PSCI 4350. Government, Business and the
      Economy, 3 units
      *PSCI 4420. Comparative Bureaucracies,
      3 units
   C. One of the following courses:
      PSCI 4110. Computers for Policy Analysis,
      3 units
      PSCI 4345. Information Systems in Government
      and Business, 3 units

3. Two of the following courses (not taken above) .. 6-8
   PSCI 3210. Legislative Process, 3 units
   PSCI 3220. Constitutional Law, 4 units
   PSCI 3225. Civil Liberties, 3 units
   PSCI 3320. Executive Legislative Relations 3 units
   PSCI 3330. California Politics, 3 units
   PSCI 4210. The Judicial Process, 3 units
   PSCI 4230. The Chief Executive, 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 4450. Political Elites, 3 units
   PSCI 4940. Public Administration Internship,
      3 units

4. Two of the following courses in supporting
   fields ......................... 6
   ECON 4050. Comparative Economic Systems, 3 units
   ECON 4100. Labor Economics, 3 units

*May also satisfy the Comparative Politics requirement.
### Politics and Public Administration

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<tr>
<td><strong>One upper division course from each of the following fields:</strong> American Politics, Comparative Politics, International Relations</td>
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<tr>
<td>Courses in Political Science as approved by major adviser</td>
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<td>Total</td>
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Strongly recommended:

- PSCI 4110. Computers for Policy Analysis, 3 units

### DEGREE MINOR IN POLITICAL SCIENCE

Sixteen units approved by the minor adviser are required, including at least 10 units in upper division courses.

### LIBERAL STUDIES CONCENTRATION IN POLITICAL SCIENCE

Twenty units, including at least 15 upper division units.

#### Lower Division

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#### Upper Division

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<td>At least two courses selected from the area of Comparative/International Politics</td>
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<td>At least two courses selected from the area of American Politics</td>
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<td>Electives</td>
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### 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 programming carefully with their adviser in order to complete the approved waiver program at the time of graduation.
Politics and Public Administration

the political management process and to acquire the analytical skills employed by public and private agencies. Classes cover a wide range of subjects and should appeal to those interested in local, state, national, and international administration and politics.

An internship program sponsored by the Department provides students with opportunities to work in administrative, legislative, legal, and political agencies. Interns are able to apply knowledge acquired in the classroom and gain practical experience in a professional setting.

Careers in Foreign Affairs:

The Department of Politics and Public Administration offers a number of international courses for students interested in entering the foreign service, the various international organizations, and international business. These courses, plus classes taken in related fields such as economics, provide students with an extensive knowledge of governmental vocations, administrative and organizational skills, and economic processes.

REQUIREMENTS FOR THE BACHELOR OF ARTS, POLITICAL SCIENCE

Political Science majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 30 upper division units. Eight units of Winter Term CR graded course work may apply toward the major.

Completion of a minor is not required.

DEGREE MAJOR IN POLITICAL SCIENCE

Prerequisites to the Major

Required courses in the major field

PSCI 1201. American Government, 3 units
PSCI 2000. Introduction to Political Science, 3 units (recommended)
OR PSCI 2020. Politics and Society, 3 units

Strongly recommended:

MATH 1600. Statistics, 4 units

The Major

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<tr>
<td>PSCI 3000. Ancient &amp; Medieval Political Thought</td>
<td>3</td>
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<tr>
<td>OR PSCI 3010. Modern Political Thought</td>
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Politics and Public Administration

Paul F. Magnelia, Ph.D., Professor, Chair
Kenneth Entin, Ph.D., Professor
Steven Hughes, Ph.D., Professor
Gary Shaw, Ph.D., Professor
John T. Wold, Ph.D., Professor
Lawrence L. Giventer, Ph.D., Associate Professor
William Neeley, Ph.D., Assistant Professor
Honorable John J. McFall, U. S. House of Representatives, 1957-1979, Adjunct Professor
Honorable B. F. Sisk, U. S. House of Representatives, 1955-79, Adjunct Professor

The Department of Politics and Public Administration offers the degree Bachelor of Arts, Political Science. The primary objective of the major in political science is to provide a core for a liberal arts education that will prepare students to assume and execute their responsibilities intelligently as citizens in a self-governing community. The major program also provides appropriate preprofessional training for students who intend to enter graduate school, to study for a teaching credential, or to pursue one of the careers listed below.

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 the prelaw student 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 the comprehension and use of the English language.

Most law schools currently admit applicants with the highest overall grade point average and Law 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:

Courses offered by the Department and the undergraduate concentration in Public Administration enable students to explore
Physics and Physical Sciences

GEOL 4200. Earth Science I (3)

Study of physical properties of rocks, earth's internal structure, seismic techniques of earthquakes, gravity, and magnetic properties of the earth. Prerequisite: GEOL 2100 or consent of instructor.

GEOL 4210. Earth Science II (3)

Continuation of GEOL 4200. Prerequisite: GEOL 4200.

GEOL 4300. Minerals and Crystals (3)

Study and classification of crystals, physical properties of crystals with their chemical composition, property of light, and optical properties of minerals under polarized light. Prerequisite: GEOL 2100 or consent of instructor.

GEOL 4400. Plate Tectonics and Continental Drift (4)

Study of the theory of plate tectonic and present magnetic gravity, heat flow, earthquake, and other evidence in the support of the theory. (Formerly 3200) Prerequisite: GEOL 2100.

GEOL 4500. Field Geology (4)

Study of geological maps and preparation of local maps for use in field study; locate and study specific geologic structure. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: GEOL 2100 or consent of instructor.

GEOL 4600. Geology of Petroleum (3)

The origin of petroleum; hydrocarbon, its formation and migration into reservoir rocks will be discussed with emphasis on the types of oil fields. (Formerly 3500) Prerequisite: GEOL 2100.
ASTR 4200. Planetary and Space Science (3)

Study of the structure and origin of the planets and their atmosphere. Emphasis will be placed on new developments of NASA space programs. (Formerly 3200) Prerequisite: ASTR 2100 or consent of instructor.

ASTR 4970. Selected Topics offered during Winter Term (4)

GEOLOGY

Lower Division

GEOL 2001. Regional Geology of California (2)

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 1 hour; field trips) This course may be repeated for a total of 6 units; but only 2 units are applicable to General Education: Great Valley, 2 units; Coastal Ranges, 2 units; Sierra Nevada Mountains, 2 units. Prerequisite: None.

GEOL 2100. Principles of Geology (4)

Survey of the structure and the materials of the outer portion of the earth and the geologic processes responsible for sculpturing of the earth of today. (Lecture, 3 hours; laboratory, 3 hours, including some field trips) Prerequisite: None.

GEOL 2101. Basic Principles of Geology (3)

Survey of the structure and the materials of the outer portion of the earth and the geological processes responsible for sculpturing the earth of today. (Lecture, 3 hours) Prerequisite: None.

GEOL 2970. Selected Topics offered during Winter Term (4)

Upper Division

GEOL 3000. Physical and Environmental Geology (3)

Structural geology, global tectonics, and other topics of physical geology. Interaction of man with his geological environment, hazards from earthquakes and landslides, disposal of wastes in land and waters, conservation of minerals and resources, geology, and regional planning. Prerequisite: GEOL 2100.
Physics and Physical Sciences

PHSC 4970. Selected Topics offered during Winter Term (4)

PHSC 4980. Individual Study (1-4)

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)

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) No prerequisite. 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.

ASTR 2110. Astronomy Laboratory (1)

Telescope observations of the moon, planets, their satellites, and sunspots. Laboratory experiments related to astronomy. Offered once a year, fall or spring. Prerequisite: ASTR 2100 or concurrent enrollment in ASTR 2100.

ASTR 2970. Selected Topics offered during Winter Term (4)

Upper Division

ASTR 3000. Contemporary Astronomy (3)

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. Prerequisite: Upper division standing or consent of instructor.

ASTR 4000. Astrophotography (2)

Theory of the photographic process; astrophotography of the moon, planets, star clusters and galaxies; photographic photometry; reduction of photographic data. (Lecture, 1 hour; activity, 1 hour) Prerequisite: None
PHSC 3000. Energy, Ecology, and Environment (3)

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. Prerequisite: Upper division standing or consent of instructor.

PHSC 3500. Solar and Other Alternative Energies (4)

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 would also be included. Prerequisite: Upper division standing or consent of instructor.

PHSC 3600. Solar Home Design (3)

Study of residential use of solar energy. Topics include design space heating and cooling systems, water heaters, natural lighting systems, and fundamentals in solar home design. Passive solar home design will be emphasized. Prerequisite: Consent of instructor.

PHSC 3700. Solar Energy Conversion and Storage (3)

Study of various methods, direct and indirect, for converting solar energy into electricity, such as solar thermal conversion, photovoltaic conversion, wind energy. Converting solar energy to plants and fossil fuels will also be included. Various methods and techniques of energy storage such as fuel cells, electric batteries, thermal storage, chemical storage, biological storage, and magnetic energy storage form the second part of the course. Prerequisite: Upper division standing or consent of instructor.

PHSC 4950. Selected Topics in Physical Sciences (Topics to be specified in Class Schedule) (1-5)

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)

Presentation and discussion of selected topics in physical sciences from current literature. May be repeated for credit. Prerequisite: Consent of instructor.
Physical Sciences

PHYS 4980. Individual Study (1-4)

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 5960. Graduate Project (1-3)

For qualified students seeking a specialized project. Prerequisite: Consent of instructor and graduate adviser.

PHYS 5990. Thesis (1-6)

Master's thesis research. May be repeated for a total of 6 units. Prerequisite: Classified graduate standing in MA Special Major Program.

PHYSICAL SCIENCES

Lower Division

PHSC 1000. Solar Energy Today (3)

Survey of the direct use of sunlight to supply the basic human needs for energy; bring students up to date on work to the present time on the broad spectrum of solar energy utilization. (Lecture, 3 hours) Prerequisite: None

PHSC 1300. Environmental Pollution (3)

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) Prerequisite: None.

PHSC 2100. Atmosphere, Weather, and Climate (3)

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) Prerequisite: None.

PHSC 2970, Selected Topics offered during Winter Term (4)
PHYS 4510. Quantum Mechanics I (3)

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. (Formerly 3530) Prerequisite: PHYS 3520 or consent of instructor.

PHYS 4520. Quantum Mechanics II (3)

Continuation of PHYS 4510. (Formerly 3540) Prerequisite: PHYS 4510.

PHYS 4530. Thermal and Statistical Physics (4)

Thermodynamics and statistical mechanics. A unified approach following Gibbs, based on a microscopic description using quantum states. Fermi, Bose, and "Classical" systems are discussed, with applications to standard and current topics. Prerequisite: PHYS 2260 or consent of instructor.

PHYS 4560. Solid State Physics (3)

Crystal structure, metal crystals, molecular crystals. Thermal, electrical, magnetic properties of crystals. Free electron model of metals, band theory of solids. Prerequisite: Upper division standing or consent of instructor.

PHYS 4900. Modern Optics and Lasers (3)

Principles of geometrical optics; reflection, refraction, polarization, coherence and interference, Kirchhoff's diffraction theory, Fourier methods in optics, optics of solids, lasers and holography. Prerequisite: Upper division standing or consent of instructor.

PHYS 4930. Lasers and Holography (4)

Interference and coherent light, holographic recording and image reconstruction, properties of holograms and a geometric interpretation, semiclassical 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)

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 4970. Selected Topics offered during Winter Term (4)
## Physics and Physical Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYS 3100</td>
<td>Classical Mechanics</td>
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</tr>
<tr>
<td>PHYS 3320</td>
<td>Electricity and Magnetism I</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS 3330</td>
<td>Electricity and Magnetism II</td>
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<tr>
<td>PHYS 3520</td>
<td>Modern Physics</td>
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<tr>
<td>PHYS 4100</td>
<td>Advanced Physics Laboratory</td>
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<tr>
<td>PHYS 4200</td>
<td>Electronics Instrumentation</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS 4370</td>
<td>Relativity and Cosmology</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS 4450</td>
<td>Nuclear Physics</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**PHYS 3100. Classical Mechanics (4)**

Dynamics of particles and rigid bodies, gravitation, Lagrangian and Hamiltonian dynamics, theory of oscillations, and the wave equation. (Formerly 3140, 3150) Prerequisite PHYS 2260.

**PHYS 3320. Electricity and Magnetism I (3)**

Electrostatics, magnetostatics, electric current, electromagnetic induction, Maxwell's equations, electromagnetic waves, radiative reaction, electric and magnetic properties of materials, properties of wave guides. Prerequisite: PHYS 2260.

**PHYS 3330. Electricity and Magnetism II (3)**

Continuation of PHYS.3320. Prerequisite: PHYS 3320.

**PHYS 3520. Modern Physics (3)**

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. Prerequisite: PHYS 2260 or consent of instructor.

**PHYS 4100. Advanced Physics Laboratory (1)**

Project type experiments in mechanics, heat, electricity, and magnetism, optics, atomic physics, nuclear physics, etc. (laboratory, 3 hours) Prerequisite: Upper division standing or consent of instructor. This course may be repeated for a maximum of 6 units.

**PHYS 4200. Electronics Instrumentation (3)**

Introduction to basic electronics and fundamental electronic measuring instruments. The student will study the experimental setup in an actual system used in his field of interest, chosen from current literature. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: Upper division standing or consent of instructor.

**PHYS 4370. Relativity and Cosmology (3)**

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. (Formerly 3370) Prerequisite: Upper division standing or consent of instructor.

**PHYS 4450. Nuclear Physics (3)**

Elements of nuclear structure, radioactivity, interaction of nuclear radiations with matter, detection of nuclear radiation, fission and fusion, nuclear models. Prerequisite: Upper division standing or consent of instructor.
PHYS 2250. General Physics I (4)

General physics using calculus, for science students. Mechanics, wave motion, heat, and thermodynamics. (Lecture, 3 hours; discussion, 1 hour) Prerequisite: Concurrent enrollment in MATH 1410, or consent of instructor.

PHYS 2260. General Physics II (4)

Continuation of PHYS 2250. Electricity, magnetism, light, optics. Prerequisite: PHYS 2250.

PHYS 2350. General Physics Laboratory I (1)

Laboratory to accompany PHYS 2250. Prerequisite: PHYS 2250 or concurrent enrollment in PHYS 2250.

PHYS 2360. General Physics Laboratory II (1)

Laboratory to accompany PHYS 2260. Prerequisite: PHYS 2260 or concurrent enrollment in PHYS 2260.

PHYS 2600. Computer Programming with Applications (2)

Programming in BASIC with emphasis on practical applications in the sciences and the use of mini- and micro-computers. (Same as CHEM 2600) (Lecture, 1 hour, laboratory, 3 hours) Prerequisite: Consent of instructor.

PHYS 2970. Selected Topics offered during Winter Term (4)

Upper Division

PHYS 3000. Computer Graphics (2)

An introduction to computer graphics, using the department's microcomputers, time-sharing and Tektronic graphics terminals. Theory of three-dimensional projections and their applications in physics and physical sciences. Students will write generating programs for their projects. Prerequisite: PHYS 2600.

PHYS 3010. Introduction to Mathematical Physics I (3)

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. Prerequisite: PHYS 2260.

PHYS 3020. Introduction to Mathematical Physics II (3)

Continuation of PHYS 3010. Prerequisite: PHYS 3010.
Physics and Physical Sciences

6. CHEM 3020. Organic Chemistry II, 3 units
   CHEM 3040. Organic Chemistry Laboratory II, 2 units
   CHEM 4010. Physical Chemistry I, 3 units
   CHEM 4030: Physical Chemistry Laboratory, 1 unit. . . . 5-9
Electives in Chemistry, Physics, Physical Science. . . . . 4-9
Geology, or Astronomy

COURSE DESCRIPTIONS

PHYSICS

Lower Division

PHYS 1000. Exploring Modern Electronics (3)

Presents a broad introduction to modern electronics and provides the essential background and technique for those students who wish to explore the electronics field; application of basic concepts and construction techniques to electronic devices, such as radios, sound systems, and music synthesizers. (Lecture, 2 hours; activity, 2 hours) Prerequisite: None.

PHYS 1100. Basic Physics I (5)

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) Prerequisites: Algebra and trigonometry, or consent of instructor.

PHYS 1110. Basic Physics II (5)

Continuation of PHYS 1100. Electricity and magnetism, light, optics, atoms, and nucleus. Prerequisite: PHYS 1100.

PHYS 1500. Energy and Matter (3)

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) Prerequisite: None.

PHYS 1501. Energy and Matter Laboratory (1)

Optional laboratory to accompany PHYS 1500. Prerequisite: PHYS 1500 or concurrent enrollment in PHYS 1500.

PHYS 2000. Basic Solid State Electronics (3)

Basic DC and AC circuit theory; elements of semiconductors and transistors; operation of semiconductor diodes, transistor switches, transistor amplifiers, and oscillators; introduction to integrated circuits and digital electronics. Prerequisite: Consent of instructor.
Physics and Physical Sciences

Lower Division

PHYS 2260. General Physics II, 4 units
AND PHYS 2360. General Physics Lab II, 1 unit
OR PHYS 1110. Basic Physics II, 5 units, with consent of adviser.

Upper Division

At least 15 units chosen from upper division courses in physical science, astronomy, geology, or physics, with consent of the physical science adviser.

TEACHING CREDENTIALS

The major requirements in physical sciences for students interested in obtaining a single subject teaching credential waiver are listed below. Please refer to the Education section of the catalog for a description of other requirements to be completed in obtaining a single subject credential.

PHYSICAL SCIENCE WAIVER PROGRAM

With a Major in Physical Science

Lower Division

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>PHYS 2250, 2260</td>
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<td>CHEM 1100, 1110</td>
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<td>MATH 1910, 1920</td>
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<td>OR MATH 1410, 1420</td>
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<td>BIOL 1010</td>
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<td>GEOL 2100</td>
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Upper Division

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ASTR 3000</td>
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<tr>
<td>CHEM 3010</td>
<td>3</td>
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<tr>
<td>CHEM 3030</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 3520</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following sequences:

1. ASTR 4200. Planetary & Space Sciences, 3 units
2. CHEM 4010, 4020. Physical Chemistry I, II 6 units
3. GEOL 4200, 4210. Earth Science I, II, 6 units
4. PHYS 3320, 3330. Electricity & Magnetism, I, II, 6 units
5. PHYS 4200. Electronics Instrumentation, 3 units
   PHYS 4930. Lasers and Holography, 4 units

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Physics and Physical Sciences

Electives, 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 3120. Geomorphology, 3 units
- GEOG 3700. Cartographic Presentation, 3 units
- GEOG 3710. Remote Sensing of the Environment, 2 units

APPLIED PHYSICS CONCENTRATION

Required courses:
- PHYS 3520. Modern Physics, 3 units
- PHYS 4100. Advanced Physics Lab, 2 units
- PHYS 4200. Electronics Instrumentation, 3 units
- PHYS 4930. Lasers and Holography, 4 units

Electives, 12 upper division units in physical sciences or mathematics, in consultation with the adviser.

DEGREE MINOR IN PHYSICAL SCIENCES

Consists of 18 units in physical sciences as approved by the minor adviser, to include at least 8 units in upper division.

DEGREE MINOR IN EARTH SCIENCES

Lower Division

- GEOL 2100. Principles of Geology, 4 units
- PHSC 2100. Atmosphere, Weather, and Climate, 3 units
- OR GEOG 3100. Climatology, 3 units

Upper Division

Required

- GEOL 4200, 4210. Earth Science I, II, 6 units

Electives, 6 units, selected from the following:

- GEOL 3000. Physical & Environmental Geology, 3 units
- GEOL 4400. Plate Tectonics & Continental Drift, 4 units
- GEOL 4600. Geology of Petroleum, 3 units
- GEOL 4300. Minerals and Crystals, 3 units
- GEOG 3120. Geomorphology, 3 units
- GEOG 3700. Cartographic Presentation, 3 units
- GEOG 3710. Remote Sensing of the Environment, 2 units

LIBERAL STUDIES CONCENTRATION IN PHYSICAL SCIENCES

Twenty units, including at least 15 upper division units.
DEGREE MAJOR IN PHYSICAL SCIENCES

Prerequisites to the Major:

PHYS 2250, 2260. General Physics I, II, 8 units
   AND PHYS 2350, 2360. General Physics Lab I, II, 2 units
OR PHYS 1100, 1110. Basic Physics I, II, 10 units
CHEM 1100, 1110. Principles of Chemistry I, II, 10 units
MATH 1910, 1920. Calculus with Applications I, II, 6 units

Students interested in earth science and astronomy may substitute:

MATH 1600. Statistics, 4 units
   AND MATH 1151. Programming in BASIC, 3 units
OR PHYS 2600. Computer Programming with Applications, 2 units

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. He or she 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

Complete all requirements of the environmental science concentration (13 upper division units). Select an additional 11 upper division units of appropriate courses in consultation with the adviser.

SPACE AND EARTH SCIENCES CONCENTRATION

Twelve units to be selected from the following:

ASTR 3000. Contemporary Astronomy, 3 units
ASTR 4200. Planetary and Space Science, 3 units
GEOL 3000. Physical & Environmental Geology, 3 units
GEOL 4200, 4210. Earth Science, I, II, 6 units
GEOL 4300. Minerals and Crystals, 3 units
GEOL 4400. Plate Tectonics & Continental Drift, 4 units
GEOL 4600. Geology of Petroleum, 3 units
Physics and Physical Sciences

Upper Division

At least 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 which is defined to include 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 department adviser as to the areas of interest and to the proper selection of courses to suit his or her aims.

Students interested in seeking entrance to medical school, dental school, and other health professions such as pharmacy, physical therapy, optometry, teaching science in secondary school, environmental design, technical administration in government and industry, laboratory technology, legal work pertaining to patients, 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 the catalog for description of Moss Landing course offerings.

Physical Sciences majors interested in medical professions should work out a plan of study as soon as possible with their major adviser and health sciences committee. Refer to the health sciences section of this catalog.

REQUIREMENTS FOR BACHELOR OF ARTS, PHYSICAL SCIENCES

Physical Sciences majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 24 upper division units of physical sciences. Up to 8 units of CR-graded work may apply toward the major.

No minor is required.
BACHELOR OF SCIENCE, PHYSICS

Prerequisites to the Major

Required courses in major field:

PHYS 2250, 2260. General Physics I, II, 8 units
PHYS 2350, 2360. General Physics Laboratory, 2 units

Required courses in supporting field:

MATH 1410, 1420. Calculus I, II, 8 units
MATH 2410. Multivariate Calculus, 4 units
CHEM 1100, 1110. Principles of Chemistry I, II, 10 units

The Major

PHYS 3010. Introduction to Mathematical Physics I... 3
PHYS 3100. Classical Mechanics .................. 4
PHYS 3320, 3330. Electricity & Magnetism I, II .... 6
PHYS 3520. Modern Physics .......................... 3
PHYS 4100. Advanced Physics Laboratory ............ 2
PHYS 4200. Electronics Instrumentation ............. 3
PHYS 4510. Quantum Mechanics I ................... 3
PHYS 4520. Quantum Mechanics II .................... 3
PHYS 4530. Thermal & Statistical Physics ............ 4

Upper division electives in physics & physical sciences . 3

Total ............................................. 34

The recommended electives are:

PHYS 3000. Computer Graphics, 2 units
PHYS 3020. Introduction to Mathematical Physics II, 3 units
PHYS 4370. Relativity and Cosmology, 3 units
PHYS 4450. Nuclear 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
GEOL 4200, 4210. Earth Science I, II, 6 units

DEGREE MINOR IN PHYSICS

Consists of 18 units in physics as approved by the minor adviser, to include at least 8 units in upper division.

LIBERAL STUDIES CONCENTRATION IN PHYSICS

Twenty units, including at least 15 upper division units.

Lower Division

PHYS 2260. General Physics II, 4 units
AND PHYS 2360. General Physics II Lab, 1 unit
Physics and Physical Sciences

REQUIREMENTS FOR THE BACHELOR OF ARTS OR BACHELOR
OF SCIENCE, PHYSICS

Physics majors are to:

1. Complete the college requirements for the bachelor's degree.
2. Complete prerequisites to the major.
3. Complete a 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; of these, no more than 8 units of CR-graded course
   work may apply toward the major.

Completion of a minor is not required.

BACHELOR OF ARTS, PHYSICS

Prerequisites to the Major:

Required courses in major field:

- PHYS 2250, 2260. General Physics I, II, 8 units
- PHYS 2350, 2360. General Physics Laboratory, I, II
  2 units

Required courses in supporting fields:

1. CHEM 1100, 1110. Principles of Chemistry, I, II, 10 units
2. One of the following options:
   a. MATH 1910, 1920. Calculus with Applications I, II,
      6 units
      AND MATH 2500. Elementary Linear Algebra, 3 units
      OR MATH 1151. Programming in BASIC, 3 units
      OR PHYS 2600. Computer Programming with Applications,
      2 units
   b. MATH 1410, 1420. Calculus I, II, 8 units
      AND MATH 2410. Multivariate Calculus, 4 units

The Major

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<td>3</td>
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<tr>
<td>PHYS 4530</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 25 units
Physics and Physical Sciences

James M. Goodwin, Ph.D., Professor of Physics, Chair
Tai-Low Chow, Ph.D., Professor of Physics
Ervin H. Schwarcz, Ph.D., Professor of Physics
Vladimir S. Tuman, Ph.D., Professor of Earth Sciences
Roy Y. Yasui, Ph.D., Professor of Education

The Department of Physics and Physical Sciences 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 three concentrations: Applied Physics, Earth and Space Sciences, 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: Earth Science, Physical Sciences, and Physics.

A concentration in Physical Sciences and in Physics for the Bachelor of Arts degree in Liberal Studies is available. An approved single subject waiver is also available for students who wish to declare Physical Sciences as their subject matter teaching area.

Students interested in graduate work in physics, physical sciences, astronomy, or geology can earn a Master of Arts degree through the M.A. Special Major program. See the M.A. Special Major section for detail.

BACHELOR OF ARTS AND BACHELOR OF SCIENCES, 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 acquire preparation for study in engineering. After completion, the student can transfer to engineering programs for upper division course work and study in engineering.
Physical Education and Health

groups and methods and materials used. Discussion of common and potential problems, and various alternative solutions. (Formerly PHED 3510)

REC 3200. Community Recreation (3)

The role of private and public recreation agencies in the community. Organizational pyramid and structure of community recreation agencies. Legal implications of policies and procedures in the recreational agencies. Facility utilization and the school-community concept. Politics involved in municipal (or public) recreation agencies. (Formerly PHED 3500)

REC 3300. Recreation Administration (3)

Principles of budget and finance. Demographic analysis for program planning. Program evaluation, function and method of statistical reporting. Innovative ideas in programming and organization. (Formerly PHED 3300)

REC 3400. Commercial Recreation (3)

A study of the leisure economy as it is developing in commercial businesses. Examination of the current supply and demand of various commercialized leisure activities. Special emphasis on the development and operational techniques employed in conducting the business.

REC 3500. Community Programming/Planning in Parks & Recreation (3)

Analysis of community data influencing the planning and programming of recreational facilities and activities. Emphasis will be on developing a wide variety of activities and programs based on needs as determined by specific observation/evaluation procedures. Prerequisites: REC 3100, 3200.

REC 4900. Field Work or Practicum in Recreation (1-3)

Field work is designed for students interested in gaining experience in a recreation organization/supervision situation off campus. Practicum is designed for students interested in gaining experience in a recreation organization/supervision situation on campus. May be repeated for a total of 6 units. Prerequisite: Consent of department chair.

REC 4940. Internships in Recreation (1-3)

Provides training and education of the organizational and implementation procedures at the administrative levels within local leisure service agencies. Students will be assigned to an agency for 18 hours per week. Seminars will be held four times during the semester to discuss assignments, etc. Prerequisite: Consent of department chair.
PHED 4980. Individual Study (1-4)

For students capable of independent work in need of advanced or specialized study. May be repeated for 6 units. Prerequisite: Consent of department chair.

**HEALTH**

HLTH 1000. Health in Today's Society (1)

Attention is focused on contemporary health problems and concerns. Typical topics covered are mental health, nutrition, family planning, and the physiological and sociological effect of alcohol, narcotics, and tobacco.

HLTH 2100. First Aid/Safety in Sports (2)


HLTH 2200. School Health and Safety (2)

Investigation and analysis of school health problems and services. The school environment as it relates to accidents and safety.

HLTH 3000. Prevention and Care of Athletic Injuries (2)

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.

**RECREATION**

REC 2100. Introduction to Recreation (1)

Provides a perspective of job opportunities in public and private recreation agencies, and the necessary academic preparation. Philosophy and implications of leisure in contemporary society and issues facing the profession. Professional organizations, and their function, and certification procedures and options. (Formerly PHED 2200)

REC 3100. Recreational Leadership Analysis (3)

Leadership techniques and presentations for games, arts and crafts, music, drama, rhythms, nature activities, special events, sports, and camp fires. Mechanics of program planning for special
PHED 4300. Measurement and Evaluation in Physical Education (3)

A study of practical measurements for evaluation in physical education with emphasis on fitness and sports skills. Prerequisite: Junior standing.

PHED 4400. Kinesiology (3)

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.

PHED 4500. Physiology of Exercise (3)

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, 2240, and junior standing. CHEM 1000 is recommended.

PHED 4600. Athletic Administration (3)

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)

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. (Formerly 3800) ZOOL 2250 is recommended. (Lecture, 2 hours; laboratory, 3 hours)

PHED 4900. Field Work or Practicum in Physical Education (1-2)

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.

PHED 4950. Selected Topics in Physical Education (Topics to be specified in Class Schedule) (1-5)

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 4970. Selected Topics offered during Winter Term (4)
PHED 3401. Elementary School Physical Education (2)

The scope and values of physical education and movement education in the elementary school. Program development, methods, materials, and practice in teaching activities for primary, intermediate, and upper grades. (Formerly 3400)

PHED 3402. Elementary School Physical Education Laboratory (1)

Assignment to a teaching situation in a public school involving participation in the regular school curriculum in physical education. (Laboratory, 3 hours) (Formerly 3400) Prerequisite: PHED 3401.

PHED 3600. Intramural Programs (2)

The organization, administration, and motivation of intramural activities for schools including practical field experience.

PHED 3700. Sport in Society (3)

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 involvement in play, game, and sport.

PHED 3750. Women in Sport (3)

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.

PHED 4100. Curriculum Organization, Administration and Instruction of Physical Education (3)

An introduction to secondary level physical education curriculum planning, development, and evaluation. Preparation for teaching 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. (Meets Physical Education requirement for EDUC 4161.)

PHED 4200. Motor Learning (3)

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.
Physical Education and Health

varsity or freshman-junior varsity teams. May be repeated for credit. PHED 2500, Baseball; PHED 2510, Basketball (M); PHED 2520, Cross Country; PHED 2530, Golf; PHED 2540, Tennis (M); PHED 2550, Tennis (W); PHED 2555, Soccer; PHED 2560, Track and Field; PHED 2570, Volleyball; PHED 2580, Basketball (W); PHED 2590, Wrestling. Prerequisite: Consent of instructor.

PHED 2950. Selected Topics in Physical Education (Topics to be specified in Class Schedule) (1-5)

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 2970. Selected Topics offered during Winter Term (4)

Upper Division

PHED 3100. Foundations, History, and Philosophy of Physical Education (3)

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 time to modern time.

PHED 3200-3240. Theory of Coaching (2)

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. Prerequisite: Limited to physical education majors and minors, or consent of instructor.

PHED 3300-3360. Theory and Analysis of Physical Education Activities (2)

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.

406
## Individual & Dual Sports

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Archery</td>
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<td>PHED 1230</td>
<td>Badminton</td>
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<td>PHED 1250</td>
<td>Advanced Badminton</td>
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<td>Bowling</td>
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<td>Advanced Bowling</td>
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<td>PHED 1290</td>
<td>Canoeing</td>
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<tr>
<td>PHED 1300</td>
<td>Fencing</td>
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<tr>
<td>PHED 1320</td>
<td>Advanced Fencing</td>
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<tr>
<td>PHED 1330</td>
<td>Golf</td>
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<tr>
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<td>Advanced Golf</td>
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<td>PHED 1400</td>
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</tr>
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<td>PHED 1420</td>
<td>Racquet Ball</td>
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<tr>
<td>PHED 1450</td>
<td>Skiing</td>
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<tr>
<td>PHED 1480</td>
<td>Tennis</td>
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<td>PHED 1490</td>
<td>Intermediate Tennis</td>
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<tr>
<td>PHED 1500</td>
<td>Advanced Tennis</td>
</tr>
<tr>
<td>PHED 1510</td>
<td>Casting &amp; Angling</td>
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## Aquatics

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
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<td>PHED 1630</td>
<td>Advanced Swimming</td>
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<tr>
<td>PHED 1640</td>
<td>Life Saving</td>
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## Team Sports

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<tr>
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<tbody>
<tr>
<td>PHED 1700</td>
<td>Baseball</td>
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<tr>
<td>PHED 1720</td>
<td>Advanced Baseball</td>
</tr>
<tr>
<td>PHED 1740</td>
<td>Basketball (M)</td>
</tr>
<tr>
<td>PHED 1760</td>
<td>Advanced Basketball (M)</td>
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<tr>
<td>PHED 1770</td>
<td>Basketball (W)</td>
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<tr>
<td>PHED 1780</td>
<td>Field Hockey</td>
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<td>PHED 1790</td>
<td>Advanced Basketball (W)</td>
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<td>PHED 1800</td>
<td>Advanced Field Hockey</td>
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<td>PHED 1820</td>
<td>Soccer</td>
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<td>PHED 1840</td>
<td>Advanced Soccer</td>
</tr>
<tr>
<td>PHED 1850</td>
<td>Softball</td>
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<td>PHED 1860</td>
<td>Track</td>
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<td>PHED 1870</td>
<td>Volleyball</td>
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<tr>
<td>PHED 1880</td>
<td>Intermediate Volleyball</td>
</tr>
<tr>
<td>PHED 1890</td>
<td>Advanced Volleyball</td>
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## Dance

<table>
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<tr>
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<tbody>
<tr>
<td>PHED 1900</td>
<td>Ballet</td>
</tr>
<tr>
<td>PHED 1920</td>
<td>Modern Dance</td>
</tr>
<tr>
<td>PHED 1930</td>
<td>Intermed. Modern Dance</td>
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<tr>
<td>PHED 1940</td>
<td>Advanced Modern Dance</td>
</tr>
<tr>
<td>PHED 1950</td>
<td>Social Dance</td>
</tr>
<tr>
<td>PHED 1960</td>
<td>Modern Jazz Dance</td>
</tr>
<tr>
<td>PHED 1970</td>
<td>Folk Dance</td>
</tr>
<tr>
<td>PHED 1980</td>
<td>African Dance</td>
</tr>
<tr>
<td>PHED 1990</td>
<td>Dance Aerobics</td>
</tr>
</tbody>
</table>

## Course Descriptions

### Lower Division

PHED 2100-2130. Sports Officiating (1)

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 2140. Water Safety Instruction (2)

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.

PHED 2500-2590. Intercollegiate Athletics (1)

Theory, practice, and game performance of competitive intercollegiate athletics. Limited to students trying out for the
Physical Education and Health

Units

PHED 2100-2130. Sports Officiating ............... 2
PHED 3200-3240. Theory of Coaching
    and PHED 3300-3360. Theory and Analysis of Physical
    Education Activities .................... 6
PHED 3700. Sport in Society ...................... 3
PHED 4600. Athletic Administration ............... 3
*PHED 4901. Fieldwork or Practicum in Physical
    Education ............................... 2
HLTH 2100. First Aid/Safety in Sports ............ 2
HLTH 3000. Prevention and Care of Athletic Injuries . 2

Total ........................................ 20

LIBERAL STUDIES CONCENTRATION IN PHYSICAL EDUCATION

Twenty units, including at least 15 upper division units.

Required courses:

PHED 3700. Sport in Society ...................... 3
PHED 4200. Motor Learning ........................ 3
Courses from Group One and Group Two of Major
    Program, minimum .......................... 2
Courses from Group Three of Major Program, minimum 2
Courses from Group Four of Major Program, minimum 6
Elective units from any of the four areas ................ 4

Total ........................................ 20

ACTIVITY COURSES

All activity courses are 1-unit courses, meet 2 hours per week, have no prerequisites, may be repeated once for credit, and are graded on a CR/NC basis.

CREDIT BY EXAMINATION:

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/Aerobics .........................
PHED 1060. Ski Conditioning ..........................
PHED 1070. Judo ......................................
PHED 1080. Karate ....................................
PHED 1090. Intermediate Karate .................
PHED 1110. Personal Defense ..................
PHED 1120. Individualized Fitness ............
PHED 1130. Weight Training ..................
PHED 1160. Wrestling .................................

* Prerequisite junior standing

404
DEGREE MINOR IN RECREATION

Twenty-three units, to include at least 21 units in upper division.

Group One: .................................................. 10
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

Group Two: .................................................... 8
EDUC 4210. Outdoor Education, 2 units
PHED 2100-2130. Sports Officiating, 1 unit
PHED 3401, 3402. Elementary School 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

Group Three: .................................................. 5
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

Total ......................................................... 23

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 for the Certificate:

Twenty units, to include at least 16 units in upper division. A minimum GPA of 2.0 is required in the following courses:
Physical Education and Health

THE WAIVER:

Required courses in related fields:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOOL 2230</td>
<td>Physiology (Lec), 3 units</td>
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</tr>
<tr>
<td>ZOOL 2240</td>
<td>Physiology (Lab), 1 unit</td>
<td></td>
</tr>
<tr>
<td>ZOOL 2250</td>
<td>Human Anatomy, 3 units</td>
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</table>

Required courses in physical education and health:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHED 3100</td>
<td>Foundations, History, &amp; Philosophy of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 3300</td>
<td>Theory and Analysis of Aquatic Sports</td>
<td>2</td>
</tr>
<tr>
<td>PHED 3310</td>
<td>Theory and Analysis of Combative Activities</td>
<td>2</td>
</tr>
<tr>
<td>PHED 3320</td>
<td>Theory and Analysis of Dance</td>
<td>2</td>
</tr>
<tr>
<td>PHED 3330</td>
<td>Theory and Analysis of Golf/Archery</td>
<td>2</td>
</tr>
<tr>
<td>OR PHED 3350</td>
<td>Theory and Analysis of Racquet Sports</td>
<td></td>
</tr>
<tr>
<td>PHED 3340</td>
<td>Theory and Analysis of Gymnastics</td>
<td>2</td>
</tr>
<tr>
<td>PHED 3360</td>
<td>Theory and Analysis of Team Sports</td>
<td>2</td>
</tr>
<tr>
<td>PHED 3401, 3402</td>
<td>Elementary School Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 3700</td>
<td>Sport in Society</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4100</td>
<td>Curriculum, Organization, and Administration of Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4200</td>
<td>Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4300</td>
<td>Measurement and Evaluation in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4400</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4500</td>
<td>Physiology of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4800</td>
<td>Adapted Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 3000</td>
<td>Prevention and Care of Athletic Injuries</td>
<td>2</td>
</tr>
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</table>

Total units: 41

DEGREE MINOR IN PHYSICAL EDUCATION

Twenty units approved by the minor adviser, 16 of which must be upper division units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 3000</td>
<td>Prevention &amp; Care of Athletic Injuries</td>
<td>2</td>
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<tr>
<td>Courses from Group One of Major Program</td>
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<tr>
<td>Courses from Group Two of Major Program</td>
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<tr>
<td>Courses from Group Three of Major Program</td>
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<td>4</td>
</tr>
<tr>
<td>Courses from Group Four of Major Program</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 20
Group Three: ........................................... 8

   EDUC 4210. Outdoor Education, 2 units
   PHED 2100-2130. Sports Officiating, 1 unit
   PHED 3401, 3402. Elementary School 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

Group Four: ............................................... 5

   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, 2 units
               Mentally Handicapped, 1 unit
               Physically Handicapped, 1 unit
               Administrative Internship, 3 units
   Total ................................................. 38

NOTE: This major does not qualify the candidate for admittance to the Credential Program in Physical Education.

TEACHING CREDENTIALS

   Majors in Physical Education interested in multiple subject or single subject credentials are referred to the Education section of the catalog for a description of teaching credential programs.

REQUIREMENTS FOR THE SINGLE SUBJECT WAIVER PROGRAM, PHYSICAL EDUCATION (Teacher Preparation & Licensing Law of 1970, Ryan Bill)

   The course requirements needed to meet the Physical Education Single Subject Waiver program are presented below. Please refer to the Education section of the catalog for a description of other requirements.

Prerequisites to the waiver:

   BIOL 1010. Principles of Biology, 4 units
              or ZOOL 1050. Introduction to Zoology, 4 units
   HLTH 2100. First Aid/Safety in Sports, 2 units
   PHED 1000. Physical Education Activity, 1 unit
Physical Education and Health

REQUIREMENTS FOR THE BACHELOR OF ARTS, PHYSICAL EDUCATION, WITH A CONCENTRATION IN RECREATION

Physical education majors are to:

1. Complete the requirements for the Bachelor Arts degree.
2. Complete the prerequisites to the major including required courses in related fields.
3. Complete the major of not less than 38 upper division units; of these no more than 8 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.

Completion of a minor is not required.

DEGREE MAJOR IN PHYSICAL EDUCATION WITH A CONCENTRATION IN RECREATION

Prerequisites to the Major:

The following courses, which are among the choices applicable to the general education requirement, are required for physical education majors:

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
HLTH 2100. First Aid/Safety in Sports, 2 units
PHED 1000. Physical Education Activity, 1 unit

Required courses in related fields:

PSYC 2010. Introduction to Psychology, 3 units
SOCL 1010. Introduction to Sociology, 3 units

Required Courses:

Group One: .............................................. 15

PHED 3100. Foundations, History, and Philosophy of Physical Education, 3 units
PHED 3700. Sport in Society, 3 units
PHED 4100. Curriculum, Organization, and Administration of Physical Education, 3 units
PHED 4200. Motor Learning, 3 units
PHED 4300. Measurement and Evaluation of Physical Education, 3 units

Group Two: .............................................. 10

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

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### Physical Education and Health

#### Required courses in related fields:
- ZOOL 2230. Physiology (Lec), 3 units
- ZOOL 2240. Physiology (Lab), 1 unit
- ZOOL 2250. Human Anatomy (Lec & Lab), 3 units

#### The Major

#### Required courses in major field:

<table>
<thead>
<tr>
<th>Group One: All courses required</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHED 3100. Foundations, History &amp; Philosophy of Physical Education</td>
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<td>PHED 4100. Curriculum Organization &amp; Administration of Physical Education</td>
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<td>PHED 4200. Motor Learning</td>
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<td>PHED 4300. Measurement &amp; Evaluation in Physical Education</td>
<td>3</td>
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<tr>
<td>PHED 4400. Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHED 4500. Physiology of Exercise</td>
<td>3</td>
</tr>
</tbody>
</table>

| Group Two: Eight units from the following—not more than two units chosen from PHED 2100-2130 | 8 |
| PHED 2100-2130. Sports Officiating, 1 unit each | |
| PHED 3401, 3402. Elementary School 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 2200. School Health & Safety, 2 units | |
| HLTH 3300. Prevention & Care of Athletic Injuries, 3 units | |
| REC 3200. Community Recreation, 2 units | |

| Group Three: Four units from the following | 4 |
| 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 | |

| Group Four: Eight units from the following | 8 |
| 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 | |

Total: 38 units

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Urban and Community Studies

A Concentration Within the Social Sciences Major

Melvin H. Aamodt, Ph.D., Director

The interdisciplinary Urban and Community Studies Concentration is designed as an undergraduate course of study for students who wish to investigate the major problems which result from the growing complexity of our urban environment. Environmental, behavioral, and administrative aspects of urban areas are considered as well as techniques useful in studying urban problems.

Students who pursue this program obtain background leading towards positions in a variety of governmental or voluntary agencies as well as preparation for possible graduate training in such professional programs as public administration, urban or regional planning, social welfare, etc.

Internships in Governmental Agencies. There is an Intern Program in the Department of Political Science and in the Department of Anthropology/Geography. Students in the Urban and Community Studies concentration who wish to be considered for participation in one of these programs should contact these departments concerning requirements for admission.

REQUIREMENTS FOR BACHELOR OF ARTS, SOCIAL SCIENCE, WITH A CONCENTRATION IN URBAN AND COMMUNITY STUDIES

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major, as listed below.
3. Complete the major of not less than 34 upper division units as outlined below and approved by the adviser. No more than 8 units of Winter Term CR graded course work may apply toward the degree.

Completion of a minor is not required.

Prerequisites:

1. SOCL 1010. Introduction to Sociology, 3 units
2. PSCI 1201. American Government, 3 units
3. ECON 2500. Principles of Economics I, 4 units
4. Complete one of the following research methods courses:
   - BUS 2000. Introduction to Computers, 3 units
   - MATH 2000. FORTRAN Programming, 3 units
   - SOCL 3034. Research Methods, 4 units
   - SSCI 3010. Introduction to Social Science Methodology, 3 units

Recommended courses:

MATH 1600. Statistics, 4 units
Urban and Community Studies

GEOG 3700. Cartographic Presentation, 3 units
SOCL 4034. Research Techniques & Analytic Procedures, 4 units

COURSES IN THE MAJOR

1. URBAN ENVIRONMENT

Three courses dealing with the cultural, economic, spatial, and physical aspects of the urban environment:

ECON 4600. Urban Economics, 3 units
GEOG 4350. Urban Geography, 3 units
HIST 3640. Contemporary America, 3 units

2. URBAN BEHAVIOR

Two courses concerned with urban behavior:

SOCL 4810. Urban Sociology, 3 units
SOCL 4850. The Community, 3 units

3. URBAN ADMINISTRATION AND POLITICS

Two courses in the areas of urban administration and politics:

PSCI 3300. Introduction to Public Administration, 3 units
PSCI 4330. Urban Politics, 4 units

4. INTERDISCIPLINARY SEMINAR

As arranged in consultation with an adviser, complete 3 units of:

SSCI 4960. Social Sciences Interdisciplinary Seminar, 3 units

5. SSCI 3000. Library Resources for the Social Sciences, 2 units

6. Completion of the remainder of the required 35 units from the list below. 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. Cartographic Presentation, 3 units
GEOG 4301. Geography and Environmental Planning, 3 units
*GEOG 4940. Internship in Geography, 1-6 units

*GEOG 4940. Internship in Geography, is available only to students who have been admitted to the Internship Program of the Anthropology/Geography Department. Contact the secretary of the department for further details.

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HIST 4680. The American Mind, 3 units
PSCI 3230. Political Parties and Interest Groups, 4 units
PSCI 3330. California Politics, 3 units
PSCI 4110. Computers for Policy Analysis, 3 units
PSCI 4300. Organization Theory, 4 units
PSCI 4345. Information Systems in Government and Business, 3 units
*PSCI 4940. Public Administration Internship, 3 units
SOCL 3150. The Family, 3 units
SOCL 3200. Social Change, 3 units
SOCL 3310. Social Stratification, 3 units
SOCL 3430. Population, Resources, and the American Future, 3 units
SOCL 4034. Research Techniques & Analytic Procedures, 4 units
SOCL 4600. Industrial Sociology, 3 units
SOCL 4790. Social Welfare Services, 3 units

Appropriate Winter Term or other courses dealing with urbanism may be substituted upon prior approval by adviser.

TEACHING CREDENTIALS

Students pursuing an Urban & Community Studies Concentration who are interested in a single subject credential waiver are referred to a description of the waiver program in the Social Sciences section of this catalog. Please refer to the Education section of the catalog for a description of other requirements to be completed to obtain a single subject credential.

*This course is available only to students who have been admitted to the Internship Program of the Political Science Department. Contact the secretary of the department for further details.
Vocational Education
Kenneth Shrable, Ph.D., Coordinator
Melvin R. Nickerson, Ph.D., Adviser

BACHELOR OF VOCATIONAL EDUCATION

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 applicant must have substantial experience in the trade or occupation in which he is teaching (usually 7 years' experience in journeyman status following the appropriate learning experience for the trade).

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.

The Bachelor of Vocational Education degree with a major in Vocational Education consists of the segments described below:

VOCATIONAL PROGRAM:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Major in Vocational Education (a)</td>
</tr>
<tr>
<td>2. Designated Subjects Credential (b)</td>
</tr>
</tbody>
</table>

(a) 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 Cal State Stanislaus upper division courses or appropriate extension courses, related to the student's specific interests, selected with the approval of the vocational education adviser.

(b) A student must have obtained the clear Designated Subjects Credential in Vocational Education or a California Community College teaching credential in an approved subject matter area before enrolling in the BVE degree program. Vocational teacher training completed by the applicant may be used toward electives.
LIBERAL ARTS PROGRAM:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td></td>
</tr>
<tr>
<td>Degree Minor</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

When an applicant applies to Cal State Stanislaus, the following data should be included, if available:

1. Verification of "Swan Act" units, including date of evaluation
2. Verification of clear or life Designated Subjects credential (b)
3. Degree minor desired.

CONSORTIUM PROGRAMS OF THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

The degree and credential programs listed below are offered through the cooperative effort of California State College, Stanislaus; CSU, Sacramento; and the Consortium Office of The California State University and Colleges. Course work offered through the Consortium has a separate fee structure. Students should contact the Office of Extended Education for specific information.

(c) This portion of the program may be completed through an appropriate selection of courses at CSCS or a community college.

(d) Degree Minor: Students must select a minor from those listed in the CSCS 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.

(e) Included as electives are courses transferred from 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 College.
BACHELOR OF SCIENCE IN VOCATIONAL EDUCATION

This degree program includes an occupational experience competency component of up to 30 units, a 24-unit requirement of course work in the core areas of vocational education, and a 12-18 unit requirement in the professional preparation area, e.g., curriculum, evaluation, media, methods, and techniques of vocational education. The requirements in vocational education are more extensive than the traditional BVE degree. As with BVE degree, students are to complete 40 units of general education and appropriate electives. Courses required for the Designated Subjects Credential may be taken as part of the professional preparation units.

DESIGNATED SUBJECTS CREDENTIAL IN VOCATIONAL EDUCATION AND ADULT EDUCATION

The CSUC Consortium for Vocational Education has been approved by the Commission for Teacher Preparation and Licensing as a local education agency for processing credentials and providing teacher education for the Ryan Designated Subjects Teaching Credential in 1) vocational educational areas, and 2) adult education.

MASTER OF ARTS IN VOCATIONAL EDUCATION

The program of study leading to the MA in Vocational Education totals 30 semester units. Requirements for the degree include 18 units of core course work; a 6-unit area of specialization in either Program Administration and Management, Curriculum Development, or Research and Evaluation; and 6 units of elective.
Women's Studies

A DEGREE MINOR

Jamie M. Yockey, Ph.D., Coordinator

Women's Studies is an interdisciplinary degree minor that addresses itself to the analysis of various aspects of women's roles in modern societies. In particular, this program is concerned with changing sex role stereotypes, attitudes, and behavior as they pertain to women in a variety of environmental settings. The Women's Studies minor should be valuable, therefore, to any student who will eventually work with women--either in our own society or in another cultural context.

DEGREE MINOR IN WOMEN'S STUDIES

Seventeen units as specified below.

Required courses:

MDIS 3100. Women in America, 3 units
MDIS 4000. Women's Studies Colloquium, 2 units

Elective courses:

At least four courses from the following:

ANTH 3900. Women: A Cross-Cultural View, 3 units
ENGL 4508. Images of Women in Literature, 3 units
HIST 3680. Women in American History, 3 units
PHED 3750. Women in Sport, 3 units
PSYC 3660. Psychology of Women, 3 units
PSYC 4850. Psychology of Sex Differences, 3 units
SOCL 3170. Women in the Labor Force, 3 units
SPAN 3701. Women in Hispanic Literature, 3 units

Winter Term courses may be substituted for elective courses by advisement.

COURSE DESCRIPTIONS

MDIS 3100. Women in America (3)

An overview of the role of women in contemporary American society. An interdisciplinary approach to the study of women is stressed. Topics to be examined include perspectives and images of women in society, the role of women in society and the issue of sex role innovation. No prerequisites:

MDIS 4000. Women's Studies Colloquium (2)

This course covers a range of areas and issues concerning women in contemporary American society. Selected topics are presented by guest speakers who are experts in various areas of women's studies. Class discussion follows presentations by guest speakers. Prerequisite: Junior or senior standing.
The General Faculty

OLSON, Walter, 1975
President; Professor of Human Geography
B.A. 1947, University of Washington; M.A. 1949, University of Puget Sound; Ph.D. 1956, Syracuse University

AAMODT, Melvin H., 1970
Professor of Human Geography
B.A. 1958, Brigham Young University; M.A. 1960, University of Wisconsin; Ph.D. 1968, Indiana University

AHANTU, Austin Metumara, 1970
Associate Professor of History
B.A. 1967, Berea College; M.A. 1968, Ph.D. 1971, University of California, Los Angeles

ALMY, John, 1971
Associate Professor of Organic/General Chemistry
B.A. 1964, Johns Hopkins University; Ph.D. 1969, University of California, Los Angeles

ALTER, Richard D., 1979
Acting Director of Community and School Relations
B.A. 1961, Ohio Wesleyan University; M.A. 1965, Ph.D. 1967, University of Utah

ANDERSON, Robert K., 1971
Professor of Language & Literature: Spanish
B.A. 1966, Brigham Young University; Ph.D. 1973, Saint Louis University

ARMSTRONG, Corinne P., 1972
Acting Affirmative Action Officer & Research and Grants Coordinator
B.A. 1964, M.A. 1965, University of California, Los Angeles

AUBERT, Edward J., 1961
Director of Admissions and Articulation
B.S. 1956, University of San Francisco; M.B.A. 1961, University of California Berkeley

BARRETT, Thomas P., 1961
Professor of Management - General
B.A. 1954, Northeastern University; M.A. 1958, Michigan State University

BEAMISH, Jerome J., 1964
Director of Testing, Tutorial Services, Disabled Students, Adult Reentry, Women's Center
B.A. 1957, Sir George Williams University; M.A. 1958, Ph.D. 1962, Columbia University
Faculty

BENNETT, Agnes L., 1961
Head Catalog Librarian
A.B. 1951, Luther College; A.M.L.S. 1952, University of Michigan

BERKOBEN, Lawrence D., 1963
Professor of Language & Literature: English
B.A. 1957, Pennsylvania State University; M.A. 1958, Ohio University; Ph.D. 1963, University of Washington

BIANCANI, Albert W., 1976
Coach, Academic Year
B.A. 1967, M.A. 1968, California State University, Sacramento; Ed.D. 1972, Utah State University

BOFFMAN, June L., 1977
Assistant Professor of Nursing
B.S. 1969, M.S. 1970, University of California, San Francisco

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
Professor of Sociology

BOWERS, Ida I., 1972
Associate Professor of Physical Geography
B.S. 1961, Central Michigan University; M.A. 1965, Ph.D. 1973, University of Hawaii

BREWER, Joseph E., 1967
Professor of Language & Literature: English
B.A. 1947, University of Akron; M.A. 1948, University of Cincinnati; Ph.D. 1954, Case Western Reserve University

BROWN, Judith A., 1969
Associate Professor of Zoology
B.A. 1966, Whittier College; M.S. 1969, Ph.D. 1973, Northwestern University

BRUGGMAN, Joseph E., 1960
Professor of Music Education
B.A. 1941, San Jose State University; M.A. 1947, Ed.D. 1949, Columbia University

BYRD, James E., 1974
Associate 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

CANBY, Joel, 1970
Professor of Cultural Anthropology
B.A. 1941, Colorado College; A.M. 1948, Ph.D. 1950, Harvard University

CARROLL, John E., 1971
Professor of Language & Literature: English
B.A. 1965, M.A. 1967, Ph.D. 1970, University of New Mexico

CARSON, Carol P., 1972
Assistant Professor of Physical Anthropology
B.A. 1966, University of California, Davis; M.A. 1969, Ph.D. 1977, University of California, Berkeley

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
Associate Professor of Mathematics
B.E. (Engineering) 1947, Tohuku University, Japan; M.S. 1961, Kansas State Teachers College; Ph.D. 1969, Iowa State University

*CHAPIN, Wayne R., 1970
Professor of Accounting
B.B.A. 1958, M.B.A. 1959, University of Texas at Austin; D.B.A. 1965, University of Southern California; C.P.A. 1958, State of Texas

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

CHORNESS, Marjorie K., 1978
Assistant Professor of Nursing
B.S.N. 1951, Wayne University, Detroit; M.S. 1971, University of California Medical Center, San Francisco; M.A. 1975, Holy Names College, Oakland

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

*Sabbatical Leave, Academic Year 1981-82
Faculty

*CHRISTOFFERSON, Jay P., 1970
Professor of Zoology
B.S. 1961, University of Utah; M.S. 1965, Ph.D. 1970, University of Hawaii

CLARK, Nancy J., 1979
Visiting Lecturer in Nursing
B.S. 1968, California State University, Fresno

COLE, James C., 1964
Professor of Education
A.B. 1947, M.A. 1948, Stanford University; Ed.D. 1956, Teachers College, Columbia University

CONANT, Richard D., 1969
Professor of Physical Education
A.B. 1955, Occidental College; M.S. 1956, University of California, Los Angeles; Ph.D. 1969, University of Oregon

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

CRAWFORD, Paula J., 1973
Reference Librarian
B.A. 1972, University of the Pacific; M.S.L.S. 1973, University of Southern California

CREDELL, Edward R., 1967
Professor of Education
A.B. 1949, California State University, Fresno; M.S. 1956, M.Ed. 1960, University of Southern California; Ph.D. 1967, Northwestern University

CRIST, William D., 1969
Professor of Economics
B.S. 1960, M.A. 1962, Ph.D. 1972, University of Nebraska

CROWLEY, Gerard J., 1960
Executive Dean; Professor of Management - General
A.B. 1942, Loyola College; Ed.M. 1951, Boston University

CUEVAS, Jess L., 1976
Coordinator of Articulation
B.A. 1974, California State College, Stanislaus

*Sabbatical Leave, Spring 1982
DEADRICH, Burke W., 1978
Visiting Lecturer in Language & Literature: English and Physical Education
B.A. 1969, Southern Illinois University, Carbondale; M.J. 1975, University of California, Berkeley

DEAN, Britten, 1967
Professor of History

DIEKMAN, Jane E., 1971
Visiting Lecturer in Education
B.S. 1958, University of North Dakota; M.A. 1978, California State College, Stanislaus

DINSE, Noble T., 1970
Associate Professor of Drama

DONINI, Antonio O., 1966
Professor of Sociology
A.B. 1941, Institute of Classical Literature and Humanities; M.A. 1945, Saint Michael College, Buenos Aires, Argentina; M.S.Sc. 1957, Ph.D. 1960, Institute of Social Sciences, Gregorian University, Rome, Italy

DORAZ, Walter E., 1975
Assistant Professor of Sociology
B.A. 1970, Southeastern Massachusetts University; M.A. 1972, Ph.D. 1975, Washington State University

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

DYCHE, Chester W., 1970
Professor of Mathematics
B.A. 1952, Linfield College; M.A. 1956, Oregon State University

EDMONDSON, Frederick S., 1977
Assistant Director of Counseling
B.A. 1971, California State University, Sacramento; M.A. 1973, California Polytechnic State University, San Luis Obispo

ELLIOTT, Lee A., 1972
Professor of Psychology
B.A. 1959, Quincy College; M.Ed. 1967, Xavier University; Ph.D. 1970, University of Cincinnati
Faculty

ENTIN, Kenneth, 1971
   Professor of Political Science

ERICKSON, Edward C., 1970
   Associate Professor of Economics
   B.A. 1965, M.A. 1966, University of California, Riverside; Ph.D. 1970, University of Southern California

FARRAR, Charles R., 1960
   Credentials Coordinator; Professor of Education
   B.A. 1949, M.A. 1950, Humboldt State University; Ed.D. 1963, Stanford University

FAZAL, Sadrudin Shariff, 1976
   Associate 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

FOX, Phillis T., 1974
   Associate Professor of Sociology
   B.A. 1966, University of Chicago; M.A. 1969, Ph.D. 1974, Northwestern University

FULLER, Michael C., 1971
   Associate Professor of Language & Literature: French
   B.A. 1964, University of Idaho; M.A. 1966, Ph.D. 1971, University of Washington

GALLOWAY, R. Dean, 1960
   Director of the Library
   A.B. 1947, Humboldt State University; M.S. 1950, University of Southern California

*GENTRY, Thomas A., 1973
   Associate Professor of Psychology
   B.A. 1957, M.A. 1958, Colorado College; Ph.D. 1973, Brandeis University

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

*Sabbatical Leave, Spring 1982

500
Faculty

GIVENTER, Lawrence L., 1975
Associate 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

*GOLDSMITH, W. Mack, 1966
Professor of Psychology
A.B. 1957, Ripon College; Ph.D. 1966, Cornell University

*GOODWIN, James M., 1968
Professor of Physics
B.S. 1958, Pennsylvania State University; M.S. 1964, Ph.D. 1968, University of Washington

GORELINIK, Sally J., 1975
Associate Professor of Sociology
B.A. 1968, California State University, Los Angeles; M.A. 1971, Ph.D. 1974, University of Minnesota

GOTELLI, David M., 1970
Professor of Botany
B.A. 1964, University of California, Berkeley; Ph.D. 1969, University of Washington

GRANT, Curtis R., 1966
Professor of History
A.B. 1960, Stanford University; M.A. 1961, University of California, Berkeley; Ph.D. 1968, Stanford University

GRAVES, Jack A., 1969
Professor of Education

GRILLOS, Steve J., 1965
Professor of Botany
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

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

*Sabbatical Leave, Academic Year 1981-82

501
Faculty

HAMILTON, Hobart G., Jr., 1968
Associate Vice President for Academic Affairs; Professor of Inorganic/General Chemistry
B.S. 1961, University of Texas, El Paso; M.S. 1963, Ph.D. 1967, New Mexico State University

HANNA, Charles C., 1977
Academic Dean for Credentials and Graduate Programs; Professor of Education
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
B.A. 1949, M.A. 1957, University of the Pacific; Ed.D. 1972, Laurence University

HANSON, James C., 1960
Professor of Zoology
B.A. 1955, M.A. 1957, University of the Pacific; Ph.D. 1967, Oregon State University

HARDER, Paul O., 1973
Dean for Academic Resources; Professor of Music/Theory
B.M. 1944, Butler University; M.M. 1945, Eastman School of Music; Ph.D. 1959, University of Iowa

HAYES, William H., 1971
Professor of Philosophy
B.A. 1947, Columbia College, Columbia University; M.A. 1952, Ph.D. 1967, University of California, Berkeley

HERNANDEZ, Leodoro, 1980
Associate Professor of Education
B.A. 1966, University of Omaha; M.A. 1968, Chapman College; Ed.D. 1976, University of Northern Colorado

HILPERT, Fred P., Jr., 1977
Associate Professor of Speech Communication
B.A. 1962, University of Washington; M.A. 1969, California State University, Chico; Ph.D. 1972, University of Oregon

HINKSON, Jimmy W., 1970
Professor of Bio-Chemistry/General
B.S. 1956, M.S. 1958, Brigham Young University; Ph.D. 1962, Indiana University

HOLDER, Franklin B., 1965
Professor of History, Foreign Student Advisor
B.A. 1949, M.A. 1951, Ph.D. 1962, University of California, Berkeley

502
HOLT, Lewis E., 1971
Professor of Psychology
B.A. 1960, M.A. 1967, Ph.D. 1969, University of California, Berkeley

HOWARD, Jane S., 1978
Assistant Professor of Psychology
B.A. 1973, Mount Holyoke College; M.A. 1977, Ph.D. 1978, Western Michigan University, Kalamazoo

HUGHES, Steven W., 1971
Professor of Political Science
B.A. 1966, Whittier College; Ph.D. 1971, University of North Carolina

JAMES, Ralph L., 1970
Professor of Mathematics
B.S. 1963, University of Washington; M.S. 1965, Ph.D. 1970, Oregon State University

JAVAHER, James N., 1961
Professor of Mathematics
L.L.B. 1946, University of Tehran; A.B. 1950, San Jose State University; M.A. 1952, University of California, Berkeley; B.S. 1954, Stanford University; Doctorat d'Universite, Faculte des Sciences, 1960, University of Paris, Sorbonne

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

JENSEN, James P., 1961
Professor of Language & Literature: English
B.A. 1953, M.A. 1957, Ph.D. 1964, University of Washington

JOHNSON, Jacqueline B., 1976
Professor of Nursing
B.S. 1949, Adelphi University; M.S. 1962, St. John's University, Jamaica, N.Y.

JOHNSON, Lola V., 1960
Professor of Language & Literature: English
B.A. 1956, M.A. 1959, University of the Pacific

KAMPTNER, N. Laura, 1978
Director of the Child Development Center; Visiting Lecturer in Speech Communication
B.S. 1976, San Diego State University; M.S. 1979, University of California, Davis

*Sabbatical Leave, Spring 1982
Faculty

KAVASCH, Deborah H., 1979
Visiting Lecturer in Music; Theory/Voice
University; Ph.D. 1973, University of California, San Diego

KELTNER, Bette J., 1978
Assistant Professor of Nursing
B.S. 1972, M.S. 1975, California State University, Fresno

KIMLICKA, Thomas M., 1978
Assistant Professor of Psychology
A.B. 1973, University of California, Berkeley; M.S. 1976,
Ph.D. 1978, Washington State University, Pullman

KIRSHEN, Hime B., 1980
Visiting Lecturer in Business Administration
B.S. 1926, Whitman College; 1928, Columbia University Law
School; M.A. 1929, Columbia University; Ph.D. 1937, University
of Wisconsin, Madison

KLEVMYR, Aleta P., 1978
Assistant Professor of Communication Disorders
B.A. 1973, M.A. 1975, California State University, Fresno

KOTTKE, Frederick E., 1963
Professor of Economics
B.S. 1952, Pepperdine College; M.A. 1957, Ph.D. 1960,
University of Southern California

LAMBRIGHT, Robert W., 1968
Professor of Marketing
at Seattle

LEE, Albert Yin-Po, 1970
Professor of Economics
B.A. 1955, National Taiwan University; Ph.D. 1970, Southern
Illinois University

LEMA, David E., 1978
Associate Professor of Education
B.A. 1957, M.A. 1960, San Jose State University; Ed.D. 1965,
Syracuse University

LESLE, Mary E., 1978
Assistant Professor of Physical Education
A.B. 1951, Smith College; M.S. 1975, Northeastern University;
Ph.D. 1979, University of Southern California

504
LEVERING, Richard A., 1973
Associate Professor of Drama
A.B. 1961, M.A. 1968, California State University, Long Beach

LEWIN, Lewis M., 1976
Assistant Professor of Psychology
B.A. 1968, Allegheny College; M.S. 1972, Ph.D. 1975, Ohio University, Athens

LODEWYCK, Ronald W., 1973
Professor of Management - Quantitative
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SMURR, J. W., 1967
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STEELE, Joan D., 1976
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TUMAN, Vladimir S., 1965
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WOLD, John T., 1970
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Visiting Lecturer in Psychology
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Visiting Lecturer in Business Administration
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Visiting Lecturer in Mathematics
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Visiting Lecturer in Economics
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Visiting Lecturer in Business Administration
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Visiting Lecturer in Language and Literature: English  
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YOCKEY, Robert H., 1980  
Visiting Lecturer in Business Administration  
B.S. 1970, Ohio State University; M.S. 1974, University of Florida; M.B.A. 1980, California State College, Stanislaus
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