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In the Fall of 1973, California State College, Stanislaus will launch a new academic calendar known as the "4-1-4" program. 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 early June. 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, 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 section of Catalog.)

Cal State, Stanislaus is the first public, four-year institution of higher learning in California to adopt a 4-1-4 calendar. Implementation of the new program required a massive expenditure of time and energy by virtually everyone on the College staff. The faculty especially merits commendation for successfully revising the entire curriculum. Finally, the early support of President Carl Gatlin and Chancellor Glenn S. Dumke made the 4-1-4 venture possible at Cal State, Stanislaus.
ACADEMIC CALENDAR, 1973-1974

SUMMER SESSIONS 1973

First Session--June 18-July 27
April 2, Tuesday ........... Filing period for Registration Applications begins
April 2-June 18, Monday through Monday .......... Regular registration period
June 18, Monday .......... Instruction begins
June 19-25, Tuesday through Monday .......... Late registration period ($5 late fee)
June 25, Monday .......... Last day for late registration
June 25, Monday .......... Last day to add a course
July 2, Monday .......... Last day to drop a course
July 2, Monday .......... Last day to file Application for Partial Refund of Fees
July 4, Wednesday .......... Legal Holiday (Independence Day)
July 27, Friday .......... First session ends

Second Session--July 30-August 17
April 2, Tuesday ........... Filing period for Registration Applications begins
April 2-July 30, Monday through Monday .......... Regular registration period
July 30, Monday .......... Instruction begins
July 25-August 1, Wednesday through Wednesday .......... Late registration period ($5 late fee)
August 1, Wednesday .......... Last day for late registration
August 1, Wednesday .......... Last day to drop a course
August 17, Friday .......... Second session ends

FALL SEMESTER 1973

November 1-30, 1972, Wednesday through Thursday .......... Initial period for accepting admission applications for Fall Semester 1973
December 1, 1972, Friday .......... Extended filing period begins for Fall Semester 1973 admission applications
March 30, Friday .......... Last day to file applications for financial aid in the Fall Semester 1973
April 16, Monday .......... Beginning of regular academic advising period for Fall Semester 1973
May 25, Friday

End of regular academic advising period for Fall Semester 1973

June 4, Monday

Registration for Fall Semester 1973

September 3, Monday

Legal Holiday (Labor Day)

September 4, Tuesday

Beginning of late academic advising period for Fall Semester 1973

September 6, Thursday

Student Orientation Program

September 7, Friday

Completion of regular registration

September 7, Friday

Last day to register without late registration fee

September 10, Monday

First day of late registration

September 10, Monday

Instruction begins

September 19, Wednesday

End of late academic advising period for Fall Semester 1973

September 19, Wednesday

Last day of late registration

September 21, Friday

Last day to apply for Fall 1973 graduation

September 24, Monday

Last day to add a course

September 24, Monday

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

October 5, Friday

Last day to drop a course

October 5, Friday

Applications due for Spring 1974 and Summer 1974 graduation

October 22, Monday

Legal Holiday (Veteran's Day)

November 5, Monday

Beginning of regular academic advising period for Winter Term 1974 and Spring Semester 1974

November 1-30, Thursday through Friday

Filing period for Fall Semester 1974 admission applications

November 20, Tuesday

Last day to submit approved master's degree thesis for Fall Semester 1973 graduation

November 21-25, Wednesday through Sunday

Thanksgiving Holiday (College closed November 22-25)

November 29, Thursday

Last day to withdraw from College for Fall Semester 1973

December 3, Monday

Extended filing period begins for Fall Semester 1974 admission applications

December 5, Wednesday

End of regular academic advising period for Winter Term 1974 and Spring Semester 1974

December 11, Tuesday

Classes meet on Friday schedule

December 13, Thursday

Last day of classes for Fall Semester 1973
December 14, Friday ....... Registration for Winter Term 1974 and Spring Semester 1974

December 14, Friday ....... Last day to register for Winter Term 1974 and Spring Semester 1974 without late registration fee

December 17-20, Monday through Thursday ....... Final examinations for Fall Semester 1973

December 20, Thursday ....... Fall Semester 1973 ends

December 25-26, Tuesday through Wednesday ....... Christmas Holiday

WINTER TERM 1974

June 1-29, 1973, Friday through Friday ....... Initial period for accepting admission applications for Winter Term 1974

July 2, 1973, Monday ....... Extended filing period begins for Winter Term 1974 admissions applications

November 5, 1973, Monday ....... Beginning of regular academic advising period for Winter Term 1974 and Spring Semester 1974

December 5, 1973, Wednesday ....... End of regular academic advising period for Winter Term 1974 and Spring Semester 1974

December 14, 1973, Friday ....... Registration for Winter Term 1974 and Spring Semester 1974

December 14, 1973, Friday ....... Last day to register for Winter Term 1974 and Spring Semester 1974 without late registration fee

January 1, Tuesday ....... Legal Holiday (New Year's Day)

January 7, Monday ....... Beginning of late academic advising period for Winter Term 1974

January 7, Monday ....... First day of late registration

January 7, Monday ....... Instruction begins

January 7, Monday ....... First day to add or drop a course

January 9, Wednesday ....... End of late academic advising period for Winter Term 1974

January 9, Wednesday ....... Last day of late registration

January 9, Wednesday ....... Last day to add a course

January 9, Wednesday ....... Last day to drop a course

January 11, Friday ....... Last day to apply for Winter Term 1974 graduation

January 11, Friday ....... Applications due for Fall Semester 1974 graduation

January 15, Tuesday ....... Last day to submit approved master's degree thesis for Winter Term 1974 graduation
January 18, Friday ... Last day to file application for partial refund of fees after withdrawing from College

February 5, Tuesday ... Last day of classes for Winter Term 1974

February 5, Tuesday ... Winter Term 1974 ends

SPRING SEMESTER 1974

August 1-31, 1973, Wednesday through Friday ... Initial period of accepting admission applications for Spring Semester 1974

September 4, 1973, Tuesday ... Extended filing period begins for Spring Semester 1974 admission applications

November 5, 1973, Monday ... Beginning of regular academic advising period for Spring Semester 1974

November 15, 1973, Thursday ... Last day to file applications for financial aid in Spring Semester 1974

December 5, 1973, Wednesday ... End of regular academic advising period for Spring Semester 1974

December 14, 1973, Friday ... Registration for Spring Semester 1974

December 14, 1973, Friday ... Last day to register without late registration fee

February 13, Wednesday ... Beginning of late academic advising period for Spring Semester 1974

February 13, Wednesday ... First day of late registration

February 13, Wednesday ... Instruction begins

February 13, Wednesday ... First day to add or drop a course

February 18, Monday ... Legal Holiday (Washington's Birthday)

February 25, Monday ... End of late academic advising period for Spring Semester 1974

February 25, Monday ... Last day of late registration

February 27, Wednesday ... Last day to apply for Spring Semester 1974 and Summer 1974 graduation

February 27, Wednesday ... Last day to file application for partial refund of fees after withdrawing from the College

February 28, Thursday ... Last day to add a course

March 13, Wednesday ... Last day to drop a course

March 13, Wednesday ... Applications due for Winter Term 1975 graduation

April 8-15, Monday through Monday ... Easter Holiday (College closed Monday, April 15)
April 16, Tuesday .......... Beginning of regular academic advising period for Fall Semester 1974
May 2, Thursday .......... Last day to submit approved master's degree thesis for Spring Semester 1974 graduation
May 10, Friday .......... Last day to withdraw from College for Spring Semester 1974
May 16, Thursday .......... Classes meet on Monday schedule
May 17, Friday .......... End of regular academic advising period for Fall Semester 1974
May 22, Wednesday .......... Classes meet on Monday schedule
May 23, Thursday .......... Last day of classes for Spring Semester 1974
May 24, Friday .......... Registration for Fall Semester 1974
May 27, Monday .......... Legal Holiday (Memorial Day)
May 28-31, Tuesday through Friday ............. Final examinations for Spring Semester 1974
June 1, Saturday .......... Commencement
June 1, Saturday .......... Spring Semester 1974 ends

SUMMER SESSIONS 1974 (TENTATIVE)

First Session--June 17-July 26
April 1-June 17 .......... Regular registration period
June 17, Monday .......... Instruction begins
June 18-24 .......... Late registration period ($5 late fee)
July 4, Thursday .......... Legal Holiday (Independence Day)
July 26, Friday .......... First session ends

Second Session--July 29-August 16
April 1-July 29 .......... Regular registration period
July 29, Monday .......... Instruction begins
July 30-31 .......... Late registration period ($5 late fee)
August 16, Friday .......... Second session ends
The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972 the system became The California State University and Colleges and fourteen of the nineteen campuses received the title University.

The oldest campus - California State University, San Jose - was founded 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 systemwide 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. A limited number of doctoral degrees is offered jointly with the University of California.

Presently, under the system's "New Approach to Higher Education," the campuses are implementing a wide variety of innovative programs to meet the changing needs of students and society. Among pilot programs under way are off-campus degree programs, weekend colleges, self-paced learning programs, and special testing programs to accelerate student progress toward a degree.

Enrollments in fall 1972 totaled 278,000 students, who were taught by a faculty of 15,500. Last year the system awarded over 55 percent of the bachelor's degrees and 35 percent of the master's degrees granted in California. Almost 360,000 persons have been graduated from the nineteen campuses since 1960.
EX OFFICIO TRUSTEES

Hon. Ronald Reagan .................. State Capitol
Governor of California and
President of the Trustees

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Lieutenant Governor of California

Hon. Bob Morretti ..................... State Capitol
Speaker of the Assembly

Hon. Wilson C. Riles ................ 721 Capitol Mall
State Superintendent of
Public Instruction

Dr. Glenn S. Dumke .................. 5670 Wilshire Blvd.
Chancellor of The California State
University and Colleges

Appointments are for a term of eight years expiring March 1 of the
years in parentheses. Names are listed in order of appointment to
the Board.

Charles Luckman (1974)
9200 Sunset Blvd.
Los Angeles 90069

Daniel H. Ridder (1975)
604 Pine Avenue
Long Beach 90801

George D. Hart (1975)
111 Sutter Street
San Francisco 94104

Edward O. Lee (1974)
2000 Center Street
Berkeley 94704

Karl L. Wente (1976)
5565 Telsa Road
Livermore 94550

W. O. Weissich (1977)
1299 Fourth Street
San Rafael 94901

Robert A. Hornby (1978)
P.O. Box 60043, Terminal Annex
Los Angeles 90060

Wendell W. Witter (1979)
45 Montgomery Street
San Francisco 94106

Mrs. Winifred H. Lancaster (1977)
P.O. Drawer JJ
Santa Barbara 93102

Gene M. Benedetti (1978)
8990 Poplar Avenue
Cotati 94923

Robert F. Beaver (1976)
254 East 27th Street
Los Angeles 90011

Roy T. Brophy (1980)
2160 Royale Road, Suite 20
Sacramento 95815

Mrs. C. Stewart Ritchie (1980)
1064 Creek Drive
Menlo Park 94025

Frank P. Adams (1981)
235 Montgomery Street
San Francisco 94104

Richard A. Garcia (1979)
P.O. Box 2073
Glendale 91209

Dean Lesher (1981)
7 Oaks Circle
Orinda 94563

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President

Karl L. Wente
Chairman

George D. Hart
Vice Chairman

Chancellor Glenn S. Dumke
Secretary-Treasurer

OFFICE OF THE CHANCELLOR

The California State University and Colleges
5670 Wilshire Boulevard
Los Angeles, California 90036
(213) 938-2981

Glenn S. Dumke . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Chancellor
H. E. Brakebill . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Executive Vice Chancellor
Norman L. Epstein . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Vice Chancellor and General Counsel
D. Dale Hanner . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Vice Chancellor, Business Affairs
Harry Harmon . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Vice Chancellor, Physical Planning and Development
C. Mansel Keene . . Vice Chancellor, Faculty and Staff Affairs
W. B. Langsdorf . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Vice Chancellor, Academic Affairs

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

California State College, Bakersfield
9001 Stockdale Highway
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Leo F. Cain, President
(213) 532-4300

California State University, Fullerton
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L. Donald Shields, President
(714) 870-2011

California State University, Hayward
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Hayward, California 94542
Ellis E. McCune, President
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14
California State University, Long Beach
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Long Beach, California 90840
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California State University, Los Angeles
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John A. Greenlee, President
(213) 224-0111

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Pomona, California 91768
Robert C. Kramer, President
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San Luis Obispo, California 93401
Robert E. Kennedy, President
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Stanford Cazier, President
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Fresno, California 93710
Norman A. Baxter, President
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(707) 826-3011
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Sacramento, California 95819
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    Imperial Valley Campus
    720 Heber Avenue
    Calexico, California 92231
    (714) 357-3721

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Northridge, California 91324
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S. I. Hayakawa, President
(415) 469-9123

California State University, San Jose
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San Jose, California 95114
John H. Bunzel, President
(408) 277-2000

California State College, Sonoma
1801 East Cotati Avenue
Rohnert Park, California 94928
Thomas H. McGrath, President
(707) 795-2011

California State College, Stanislaus
800 Monte Vista Avenue
Turlock, California 95380
Carl Gatlin, President
(209) 634-9101
ADVISORY BOARD

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:

Otto R. Zentner, Chairman ........................................ Los Banos
Alden R. Houben, Secretary ....................................... Lodi
A. Joseph Bellizzi .................................................. Modesto
Hon. Ross A. Carkeet ............................................ Sonora
Dale V. Dustin ..................................................... Oakdale
Jack L. Hollstien .................................................. Stockton
John Mensinger ..................................................... Modesto
Shawn Moosekian ................................................... Turlock
Francis R. Ruggieri .............................................. Modesto
W. O. (Ted) Thompson ............................................. Turlock
William P. Youngdale ............................................. Turlock
Richard W. Zug, D.D.S. .......................................... Merced

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William Logan ..................................................... Patterson
Frank Peluso ........................................................ Los Banos
Karl E. Wellman .................................................... Newman
Stanley T. Wilson ................................................ Palm Springs

ADMINISTRATION

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President ............................................................ Carl Gatlin, Ph.D.
Acting Vice President for Academic Affairs. Curtis R. Grant, Ph.D.
Executive Dean ...................................................... Gerard J. Crowley, Ed.M.
Dean of Student Services ........................................ Louis J. Leo, J.D.
Business Manager ..................................................... Frank C. Balbo, B.S.
Special Assistant to the President;
   Director of Special Program ............................... Norbert M. Gonzales, M.A.
ACADEMIC ADMINISTRATION

Acting Vice President for Academic Affairs  .  Curtis R. Grant, Ph.D.
Assistant Vice President for
Academic Affairs  .  Joseph W. Corbin, Ed.D.
Dean of Educational Services  .  William W. Day, Ed.D.
Director of Continuing Education .  Richard B. Parnsworth, M.A.
Director of Academic Advising .  William F. McClintock, Ph.D.
Director of ADP Services .  Miles E. Twaddell, M.S.
Director of Admissions and Relations
with Schools  .  Edward J. Aubert, M.B.A.
Registrar  .  C. W. Quinley, Jr., A.B.

ACADEMIC ORGANIZATION

Dean, School of Arts and Humanities  .  Martin L. Camarata, M.A.
Chairman, Department of Art .  Martin L. Camarata, M.A.
Chairman, Department of Drama .  Douglas McDermott, Ph.D.
Chairman, Department of English and
Foreign Languages  .  Douglas H. Taylor, Ph.D.
Chairman, Department of Music  .  R. Scott Coulter, M.M.
Area-Coordinator, Philosophy  .  William H. Hayes, Ph.D.
Dean, School of Behavioral and
Social Sciences  .  V. Kenneth Shrable, Ph.D.
Chairman, Department of
Anthropology and Geography  .  Joel S. Canby, Ph.D.
Chairman, Department of Economics  .  Frederick E. Kottke, Ph.D.
Chairman, Department of History  .  John E. Caswell, Ph.D.
Chairman, Department of Political Science-Paul F. Magnelia, Ph.D.
Chairman, Department of Psychology  .  Lewis E. Holt, Ph.D.
Chairman, Department of Sociology  .  Jack L. Dyer, Ph.D.
Chairman, Department of Speech
Communication  .  Randall C. Ruechelle, Ph.D.
Dean, School of Natural Sciences  .  Evan M. Thompson, Ph.D.
Chairman, Department of
Biological Sciences  .  James C. Hanson, Ph.D.
Chairman, Department of Chemistry  .  Robert J. Hamilton, Ph.D.
Chairman, Department of Mathematics  .  Narendra L. Maria, Ph.D.
Chairman, Department of Physical
Education and Health  .  Armin P. Pipho, Ph.D.
Chairman, Department of Physics  .  Walter John, Jr., Ph.D.
Chairman, Division of Business
Administration  .  Thomas P. Barrett, M.A.
Chairman, Division of Education  .  Richard V. Jones, Ed.D.
Coordinator, Ethnic Studies  .  .
STUDENT SERVICES

Dean of Student Services ......................... Louis J. Leo, J.D.
Associate Dean of Student Services ............... Richard Sebok, M.Ed.
Assistant Dean of Students ......... Gary R. Peyton, B.S.
Assistant to Dean of Students ......... James F. Schwartz, Ed.D.
Director of Testing .................. Jerome J. Beamish, Ph.D.
Director of Career Placement ........ Thomas C. Watling, Ph.D.
Director of Financial Aids ...... Manuel G. Nunez, B.A.
Counselor and Activities Adviser ....
Counselor ..................................... James H. Edmondson, Jr., M.A.
Registered Nurse ................................ June M. Meyer, R.N.
Director of College Relations .......... Wilford R. Keener, B.A.

BUSINESS MANAGEMENT

Business Manager ................................ Frank C. Balbo, B.S.
Financial Manager ......................... Francis B. Harrison, M.B.A.
Accounting Officer .......................... James C. Emerick, B.B.A.
Procurement and Support Services Officer . Thomas J. White, A.B.
Personnel Officer ............................ Gary D. Duerner, B.S.
Supervisor of Buildings and Grounds .. John L. Foster, B.S.

LIBRARY

Director of the Library ..................... R. Dean Galloway, M.S.
Head of Public Services and Assistant . . J. Carlyle Parker, M.L.S.
Head of Technical Services .......... John C. Caldwell, M.S.L.S.
Head Catalog Librarian .................. Agnes L. Bennett, A.M.L.S.
Bibliographer .............................. Robert L. Santos, M.A.
Reference Librarian ...................... Laura H. Henning, M.S.L.S.
Catalog Librarian .......................... Priscilla S. Peters, M.L.S.
Reference Librarian ...................... Robert L. Sathrum, M.L.S.
The College and Community

California State College, Stanislaus was founded in 1957 when Gov. Edmund G. Brown signed Assembly Bill No. 166 to create an institution of higher education in Stanislaus County.

In 1959 a committee chose a 220-acre site just north of the City of Turlock for the college's permanent campus, and while construction was under way on CSCS' first buildings the college opened its doors in temporary facilities at the Stanislaus County Fairgrounds.

During its five years in those temporary quarters the college admitted only junior and senior students for reasons of space and curriculum. Lower division students were not admitted until the permanent campus was opened in 1965 and since then its enrollment has tripled to about 3,000 students.

The majority of CSCS' students come from a six-county area around the college although each year finds an increasing number of students coming in from metropolitan areas north and south, and from other western states and foreign countries, as Cal State, Stanislaus' reputation as a fine liberal arts school is spread.

Dr. Carl Gatlin is CSCS' third president, having been appointed in 1969 to succeed Dr. Alexander Capurso who returned to teaching. The college's first president, Dr. J. Burton Vasche, passed away in the spring of 1962.

Cal State, Stanislaus awards bachelor degrees in 23 subject areas and master's degrees in six: Business Administration, Education, English, History, Speech and Psychology.

Curriculum policy in the future will find a substantial continuation of the college's broad-based liberal arts package although there will be increased emphasis on improving its science content for the non-science majors.

The City of Turlock is situated on the southern edge of Stanislaus County about 13 miles south of Modesto. It is a growing rural community of about 14,000 persons. Its economy is based largely upon agricultural products and food processing plants although there is a trend toward light and medium industry which will give it a better year-around economical base.

Turlock is about two hours by car from San Francisco, Yosemite National Park, the ski slopes of the Sierra Mountains and the sandy beaches of the Pacific Ocean. There also are several lakes, parks and other recreational areas closer to the city.

Turlock has six elementary schools, a high school, two hospitals, a daily newspaper, a radio station, two theaters and several other activities of educational, cultural and recreational interest.
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, laboratory sessions and seminars and a sense of informality.

Each student is encouraged to develop a broad background in his first two years before majoring in one of the 23 areas in the Schools of Arts and Humanities, Behavioral and Social Sciences, Natural Sciences, or the Divisions of Business Administration and Education. The 23 major areas are

- Anthropology
- Biological Sciences
- Business Administration
- Chemistry
- Drama
- Economics
- English
- Fine Art
- French
- History
- Political Science
- Liberal Studies
- Mathematics
- Music
- Physical Education
- Physical Sciences
- Physics
- Special Major
- Sociology
- Speech
- Social Sciences
- Spanish
- Psychology

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

Master of Arts degrees are available in Education, English, History, Psychology and Speech and Masters Business Administration.

THE FACILITIES

California State College, Stanislaus and the City of Turlock are working together to provide an attractive and highly functional campus/community complex and the fruits of their labor has been rewarding.

The campus is being totally constructed from a master plan by an independent architectural firm to allow for similar design of buildings even though they are erected years apart and the City of Turlock has masterplanned the area surrounding the college to permit necessary housing and commercial developments as the need exists.

The Library/Administration Building and the Classroom Building, the first to be constructed, are the hub of the campus and serve a variety of purposes as well as providing space for most faculty offices.

The Performing Arts Complex, which opened in the fall of 1970, is a multibuilding complex which houses the art, drama, and music departments. A modern and very comfortable 300-seat theatre is the site of most drama productions although a smaller "studio theatre" can be used as a kind of theatre-in-the-round.

A concert hall that can seat up to 200 persons is a feature of the music portion of the Performing Arts Complex while the
Art Department is highlighted by spacious and functional rooms that provide up-to-date equipment for practically all the media of art.

The Field House, located on the east side of the campus near the outdoor athletic fields, is the center of physical education activities.

A Student Union and Bookstore are located in temporary quarters until permanent buildings can be constructed probably within the next few years. The Student Union is furnished with modern furniture and decor and provides a place for students to study, watch television, eat lunch, and fraternize. It also houses the offices for the Associated Student Body officers and staff.

The Science Building was completed and occupied in Fall 1972. Future construction plans include another classroom, a gymnasium, a cafeteria and an addition to the library.

ACCREDITATION

The College is fully accredited by the Western Association of Schools and Colleges, and is a member of the American Association of Colleges for Teacher Education. It is approved by the United States Veterans Administration, the California State Department of Veterans Affairs, and the American Association of University Women.

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 will return to the semester system.

In September 1973, the College will adopt a new 4-1-4 Calendar which provides for a 13-week fall semester, a one-month winter term, and a 13-week spring semester. California State College, Stanislaus guarantees that students who attended the College under the quarter system academic calendar will be protected from unreasonable requirements or hardship in completion of graduation requirements under the 4-1-4 curricular program. Original catalog year unit and subject graduation requirements may be elected by continuing students while semester unit course substitutions will be offered in order to meet graduation requirements. If a student believes conversion to the 4-1-4 academic calendar poses a genuine hardship for him, he may seek special petition consideration through his major adviser and the Admissions and Records Office, as appropriate.

Semester units can be converted to quarter units by multiplying by 1⅓ (4 semester units x 1⅓ = 6 quarter units). Quarter units are converted to semester units by multiplying by 2/3 (9 quarter units x 2/3 = 6 semester units).
LIBRARY

The College 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 professionally trained librarian-scholars who organize, analyze, and interpret them, and aid students in acquiring principles of independent library research.

The College Library occupies the second floor of the Library Building. It seats 365 readers, and features individual study desks, and group study rooms.

The general collection of the College Library has been selected to meet the needs of the curriculum. It contains over 135,000 volumes and about 2,600 periodicals. Backfiles of most of these periodicals are available. The Library is a selective depository of U.S. Government publications and is also a complete depository of California documents.

The Library also has a Curriculum Library and Children's Collection. About 5,000 volumes of courses of study, curriculum guides, and units of work are available. The College Library is one of the twenty-one Curriculum Materials Center Depositories through which it obtains two copies of all curriculum materials published by the county schools of California. A model collection of about 2,000 of the best children's books comprises the Children's Collection.

Since the Library has a staff of eight professional librarians, at least one librarian is available at most times to give reference service and reader advisory service.

SUMMER SESSION AND EXTENSION

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

Extension credit may be considered by the Admissions and Records Office toward a degree only if requested by a student.

For information refer to the Office of the Director of Continuing Education.

During the regular academic year, non-matriculated students holding an A.A. degree or equivalent may on a space available basis enroll in regular upper division courses through extension. Students should apply and secure packets from the Office of Continuing Education.
INTERNATIONAL PROGRAMS

A study abroad program is offered by The California State University and Colleges International Programs, under which students may enroll for a full academic year simultaneously at their home campus, where they earn academic credit and maintain campus residency, and at a distinguished foreign university or a special program center.

Cooperating universities abroad include the University of Provence, France; the University of Heidelberg, Germany; the University of Florence, Italy; the Universidad Ibero-Americana, Mexico; the University of Uppsala, Sweden; the University of Madrid and the University of Granada, Spain; Tel Aviv University and the Hebrew University of Jerusalem, Israel; and Waseda University, Japan. In the United Kingdom, cooperating universities, which may vary from year to year, include Dundee, Leicester, London, Oxford, and Sheffield. In addition, California State University and Colleges students may attend a special program in Taiwan, Republic of China, or an architectural program in Copenhagen, Denmark.

Eligibility is limited to students who will have upper division or graduate standing during their year of participation, who have a B (3.0) average or better in at least 30 semester or 45 quarter units in any two previous consecutive years; show ability to adapt to a new environment; and, in the cases of France, Germany, Mexico and Spain, are proficient in the language of instruction at the foreign university. Selection is made by a faculty committee on the students' home campus and by a statewide faculty committee.

The International Programs are supported by state funds to the extent that such funds would have been expended had the student concerned continued to study in California. Students assume costs for pre-departure orientation, insurance, transportation, housing and meals. Home campus registration fees, tuition on the home campus for out-of-state students (if the student is not a California resident) and personal incidental expenses or vacation travel costs while abroad are also paid for by the student. The Office of International Programs collects and administers funds for those items which the program must arrange or can negotiate more effectively: typically, home campus fees, orientation costs, insurance, outbound transportation, and housing in some centers. Students accepted in the International Programs may apply for any financial aid available at their home campus.

Applications for the 1974-75 academic year must be submitted before February 4, 1974 (except for United Kingdom applicants who must submit applications by January 7, 1974). Applicants are notified of acceptance by April 1, 1974. Detailed information may be obtained from College Student Services Office or by writing to The California State University and Colleges International Programs, 5670 Wilshire Boulevard, Los Angeles, California 90036.
EDUCATIONAL OPPORTUNITY PROGRAM

The program offers students a combination of academic supportive services (tutoring, counseling, advising, etc.), as well as financial aid, where needed. A prospective EOP student should (1) contact the campus EOP Office before or at the time of admission application and (2) file an admission application form in the initial filing period under regular admission procedures. If an applicant whose only need for assistance is financial expects to meet standard State College admission requirements, he should not seek admission to the Educational Opportunity Program. Only those seeking special admission and/or services other than financial assistance should do so. See Admission to the College section of this catalog.
ADMISSION TO THE COLLEGE

The College admits qualified high school graduates, transfer students from two-year community colleges and four-year institutions, and graduate students for 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 5, Sub-chapter 2 of the California Administrative Code, as amended by the Board of Trustees of The California State University and Colleges. A prospective applicant who is unsure of his status under these requirements is encouraged to consult with a school or college counselor or contact 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 following provisions. Submission of the results of the American College Test (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT) is 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, 3 years (4 years preferred)
2. Foreign language, 2 years in one language
3. College preparatory mathematics, 2 years

*Exceptions: College credit earned concurrent with high school enrollment; college credit earned in summer session after high school and prior to regular matriculation in college; college credit granted for the CLEP or ADVANCED PLACEMENT programs, or military or USAFI courses; or college credit granted for some non-traditional learning experience, will not affect the applicant's status as a first-time freshman for application quota purposes as well as admission. Further, the accelerated student, who completes his high school program mid-year, who has applied to The California State University and Colleges for the following Fall term, but chooses to attend a local community college in the spring term will be considered a first-time freshman for application quota purposes as well as admission. All such college or advanced standing credit, if fully acceptable as transfer credit, will be granted the student after admission.
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, and sculpture, as much high school and independent work in these fields as possible.

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.

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

History: History and/or social sciences, 4 years preferred; foreign language, 4 years preferred.

Liberal Studies: A broad selection of elective courses.

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

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.

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, 3 years (through trigonometry).

Physics: Physics, 1 year; chemistry, 1 year; mathematics, 3 years (through trigonometry).

Political Science: History and/or social sciences, 4 years preferred; English, 3 years.

Psychology: Biology; mathematics, 4 years (through trigonometry); English, 3 years.

Social Sciences Interdepartmental Major: 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 activity in forensics; 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.
## ADMISSION ELIGIBILITY FOR CALIFORNIA HIGH SCHOOL GRADUATES

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3.00 Not eligible and below
NON-RESIDENTS GRADUATING FROM HIGH SCHOOLS IN OTHER STATES OR POSSESSIONS. An applicant who is a non-resident for tuition purposes and who is a graduate of a high school in another state or a U.S. possession must have an eligibility index which would place him 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 HIGH SCHOOLS IN A FOREIGN COUNTRY. An applicant who is a graduate of a foreign high 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 specifically requested to do so.

NON-HIGH SCHOOL GRADUATES. An applicant who is over 21 years of age, but has not graduated from high school will be considered for admission only when his preparation in all other ways is such that the College believes his promise for academic success is equivalent to that of eligible California high school graduates.

HIGH-SCHOOL STUDENTS ENTERING ADVANCED PLACEMENT PROGRAM. A student still enrolled in high school will be considered for enrollment in the College's Advanced Placement Program if he is recommended by his principal and his preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment. 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.

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 providing he has satisfied all course prerequisites. Regular college credit will be awarded providing credit is not required for high school graduation. Inquiries should be addressed to the Director of Admissions.

ADMISSION AS AN UNDERGRADUATE TRANSFER

An applicant for admission to the College as an undergraduate transfer will be considered for admission under one of the following provisions.
APPLICANTS WITH 60 OR MORE TRANSFERABLE SEMESTER UNITS. Applicants who have successfully completed 60 or more transferable semester units, or the equivalent, are eligible for admission if they have achieved a grade point average of 2.0 (C) and were in good standing at the last college attended. Nonresident applicants must have earned a grade point average of at least 2.4 (C+).

APPLICANTS WITH FEWER THAN 60 TRANSFERABLE SEMESTER UNITS. Applicants who have successfully completed fewer than 60 transferable semester units, or the equivalent, are eligible for admission if they meet the above requirements and the current first-time freshman requirements. Applicants for admission as transfer students who have been continuously enrolled at a college since graduation from high school are eligible if they meet the first-time freshman requirements in effect at the time of their high school graduation. Either ACT or SAT results are required of transfer applicants with fewer than 60 transferable semester units.

ADMISSION AS AN INTERNATIONAL STUDENT. The admission of international (foreign) students is governed by separate requirements. Prospective applicants from abroad should consult the College Admissions and Records Office for additional instructions.

OTHER UNDERGRADUATE APPLICANTS. An Applicant not admissible under one of the above provisions should enroll in a two-year college or other appropriate institution. Only under the most unusual circumstances will such applicants be permitted to enroll in the College. Permission is granted only by special action.

ADMISSION AS A GRADUATE STUDENT

UNCLASSIFIED GRADUATE STANDING. For admission to graduate standing as an Unclassified Graduate Student, a student shall have completed a four-year college course and hold an acceptable baccalaureate degree from an accredited institution; or shall have completed equivalent academic preparation as determined by appropriate campus authorities; and must satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as the appropriate campus authorities may prescribe.

Admission to the College with Unclassified Graduate Standing does not constitute admission to graduate degree curricula.

CLASSIFIED GRADUATE STANDING. A student who has been admitted to the College under the Unclassified Graduate requirement above may, upon application, be admitted to an authorized graduate degree curriculum if he satisfactorily meets the professional, personal, scholastic, and other standards for
admission to the graduate degree curriculum, including qualifying examinations, as the appropriate campus authorities 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, as determined by the appropriate campus authorities, shall be eligible to continue in such curricula. Students whose performance in a graduate degree curriculum is judged to be unsatisfactory by the authorities of the campus may be required to withdraw from all graduate degree curricula offered by the campus.

STUDENTS FORMERLY ENROLLED

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

CALIFORNIA RESIDENCY CLASSIFICATION

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 statutes governing residence determination for tuition purposes by The California State University and Colleges are found in Education Code Sections 22800-23754.4, 23758.2, 23762, and in Title 5 of the California Administrative Code, Article 4 (commencing with Section 41901) of Subchapter 5 of Chapter 1, Part V. As this is written, those regulations are in the process of amendment to implement the uniform residence determination law enacted in Statutes 1972, Chapter 1100 (AB 666), so they are not reproduced here. A copy of the revised regulations is available for inspection upon request being made to the Admissions and Records Office. The determination of whether a student qualifies as a "resident" for tuition purposes is made by a campus after review of a residence questionnaire completed by each applicant for admission. The residence questionnaire is designed to provide information necessary for residency determination, including the applicability of any exceptions.

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

Whether a student has acquired California residence usually depends on whether the student has attained majority; i.e., has become an adult. Majority is attained at 18 years of age. If the student is a minor, residence is derived from
(and therefore is the same as) that of the student's father. If the father is not living, the student's residence is that of the mother while she remains unmarried. The residence of a minor cannot be changed by act of the minor or that of the minor's guardian, so long as the minor's parents are living.

Upon attaining majority, the student may acquire a residence apart from that of the parents. The acquisition of California residence by an adult requires both physical presence in the state, and at the same time, an intent to remain in California indefinitely, that is, an intent to regard California as one's permanent home. Although physical presence is easily proven, subjective intent is more difficult requiring the student to present evidence of various objective manifestations of such intent.

A woman may establish her own residence even though she be married.

An alien is not eligible to acquire residence until admitted into the United States for permanent residence under an immigrant visa.

There are several exceptions from nonresident tuition. These rules are limited in scope and are quite detailed. If it appears that any of them may be applicable, the student may wish to discuss the matter with the residence clerk of the campus. Some of the exceptions provide for:

1. Minors whose parents were residents of California but who have left the state. When the minor reaches age 18, the exception continues for the year to enable the minor to qualify as a resident student.

2. Minors 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 are treated as adults for purposes of determining residence.

3. 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 exception is not affected by transfer of the military person directly to a post outside the 50 states and District of Columbia.

4. 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.

5. Certain credentialed, full-time employees of community college districts.

6. 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.

7. Certain exchange students.

8. 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.
9. A person in continuous full-time attendance at an institution who had resident classification on the effective date of Statutes 1972, Chapter 1100 (AB 666) shall not lose such classification as a result of adoption of the uniform student residency law on which this catalog statement is based, until the attainment of the degree for which currently enrolled. (Education Code Section 22862).

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. Resident students who become nonresidents, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions and Records Office. Applications for a change in classification with respect to a previous term are not accepted.

The student is cautioned that this summation of rules regarding residence 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 student whose past record indicates his promise of superior academic achievement at the College.

SUMMER QUARTER VISITOR PROGRAM

Any enrolled student who is seeking registration for a summer quarter at Hayward, Los Angeles, Pomona, or San Luis Obispo under The California State University and Colleges Summer Visitor Program should notify the Registrar.

ADMISSION APPLICATION PROCEDURES

UNDERGRADUATE APPLICATION PROCEDURES

All prospective undergraduate students must file a complete application for admission within the appropriate filing period. A complete application includes an application, a residence questionnaire, a data coding form, and the $20 non-refundable application fee. Each undergraduate applicant may file only one application for any one term with The California State University and Colleges System. 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. Alternate choice campuses may be listed on the application. Applicants seeking financial aid should also complete and submit with the application a Preliminary Financial Aid Application.
GRADUATE APPLICATION PROCEDURES

All applicants for any type of post-baccalaureate 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 post-baccalaureate status within the appropriate filing period. A complete application packet for admission to post-baccalaureate status includes an "Application for Admission/Readmission" (for post-baccalaureate students), a "Residence Questionnaire", a "Supplemental Graduate Admissions Application", a "Data Coding Form", and the $20 non-refundable application fee. Post-baccalaureate applicants who were enrolled as undergraduate students at the campus 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 $20 non-refundable application fee. Applicants seeking financial aid should also complete and submit with the application material specified above, a "Preliminary Financial Aid" application.

Since applicants for post-baccalaureate 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 post-baccalaureate 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 system and should be filed with the campus of first choice.

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 for which he intends to enroll. A student enrolled at the College who qualifies for a baccalaureate degree, master's degree, or credential must apply for readmission with graduate standing and declare his new educational objective so that he may be considered for continued enrollment. 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 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. However, a special registration application is required for summer session enrollment. 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 available on request from California high schools and community colleges or the Admissions and Records Office, and are accepted according to the following schedule:

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<tr>
<th>TERM</th>
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<th>EXTENDED FILING PERIOD</th>
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<td>Winter Quarter/Term</td>
<td>June 1-30</td>
<td>July 1*</td>
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<td>Spring Quarter/Semester</td>
<td>August 1-31</td>
<td>September 1*</td>
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SEASONAL CALENDAR CAMPUSES

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<td>Sonoma</td>
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<td>Stanislaus**</td>
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*The extended filing periods will continue until admission quotas are reached.

**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 early June.
SPACE RESERVATIONS

All applications received during the initial filing period will receive equal consideration within the campuses' established categories and quotas, irrespective of the time and date they are received.

Applicants who can be accommodated within enrollment quotas will receive confirmation of space reservation. Although the space reservation is not a statement of admission to a campus, it is a commitment on the part of the campus to admit a student once eligibility has been determined. When the student receives notice of the space reservation, he 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 him 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.

Initial filing period applications of students who cannot be accommodated at their first choice campus will automatically be forwarded to their second choice, and, if they cannot be accommodated there, to their third choice, etc.

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.

EXTENDED FILING PERIOD

Campuses not filling application categories during the initial filing period will continue to accept applications during the extended period until quotas are reached. Enrollment priorities within the extended period will be granted in chronological order of application receipt by the campuses.

APPLICATION FEE

A fee of twenty dollars ($20) is charged for processing of applications for admission to the College. This fee is non-refundable, non-transferable, 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 graduate 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.

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 the subjects in which he is currently enrolled. After the applicant has completed these subjects, he must notify his school or college to forward a supplementary transcript showing the final grades for that term.

VETERANS. A veteran who desires to have his military records evaluated for possible credit toward a baccalaureate degree must file a copy of his separation papers (DD 214) or form DD 295 with his application.

GRADUATE STUDENTS. An applicant who holds a baccalaureate degree from an accredited institution and who is not seeking a degree from the College needs only to verify his baccalaureate degree to the Admissions and Records Office by filing when requested to do so, two official transcripts from the institution at which his degree was earned. A graduate who is seeking admission to a degree or 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 he 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 graduate student who is not planning to complete the College's degree or credential requirements need not submit additional transcripts.
SUMMER SESSION AND EXTENSION REGISTRANTS. A student seeking to enroll for summer session or extension is not required to file official transcripts unless he plans to complete the College's requirements for a degree or credential.

ADMISSION EXAMINATION

Students who will be entering the college with fewer than sixty transferable semester units completed at regionally accredited colleges are required to take the American College Test (ACT) or the College Entrance Examination Board 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 counseling and, when required, for determining eligibility 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 February 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 during 1973-74 on the following dates:

Saturday, July 21, 1973   Saturday, February 23, 1974
Saturday, October 20, 1973 Saturday, April 27, 1974
Saturday, December 8, 1973 Saturday, June 15, 1974

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

Saturday, July 14, 1973   Saturday, February 2, 1974
Saturday, October 13, 1973 Saturday, April 6, 1974
Saturday, November 3, 1973 Saturday, June 22, 1974
Saturday, December 1, 1973

Applications and fees should be sent directly to the College Entrance Examination Board, Box 1025, Berkeley, California 94701, 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 of the SAT.
HEALTH HISTORY STATEMENT AND EXAMINATION

All admitted students must submit a health history statement. A complete physical examination by the student's private physician is required for the following categories of admitted students: 1) new students enrolling for 7 or more units; 2) former students of the College enrolling for 7 or more units who were not regularly enrolled at the College during any of the three preceding terms. This physical examination must be sent to the College Health Center by the physician. Appropriate forms will be provided all admitted students for submission prior to registration.

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 Credit which will serve as a basis for determining the remaining requirements for the student's specific objective. The evaluation remains valid as long as the student matriculates 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 Educational Objectives.)

While a student may follow the specific catalog year degree requirements on which his Evaluation of Credit is based, he 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 Entrance Examination 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 CEEB 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.

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, provided this credit is not applied toward high school graduation. (See Admission as a First-time Freshman.)
TRANSFER OF CREDIT FROM A COMMUNITY COLLEGE

Credit from two-year colleges is allowed up to a maximum of 70 semester units. No upper division credit may be allowed from a two-year college, nor may credit be allowed for professional courses in education or courses not appropriate in purpose, scope, and depth to a baccalaureate degree.

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 to 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.

A student with a degree from such an institution may have his 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.

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.

CREDIT FOR MILITARY SERVICE

Undergraduate students who have been in military service may receive credit toward a baccalaureate degree. Courses taken at military service schools if appropriate in purpose, scope, and depth to a baccalaureate degree may also yield credit. Military experience 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.
The Academic Advising Office directs the academic advising program at the College. Such advising is primarily the responsibility of faculty members in the specific academic areas. Upon admission a student is referred to an adviser in his declared major field of study or to a general adviser if he is undeclared or is without a California State College, Stanislaus degree objective. An undeclared major must declare a degree major or another specific educational objective prior to his 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 Educational Objectives.) If a student is uncertain as to a choice of major and/or its related vocational goal, he may request from his adviser a referral to the Testing Office.

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

A student is prepared for his first advising conference only after he has reviewed appropriate sections of the College catalog, examined course offerings in the class schedule, and prepared a Trial Study List including alternatives (found in 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 pre-professional programs from the following sources:
- Law - Political Science
- Medicine, dentistry, pharmacy, veterinary medicine, and other health professions - Health Services Advisory Committee. Registration with the committee should be made through the Dean of Natural Sciences 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 his application to professional schools. Registration with the committee does not commit the student to any particular program or career.
REGISTRATION

Registration is the final step in the matriculation process. When a student has been admitted to the College and has determined which subjects he should take, he is ready for registration. Academic advisement must precede registration.

A Class Schedule listing courses offered is available before registration for each term. At registration, every student is required to file an Official Program card with the Admissions and Records Office. Registration by mail is not permitted but registration by proxy is allowed. Late registrants will find themselves handicapped in arranging their programs and must pay a $5 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, he may receive grades of F or, under special circumstances, an NC. If he attends a course without officially adding it, he 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 College is accredited by the California State Board of Education for programs leading to the following credentials:

1. Standard Teaching Credential with a Specialization in Elementary School Teaching.
3. Restricted Credential Authorizing Service as a Speech and Hearing Specialist.
5. Standard Designated Services Credential with a Specialization in Pupil Personnel Services in the area of Pupil Counseling.

Detailed information on the various credential programs is found in either the Education section or the Communication Arts and Sciences section of the catalog.

ADMISSION TO A CREDENTIAL PROGRAM

A credential candidate needs to complete certain preliminary procedures prior to being screened. If accepted, the candidate may then seek advisement from an assigned credential adviser and begin to complete the steps to obtain a credential.

The student at the time of admission to a credential program needs to become familiar with the eligibility requirements as stated in the College catalog. Admission to the College does not imply admission to a credential program. To apply for admission to a teaching credential program, a student must be eligible for admission to the College, must not be on academic probation, and must have an accumulative grade point average of at least 2.25 (C+). Secondary credential applicants also need a 2.50 average in the teaching major. Advanced credential candidates should check with the Division of Education to clarify requirements.

This application should be filed with Division of Education no later than the deadline of the initial filing period for the term you plan to enter a credential program. Late applicants will be considered if quotas have not been filled.

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<th>SEMESTER</th>
<th>DEADLINE</th>
<th>EXPECT NOTIFICATION</th>
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<td>Fall</td>
<td>February 28</td>
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<td>Spring</td>
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<td>November</td>
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Materials that must be filed with the Division of Education include the following:

1. Application for admission to a credential program.
2. Two official transcripts of all college work except CSCS.
3. Handwritten autobiography emphasizing college interests and activities and experience with children and youth.
4. Two recommendations from former instructors in major and/or minor areas.
5. Two recommendations from supervisors of youth related activities.
6. An evaluation from your principal if you have taught. Following grade point verification by the credential evaluation technician, an interview with the faculty in the Division of Education, and action by the selection committee, candidates will be notified by the Chairman of the Division of Education.

CONTINUANCE IN A CREDENTIAL PROGRAM

Retention in a teaching credential program is based upon continuous satisfactory student performance. A grade point average of 2.50 in required courses must be maintained while in the program. The student's file and all required records receive a final review prior to qualifying for credential recommendation by the College.
HONOR LIST OF STUDENTS

Each semester the Vice President for Academic Affairs 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 credit 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.
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

I - Incomplete Course . . . . Student has not completed course requirements due to reasons beyond his control. Reverts to NC if not removed by the last day of the second following semester except when an extension of time by petition has been approved. Not used in grade point average or progress points calculation.

RD - Report Delayed . . . . No grade reported by the instructor. 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 . . A student may withdraw from any course through the 20th day of instruction, as indicated in the Academic Calendar, without having any administrative symbol recorded. Withdrawals after the 20th day of instruction require the approval of instructor, adviser, and School Dean (Division Chairman). (See Withdrawal from College.) 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.

SP - Satisfactory Progress . Indicates a term of satisfactory progress in a course or activity which may require more than one term to complete (e.g., Master's thesis). 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.

WU - Withdrawn, Unsatisfactory. 0 grade points (equivalent to grade of F).
IS - Incomplete, Satisfactory. No effect on grade point average.
IU - Incomplete, Unsatisfactory. No 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.

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. Administrative Symbols are not used in determining progress points.

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.

The student must notify the course instructor in writing of his election of the credit grading system by the Last Day to Add a Course. 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 may be applied toward a baccalaureate degree. No more than 8 semester units of CR/NC may be applied in a given semester 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.

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.

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 deter-

*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.
mined by means of a Progress Point Scale based on the grade and progress point values of grades mentioned under Grading System - Academic Grades.

PROBATION. A student shall be placed on probation if, in any fall and 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 School Dean (Division Chairman) or the Dean's designee 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.

REINSTATEMENT AFTER DISQUALIFICATION. A student who is disqualified will not normally be considered for reinstatement and readmission until after one full semester of nonattendance at California State College, Stanislaus.

After completion of the period of disqualification and after fulfillment of any other requirements stipulated, a student may petition for reinstatement to the Dean of his School (Division Chairman) and apply for readmission at the Admissions and Records Office.

To be reinstated and readmitted, a student must provide before the specified deadline dates listed in the College Catalog evidence that future academic performances will be satisfactory.

Reinstated students will be readmitted only if admission quotas permit. Students whose petitions for reinstatement 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 and only the most current grade earned will be used for unit credit or grade points; this policy is applicable to a maximum of four courses. 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 directly equivalent in terms of content and emphasis.
NOTE: Students are held individually responsible for knowing and complying with these regulations.

GENERAL EDUCATION CREDIT

The Class Schedule and this catalog indicate the only courses offered during 1973-74 at the College which are applicable to General Education requirements. Only courses so designated are approved for credit applicable to the "24-unit Liberal Arts requirement" (1960-64), the General Education "Liberal Arts Electives requirement" (1964-65), the General Education "Arts and Sciences Electives requirement" (1965-67), and General Education (1967-74). All enrolled undergraduates should therefore consult 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.

The instructor will give a grade of NC (No Credit) to students who never attend any sessions of a class for which they are registered and fail to officially drop.

AUDITORS

Admitted students may register in courses as auditors without credit with permission of the instructor provided that enrollment be permitted only after students otherwise eligible to enroll in the course on a credit basis have had an opportunity to do so. 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 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 or 4 units during a winter term must submit at the time of registration a Request to Exceed Official Program Limits approved by his major adviser and the Dean of his School.

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 500 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. Excess units forms are available at the Admissions and Records Office forms rack.

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 Challenge Examinations. 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 and minor requirements except with the express approval of the Major and/or Minor adviser and the appropriate Department Chairman. However, both subject and unit credit (unless otherwise specified) will be granted and 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, and evaluated by the appropriate academic department, and administered by the College Testing Office.

1. 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:
   (a) enrolling in the course for Credit by Examination during a regular registration period.
   (b) taking the Challenge Examination at the time and place specified and passing it at the level deemed satisfactory by the department.

   Grades of Credit (CR) or No Credit (NC) will be awarded.

2. CSCS Catalog Courses
   A currently-enrolled 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:
   (a) 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 and file a copy of the completed "Request" with the Director of Testing. Instructions for completing and processing the "Request" are contained in the form.
   (b) the student must take the Challenge Examination at the time and place specified and pass it at the level deemed satisfactory by the department. These examinations will be administered no later than the end of the eighth week in each semester.

   Grades of Credit (CR) or No Credit (NC) will be awarded.

   Certain specific subject requirements (e.g. U.S. Constitution, State and Local Government, etc.) may be passed by Challenge Examinations under the following conditions:
   (a) An appropriate course is not offered by the College
   (b) Special arrangements must be made with the appropriate department for the preparation of the necessary examination.
   (c) The student must secure a "Request for Credit by Challenge Examination" form, secure the necessary approvals, pay an Examination Fee of $6 and file a copy of the completed "Request" with the Director of Testing.
   (d) 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.

   A specific schedule of dates for these types of Challenge Examinations will be published by the College Testing Office. These dates will usually fall near the end of the eighth week of each semester.
Credit by Examination may also be secured through the College Entrance Examination Board Advanced Placement Program as well as by passing appropriate sections of the College-Level Examination Program (CLEP) general and subject examinations. Further information concerning these options may be obtained from the Admissions and Records Office or the Office of Testing Services.

In individual cases, a limit may be imposed on the number of units of credit which can be earned through Challenge Examinations.

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 six units of individual study credit, excluding course work taken in Winter terms, is the maximum permitted toward a degree, credential, or other educational objective. These courses are numbered 498, 598, and 698 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 head 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.

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 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 his educational objective at the College after admission must file a Declaration or Change of Educational Objective form with the Admissions and Records Office. To officially change and/or declare an educational 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.

CHANGE OF OFFICIAL PROGRAM

No change in a student's program of courses will be recognized unless it is made on official forms, properly signed, and accepted at the Admissions and Records Office during the regular add or drop period. Unauthorized withdrawal or dropping of a course will result in a final grade of F or, under special circumstances, an NC.

A student may drop a course during the term subject to the following regulations:

1. A course may be removed from the official program of courses if an approved Program Change or Withdrawal 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 last day to drop a course as shown in the Academic Calendar except when approved by the instructor and School Dean (Division Chairman) because of serious or compelling reasons.

Students may add courses by filing an approved Program Change or Withdrawal 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, etc.) request a "leave of absence" to protect his right to degree or credential requirements which were in effect at the time he was admitted to the College or admitted 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.
WITHDRAWAL FROM COLLEGE

A student may withdraw from the College by filing an approved Program Change or 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. A student who takes unauthorized leave may receive a final grade of F or, under special circumstances, an NC in each course for which he was registered.

Withdrawals after the 20th day of the term and prior to the last three weeks of instruction are permissible only for serious and compelling reasons. Permission to withdraw during this period requires approval of the instructor, the adviser, and the School Dean (Division Chairman). 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 School Dean (Division Chairman).

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 his control and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the instructor and to reach agreement on the means by which the remaining course requirements will be satisfied. A written copy of this agreement will be filed with the Department Chairman. A final grade will be assigned when the work agreed upon has been completed and evaluated.

An incomplete must be made up within one calendar year immediately following the end of the term in which it 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.

In cases of prolonged illness or any emergency which necessitates an extension of time to complete the course, the student may petition through his School Dean. 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 semester (e.g., Master's thesis) and indicates that work in progress has been evaluated as satisfactory to date but that the assignment of a precise grade must await the completion of additional course work.
All work must be completed within one calendar year of the date of first enrollment and a final grade will be assigned to all segments of the course on the basis of overall quality. Any extension of this time period must receive prior authorization of the School Dean.

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

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

Full and part-time students
- Full-time . . . . . . . . Student status is defined and certified by the college as attempting a minimum of 10 units or its equivalent in a semester or 3 units or its equivalent in a Winter term. However, other agencies (i.e., Veterans Administration) have the prerogative to define full-time to meet their particular requirements.
- Part-time . . . . . . . . Student status is defined as attempting less than 10 units in a semester or less than 3 units during a Winter term.
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.

CHANGE OF ADDRESS

A student who changes his mailing or permanent mailing address after admission or registration should immediately notify the Admissions and Records Office. This information is needed in order to insure registration packets, grades, correspondence, and other such material reach the student without unnecessary delay. The United States postal service also should be immediately notified of changes 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 $1 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 copies 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. All such petitions must be reviewed and signed by the student's major adviser and/or instructor, as appropriate, before being filed with the Admissions and Records 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 School Dean.
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. Auditors must pay the same fees as students enrolled for credit.

Total registration fees for California residents are approximately $164.00 per academic year ($72.50 per semester; $19.00 for Winter Term). Total registration fees and tuition for non-residents are approximately $1,274.00 per academic year ($553.50 per semester; $167.00 for Winter Term).

REGISTRATION FEES

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

Material and Service Fees:
- 0.0 to 2.5 Units ........................................ $ 34.00
- 3.0 to 6.5 Units ......................................... 39.00
- 7.0 to 9.5 Units ......................................... 43.00
- 10 or more units (full-time student load) ........ 52.00
- Winter Term ............................................. 14.00

Associated Student's Fees:
- Regular Students (7.0 Units or more)
  - Fall Semester ........................................ 9.00
  - Winter Term .......................................... 2.00
  - Spring Semester ...................................... 2.00
- Limited Students—Fall Semester ..................... 4.50
  - Winter Term .......................................... 2.00
  - Spring Semester ...................................... 2.00
- Summer Session ........................................ 2.00

Except that no student shall be required to pay an aggregate amount in excess of $20.00 for the entire year.

College Union Fees:
- Regular Students—Each Semester ...................... 9.00
- Limited Students—Each Semester ..................... 4.50
- Winter Term ............................................. 2.00
- Summer Session ........................................ 3.00
- Health Facility Fee—Each Semester (non-refundable) . 2.50
  --Winter Term (non-refundable) ...................... 1.00

OTHER FEES AND CHARGES (in addition to registration fees)

Nonresident tuition including foreign nonresident:
- For the first 13 units (per unit or fraction of unit) .... 37.00
- For the 14th unit and over (maximum) per Semester .... 481.00

Application Fee (non-transferable & non-refundable) ... 20.00
Late Registration Fee (non-refundable) .................. 5.00
Graduation Fee ........................................... 10.00
Check returned from bank for any cause ................. 5.00
Transcript of Record .................................... 1.00
Failure to meet administratively required appointment or
time limit ........................................ $ 2.00
Music studio lessons-per lesson ...................... 10.00
Replacement of equipment or materials lost or
damaged ................................................. Cost of Item
Library books or materials lost or damaged ....... Cost plus $1.00
Summer Session-per unit .......................... 27.00
Extension Courses-per unit:
Lecture and Discussion Courses ..................... 24.00
Activity Courses .................................. 31.25
Science Laboratory Courses ......................... 48.00
Parking Fees:
Non-reserved spaces, autos:
Regular students, per semester .................... 13.00
Winter Term ........................................ 4.00
Reserved spaces, per month or major fraction thereof . 8.00
Two-wheeled, self-propelled vehicles licensed by State
Department of Motor Vehicles, per semester . . 25% of above
Alternate vehicle (auto) in addition to fee for first
vehicle, per semester .............................. 2.00
Alternate, two-wheeled vehicle, per semester ...... 2.00

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 opening of the school
term.

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.

The nonresident tuition fee will not be required of a stu­
dent who is the child or spouse of an academic or administrative
employee of The California State University and Colleges.

Questions regarding residency classification for admission
eligibility and tuition purposes should be directed to the Resi­
dency Clerk in the Admissions and Records Office.

No tuition fee shall be required of any nonresident student
who is a full-time employee of The California State University
and Colleges or who is the child or spouse of an employee of The
California State University and Colleges.

Certain certificated full-time employees of a California
School District are deemed to be resident students.

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 ad­
viser indicates that a student is a legal resident.

REFUND REGULATIONS

Written application for refund of fees must be made on the
forms available from the Admissions and Records Office. The
application must be received in the Admissions and Records Office not later than the 14th calendar day following the first day of instruction.

Upon withdrawal from college, the State will refund the total fees paid less $12.00.

For each unit of nonresident fee charged, the State will refund the entire fee charged during the first week of each semester; thereafter 75% will be refunded the 2nd week, 50% the 3rd week, 25% the fourth week. There will be no refund after the 4th week.
The Student Services Office is established to meet student needs and offer assistance for those problems that prevent them from fully benefiting from the educational program. Specific services are listed on the following pages and completely described in the Student Handbook.

ORIENTATION

Orientation provides new students with an opportunity to learn about services, personnel and activities that are available as well as academic information.

COUNSELING & SELECTIVE SERVICE INFORMATION

Individual personal counseling or group counseling is available from a staff of trained counselors who are available to assist with any student concerns. A counselor is also provided to assist with Selective Service problems.

HOUSING

There is no on-campus housing but the College does maintain a current listing of off-campus live-in situations, apartments, and houses available for students as well as a list of students looking for roommates. There is also a privately owned dormitory. None of these off-campus facilities are approved or supervised by the College.

CAREER PLANNING AND PLACEMENT

Students and alumni are assisted in securing full-time or part-time career employment. Placement services include testing and counseling in both interests and abilities; assistance in the preparation of placement folders and forwarding them to prospective employers; help in developing resumes and letters of application; listing of open positions; arranging interviews by employees seeking personnel; and maintaining a career library.

While the placement staff desires to provide assistance, the responsibility for preparing the placement folder and for actually seeking a position rests with the individual student.

FACILITY RESERVATION

Reservation of campus facilities, except for regularly scheduled classroom activities, must be done through the Student Services Office. Only chartered student clubs, the ASCSCS, and other recognized college groups may use college facilities. Consult the policy on "Use of Campus Facilities" and "Policy on Special Events" in the office for details.
PART-TIME EMPLOYMENT

A current listing of local part-time job opportunities is maintained in the Student Services Office.

FINANCIAL AIDS

The Financial Aids Office administers and coordinates the majority of the financial aids programs available to students to help meet their educational expenses.

SCHOLARSHIPS - A limited number of scholarships and awards are offered each year to enrolled students demonstrating a financial need and scholastic attainment.

Alan Pattee Scholarship (Children of Deceased Peace Officers or Firemen)

Surviving children, natural or adopted, of California peace officers or firemen killed in the line of duty are not charged fees or tuition of any kind while enrolled at any California State University or College, according to the Alan Pattee Scholarship Act and the Education Code, Section 23762. Students qualifying for these benefits are known as Alan Pattee scholars.

COLLEGE WORK-STUDY - Students who qualify for financial aid are able to work on or off campus for all or a portion of their educational expenses for up to 15 hours a week.

STUDENT ASSISTANT PROGRAM - This program is funded through the State budget and is administered through the various academic departments on campus. Jobs are not necessarily based on need and often revolve more on ability in the academic area.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG) - These awards are Federally funded and are only granted to undergraduate students who have exceptional financial need and come from low-income backgrounds.

STATE EDUCATIONAL OPPORTUNITY GRANT PROGRAM - First and second year students who are admitted to the College under the Educational Opportunity Program and who have financial need may be funded under this program.

NATIONAL DIRECT STUDENT LOAN (NDSL) - The NDSL is a Federal program providing long-term, low-interest loans in amounts governed by established need and availability of funds. Three percent simple interest and repayment of the principle begins nine months from the date the borrower ceases to be a full-time or half-time student. In some cases deferment of payment and partial or full forgiveness of the loan and interest may be possible.

FEDERALLY INSURED STUDENT LOAN PROGRAM (FISL) - Loans are made available to half-time and full-time students through private lending institutions such as banks, savings and loans, and credit
unions. Repayment of the loan and interest is deferred until nine months after the student has graduated or left school. The application and related forms are available at the Financial Aids Office.

LAW ENFORCEMENT EDUCATION PROGRAM (LEEP) - The Law Enforcement Education Program makes available grants for fees and books each semester to full-time employees of publicly funded law enforcement agencies. Loans may be made available to students who intend to make law enforcement a career. The loan is reduced at the rate of 25% for each year of service in a public law enforcement agency upon graduation.

EMERGENCY LOAN FUND - Emergency loans to meet educational expenses are available to enrolled students. A maximum of $100 may be borrowed with repayment within forty-five days.

HOW TO APPLY - Completion of Part C of the Common Admissions Application will initiate the process for financial aid consideration at California State College, Stanislaus. For more detailed information on available programs and how to apply, please inquire to the College.

HEALTH SERVICES

All admitted students must submit a health history statement. Appropriate forms will be provided all admitted students.

A complete physical examination by the student's private physician is required for the following categories of admitted students: 1) new students enrolling for 7 or more units; 2) former students of the College enrolling for 7 or more units who were not enrolled for 7 or more units at the College during any of the 2 preceding semesters. This physical examination form must be sent to the College Health Center by the physician before registration.

The parent or guardian of each minor student is required to sign a statement giving the College permission to refer a student for treatment in the event of illness or injury. This does not prevent a student from seeking private medical care with a physician of his choice.

The College maintains a Health Center in Room 117 of the Classroom Building, which is staffed by a full-time registered nurse and part-time doctors. In some cases referral may also be made to local community doctors or hospitals. These services are provided as part of the student's health fees and include emergency, out-patient care for injury and acute illness; transportation; some medications; necessary lab tests and X-rays. Any off-campus referrals are usually limited to one visit under the policy.

SUPPLEMENTAL HEALTH INSURANCE - The very basic emergency out-patient service described above should be supplemented by an individual policy of the student or his 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.

STUDENT GOVERNMENT AND ACTIVITIES

The Associated Students (ASCSCS) is the elected government of the students of CSCS and has a budget composed of student body fees. Operated under the supervision and with the advice of the College President and the Dean of Students, it represents the student position on policy issues and also plans a program of activities for the students and the community which is intended to complement the academic program of the College. There is also a group of clubs organized for special purposes and activities.

INTRAMURAL AND INTERCOLLEGIATE ATHLETICS

There is a substantial intramural program available throughout the year including football, basketball, volleyball, etc. The College also participates in seven intercollegiate sports - baseball, basketball, golf, cross country, track, tennis (male and female) and volleyball (female).

TESTING

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 some 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 evaluative techniques is provided on request to faculty, staff and students.

CAMPUS TUTORIAL PROGRAM

There is a tutorial program available to students having difficulty with almost any academic area on campus. Tutoring is done on an individual basis by students and faculty.

OPERATION SHARE TUTORIAL PROGRAM

The Share tutorial program is a student organized project through which volunteer college and high school students work with elementary school children a minimum of two hours per week. These children are often from disadvantaged backgrounds and need both academic and developmental assistance.
STUDENT CONDUCT, RIGHTS AND RESPONSIBILITY

The College assumes that students are mature individuals who have a serious academic purpose in attending college and that they will conduct themselves individually and in groups in an appropriate manner. Departures from appropriate conduct can result in sanctions from oral reprimands to expulsion. Actions warranting such measures include violations of Title 5 of the California Administrative Code, regulations of the California State University and Colleges, the College or public law. The College and State regulations are outlined in the Student Handbook which can be obtained in L-102 along with procedures used in case of violations. There is also a Statement of Student Rights and Responsibilities and a Student Grievance Procedure in Academic Matters available.

VETERANS ASSISTANCE

The College maintains liaison with the U.S. Veterans Administration and the California State Department of Veterans Affairs. The Registrar assists veterans in conducting their relations with these agencies:

ELIGIBILITY - The veteran must have served on active duty for a continuous period of 181 days or more, any part of which occurred on or after February 1, 1955, or, if he served for less than 181 days, must have been discharged or released on or after February 1, 1955, because of service connected disability.

PROCEDURE - Application must be made to the Veterans' Administration, 49 Fourth Street, San Francisco, California 94103. The VA determines the veteran's eligibility and sends him two copies of his Certificate of Eligibility. The veteran then files both copies with the Veterans Clerk in the Admissions and Records Office.

FULLTIME UNIT LOAD - A veteran (or dependent of a veteran), under either Chapter 34 or 35, must carry 10 or more units to be considered a fulltime student according to VA regulations.

INFORMATION - Further information about Veterans' Administration or Cal-Vet regulations is available from the Veterans Clerk in the Admissions and Records Office.
4-1-4. The 4-1-4 academic calendar inaugurated at Cal State, 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.

At the same time, the unique structure of the 4-1-4 academic year merits careful attention with regard to student program planning and degree requirements. Since the calendar consists of two semesters of 13 weeks and a month-long Winter Term, proportionate adjustments must be made in student class loads, teaching loads, and student fees. Whereas, for example, a full-time student load under a traditional semester system would be 15-16 units, a normal full-time student load in Fall or Spring semester under 4-1-4 would be 13-14 units. The total number of units for the year would still be 30-32 units, since Winter Term courses are 4 semester units (equivalent to a full student load).

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 Term courses, students entering as sophomores or juniors must take two courses, and senior transfers must enroll in one Winter Term. (See Residence Requirements for details.) 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.

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

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

Winter Term courses are graded on a Credit/No Credit basis, although students may request traditional grading early in the course.

Winter Term courses are designed to give students and faculty the opportunity for intensive examination of a single subject without the constraints normally imposed by a full schedule. Winter Term offerings will feature interdisciplinary studies, off-campus field work and research, and foreign courses. Students may propose Winter Term courses or projects of self-directed study under faculty sponsorship. Student course proposals—as all Winter Term proposals—require the approval of the faculty sponsor, department
chairman, and School Dean (Division Chairman) before being sub­tmitted to the Winter Term Committee and the Vice President for Academic Affairs. (See Winter Term Bulletin for details.)

DEGREES OFFERED. The College grants the Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, and Master Business Administration degrees.

ELECTION OF REGULATIONS. A matriculated student who has been in continuous enrollment pursuing the same objective may elect to meet baccalaureate graduation requirements in effect either at the time of his first entering a degree program at a California community or CSUC campus, or at the time of his graduation. (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 his 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 "WITH HONORS." A candidate for a baccalaureate degree who completes his undergraduate program with a 3.5 (B+) cumulative college grade point average or higher and a 3.5 Stanislaus residence credit grade point average or higher, is graduated "With Honors."

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 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 24 semester units at the College. At least 12 of these 24 units must be completed among the last 20 units taken in fulfillment of degree requirements.

Credit in summer sessions may be counted as residence credit on a unit-for-unit basis. Extension course credit or credit by examination will not be counted as residence credit.

In addition, students must complete Winter Term course work as follows:

1. Students entering as Freshmen with less than 15 semester units must complete 12 units of Winter Term course work.

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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 8 units of Winter Term course work.

3. Students entering as Juniors with 75 or more semester units or entering as Seniors must complete 4 units of Winter Term course work.

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.

GENERAL EDUCATION
A General Education program of courses and units, distributed as indicated below, is required. The College accepts certification of General Education-Breadth requirements by a California Community college or another CSUC campus to regulations of the California Administrative Code. The College upon request will certify completion of General Education-Breadth requirements to another CSUC campus.

NATURAL SCIENCES
(a)

Three courses required, including at least one from each of the below groups and at least one laboratory course. Completion of the NSCI 105-106 sequence satisfies these requirements.

1. BIOL 101 & 103, Principles of Biology (lab)  4
   BIOL 231, Human Genetics  2
   BIOL 265, Environmental Biology  2
   BOTY 105, Introduction to Botany (lab)  4
   ZOOL 105, Introduction to Zoology (lab)  4

2. CHEM 100, Fundamentals of Chemistry  3
   CHEM 110-111, Principles of Chemistry I, II (lab)  5 each
   PHYS 110-111, Basic Physics I, II (lab)  5 each
   PHYS 150, Energy and Matter (lab)  3
   ASTR 210-211, Descriptive Astronomy (lab)  4
   GEOL 210-211, Principles of Geology (lab)  4
   PHSC 130, Environmental Pollution  2

SOCIAL SCIENCES

1. One of the following courses covering United States History:
   HIST 260, Problems in U.S. History  3
   HIST 361, Colonial America  3
   HIST 362, Ante-Bellum America  3
   HIST 363, America After Civil War  3
   HIST 364, Contemporary America  3

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2. One course covering United States Constitution and California State and Local Government:
   PSCI 120, American Government 3

3. Two courses from one of the following groups: (a)
   a. ANTH 206, Introduction to Cultural Anthropology 3
      ANTH 208, Introduction to Physical Anthropology 3
   b. ECON 250-251, Principles of Economics I, II 4 each
      ECON 415, Economic History of the U.S. 3
   c. GEOG 201, Principles of Physical Geography 3
      GEOG 202, Principles of Cultural Geography 3
      GEOG 240-241, World Regional Geography I, II 3 each
   d. HIST 101-102, Western Civilization I, II 3 each
   e. PSCI 201, Modern Political Ideologies 3
      PSCI 260, Issues in International Politics 3
   f. SOCL 101, Introduction to Sociology 3
      SOCL 224, Social Problems 3

4. One course in general psychology:
   PSYC 201, Introduction to Psychology 3

HUMANITIES

One course from each of the following groups: (e)
1. ENGL 101, Introduction to Literature 3
   ENGL 150, Perspectives in World Literature 3
   PHIL 101, Introduction to Philosophy 3
   PHIL 300, Humanistic Inquiry 3
2. ART 100, Drawing 3
   ART 101, Drawing I 3
   ART 210-211, Art History Survey I, II 3 each
   DRAM 101, Introduction to Theatre 3
   DRAM 230, Theatre Workshop I 1 or 2
   DRAM 250, Beginning Acting 3
   DRAM 351-352, History of Theatre I, II 3 each
   MUS 100, Introduction to Music 3
   MUS 240, Orchestra (f) 1
   MUS 241, Chorale (f) 1
   MUS 243, Chamber Singers (f) 1
   MUS 244, Symphonic Wind Ensemble (f) 1

BASIC SUBJECTS

1. The following English composition course: (g)
   ENGL 100, English Composition 4
2. One basic course in oral expression: (b)
   SPCH 200, Speech Communication 3
3. One logic, mathematics, or statistics course from the following:

PHIL 110, Logic 3
MATH 100, Math for Liberal Arts Students 3
MATH 103-104, Elementary Foundations of Mathematics I, II 3 each
MATH 105, Basic College Algebra 3
MATH 110, Precalculus 3
MATH 150, Finite Mathematics 3
MATH 160, Statistics 4
MATH 200, Introduction to Computers 3

ADDITIONAL COURSES

1. One health course:
   HLTH 100, Health in Today's Society 1

2. One semester of physical education activity course in the 100 level

3. Additional courses are required to total a minimum of 47 semester units in General Education. To complete the General Education requirement, students may choose any undergraduate course except an upper-division course having a prerequisite, outside of their major field, and not exceeding two courses in a discipline.

   (a) Requirements may be partially satisfied by acceptable scores on the CLEP Natural Science General Examination.
   (b) Students may satisfy subject requirements in United States History and Constitution, California State and Local Government, and in oral expression by passing departmental examinations in these fields.
   (c) HIST 474, Constitutional History of the United States, 3 units, will fulfill the U.S. Constitution portion of this requirement.
   (d) Requirement may be partially or fully satisfied by acceptable scores on the CLEP Social Sciences General Examination.
   (e) Requirements may be partially or fully satisfied by acceptable scores on the CLEP Humanities General Examination.
   (f) Course must be taken 2 consecutive semesters for credit to be applicable.
   (g) Requirement may be satisfied by acceptable score on the appropriate CLEP English Examination.
   (h) Requirement may be satisfied by acceptable score on the CLEP Mathematics General Examination.
   (i) Exceptions to the Health and Physical Education requirement are as follows:
1. A student may be excused from such course who states in writing that the course in health is contrary to his religious beliefs; under this condition the student is permitted to substitute a course in the field or fields specifically designated by his school dean in lieu of the required health course.

2. A student may be exempted from the physical education requirement if the student is over 25 years of age. Appropriate units in other fields must be substituted in order to meet the requirements of graduation.

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.

The College offers programs leading to the baccalaureate with a major in the following areas:

- Anthropology
- Art
- Biological Sciences
- Business Administration
- Chemistry
- Drama
- Economics
- English
- French
- History
- Liberal Studies
- Mathematics
- Music
- Physical Education
- Physical Sciences
- Political Science
- Psychology
- Sociology
- Social Sciences
- Spanish
- Special Major
- Speech
- Physics

Note: Students seeking teaching credentials are advised to consult a credential adviser. (See Division of Education.)

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 schools. A student interested in a Special Major program may search out a volunteer faculty advisory committee on his own or make use of volunteer professors obtained from a listing in the office of the Vice President for Academic Affairs.

Permission of the Council of Academic Deans and the Vice President for Academic Affairs is required in all cases. For meritorious programs, the Council of Academic Deans is pre-
pared to suspend normal College rules governing majors, minors, general studies, and the like (but not State laws nor Trustee regulations). 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 degree requirements for a Bachelor of Arts, Special Major degree at the College before permission may be granted.

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>Anthropology</th>
<th>English</th>
<th>Physical Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>French</td>
<td>Physics</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>History</td>
<td>Political Science</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Mathematics</td>
<td>Psychology</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Music</td>
<td>Sociology</td>
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<tr>
<td>Drama</td>
<td>Philosophy</td>
<td>Spanish</td>
</tr>
<tr>
<td>Economics</td>
<td>Physical Education</td>
<td>Speech</td>
</tr>
</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.

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, a student must:

1. Complete a minimum of 24 semester units in residence at the College after requirements for his last degree have been fulfilled; at least 12 of these units must be in the subject field of the student's current major; and at least 4 units in Winter Term course work.
(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 graduate student may, if he prefers, 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.

**REQUIREMENTS FOR THE MASTER'S DEGREE**

**GENERAL REGULATIONS**

Applicants for all master's degrees are admitted to classified graduate standing, programmed, and advanced to candidacy under identical policies except for some differences in curriculum and in thesis requirements. The Vice President for Academic Affairs exercises general supervision on all matters related to master's degree study. The College offers Master of Arts programs in Education, English, History, and Speech, Master of Business Administration, and a Master of Science program in Psychology. Specific requirements will be found in the catalog sections of the department concerned.

**CLASSIFIED GRADUATE STANDING**

A graduate student who expects to have his course work apply toward a master's degree should clearly indicate his master's degree objective on the application for graduate standing which he sends to the Admissions and Records Office. As soon as his admission to the College has been processed, the student will be informed of the procedures for obtaining admission to the degree program with classified status. Minimum criteria for classified graduate standing include satisfactory undergraduate scholarship, including demonstrated potential for graduate work in the major field, and may include satisfactory scores on the Graduate Record Examinations Aptitude Test, and other criteria which the department may prescribe. For specific minimum acceptable scores consult the Dean of the School in which the major is maintained. Not more than 10 semester units (including transfer credit) completed before achieving classified standing at the College may be applied to the master's degree program. Work taken during the term of classification is considered to be completed in classified standing.

Classified graduate standing, which normally occurs at the outset of graduate study, should not be confused with advancement to candidacy, which normally occurs about halfway through 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. At least 8 units must be completed after advancement; work taken in the term of advancement is considered to be "completed after advancement." Requirements for advancement to candidacy include the following:

1. Classified graduate standing, including satisfactory performance on any required test. (See Qualifying Examinations.)

2. Completion of any undergraduate prerequisites which the adviser specifies on the declaration of intent form.

3. Satisfactory completion of such departmental and scholastic achievement tests as may be required. (See Examinations.)

4. 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.

5. Satisfactory completion of the foreign language requirements for those programs having such a requirement. (See Foreign Language Requirement.)

6. Completion at the College of at least 8 units of the proposed program with a 3.0 average on all completed work appearing on the program. Usually a minimum total of 13 units of applicable work is required.

7. As soon as possible after the completion of steps 1 through 7, submission to the Dean of the School of a properly signed petition for advancement to candidacy, including a departmentally approved contract program of graduate study for the master's degree.

8. Approval by the appropriate departmental graduate committee. Ordinarily upon receipt of the advancement to candidacy form, the School Dean sends to the department committee a transcript and a report of grades and examination scores and requests departmental recommendation. In making this recommendation, the department takes into account professional and personal standards as well as scholastic achievement as revealed by grades and performance on examinations. The student is responsible for ensuring that the adviser has sufficient information other than grades and scores on which to make his recommendation. A student who does not qualify at this time has the responsibility for initiating the procedure in the office of the Dean of the School when he has removed deficiencies.

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 contract 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 (500 series) and such upper division courses (400 series) as are recommended by the departments and 600 series courses approved by the schools 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 contract program must include the following:

1. At least 24 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 a seminar alternative to the thesis.

2. Of the 30 units for the degree, not more than 6 units may consist of any combination of approved student teaching, extension courses, or transfer credit. Student teaching credit is not ordinarily used on master's degree programs. In unusual circumstances, if student teaching is demonstrably appropriate to a program, up to 3 units of such work may be approved by the school committee. 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, however, may be ruled upon by the appropriate school 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 judged by appropriate school dean to be particularly relevant to the individual student's program.

3. With approval of departmental graduate adviser, post-baccalaureate credit allowed for work taken in the term or summer in which the baccalaureate degree is granted may be applied toward a master's degree, if it meets master's degree criteria in all respects.

4. At least 12 units must be in courses designed primarily for master's degrees (numbered in the 500 series). Most programs require more than 12 units of 500 series course work.

5. At least 8 units must be completed after advancement to candidacy. Work taken during the term or summer of advancement may apply on this requirement.

6. Appropriate course work from a field other than the major may be required at the discretion of the major department.

7. Appropriate provision must be made for a thesis, a project, or, when permitted, a seminar alternative.

It is the student's responsibility to complete the specific courses listed on his contract program. Once a contract program has been approved by the student's graduate committee, it may be changed only on the written request of the student and his department adviser and with the approval of the department chairman. Forms for requesting such program adjustment are available in the departmental office.
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

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

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

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 enrollment in the thesis or project or in a seminar alternative to the thesis, a student must have been advanced to candidacy and must have maintained a B average on his contract program.

To be eligible for the granting of the degree, a student must have maintained a B average on his complete contract program. Any grade earned in a course on the contract program continues to figure 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 his department and must have earned at least a 3.9 grade point average on the contract program for the master's degree or on all upper division and graduate work subsequent to the bachelor's degree.

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 or written comprehensive examinations at the conclusion of the program.

QUALIFYING EXAMINATIONS

As part of its system of qualifying examinations for admission to classified standing and for advancement to candidacy, the College may make use of 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.

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FINAL EXAMINATIONS

In addition to the qualifying examinations which may be required for advancement to candidacy for the master's degree, 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 the chairman of the department about examination requirements for specific master's degree programs.

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 Dean of the School 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

Most master's degree curricula at the College require the preparation of a thesis or a project. A few departments permit thesis alternatives.

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 or selected seminar 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 599.
Whether a student is preparing a thesis or a project, it should be noted that quality 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 where needed.

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

The quality of writing, format, and documentation must meet standards appropriate for publication in the scholarly journals of the field, or consistent with the dictates of an authorized stylebook.

Registration for thesis requires clearance by the department chairman.

1. To be eligible to enroll for thesis or project (559), a student must have:
   a. Been advanced to candidacy for the master's degree
   b. Maintained a B (3.0) average on his contract program.
   c. Completed at least 6 units of his contract program at the College.
   d. Completed any course in research techniques required by his major department.
   e. Secured a thesis committee, consisting of a chairman and at least two other members.
   f. Secured approval of his thesis plan from his thesis committee and from department graduate committee.
   g. Filed in the Office of the Vice President for Academic Affairs an official thesis committee assignment.

2. Registration for thesis requires authorization by the department chairman and may be processed during the first two weeks of any term after the requirements listed in (a) through (g) above have been met. If, however, a student fails to enroll within one semester (excluding summer sessions) after his official acceptance by a thesis committee, the committee is dissolved, and a new committee must be appointed before registration can be processed. A student planning to register or reregister for thesis after a break in regular semester attendance must be readmitted to the College.

3. A student whose thesis is planned to extend over more than the term in which he first enroll in 599 may receive a Satisfactory Progress (SP) grade. If at the end of one full year after the recording of the SP grade the thesis has not been completed, the thesis committee and the library are relieved of any further thesis obligation to the student. The student must re-enroll and apply for a new committee in each subsequent term or summer session during which he uses the library or draws on faculty time in connection with his thesis. The new committee will not necessarily be composed of the same personnel and is not necessarily bound by the decisions of the
former committee. Since a continuing SP grade does not represent enrollment, registration may require readmission to the College.

4. The student and his thesis chairman should set a deadline for the completion of the semifinal draft, no later than four weeks before the last day of scheduled final examinations. This date should be early enough so that the chairman and the other members of the committee can clear the draft before the student must meet the deadline for clearance by the Dean of the School.

5. Before a thesis is officially accepted by the Dean of the School, it must meet the criteria on matters of format, documentation, and quality of writing. The semifinal draft, initialed by the thesis chairman as acceptable with technical corrections, should be submitted to the Vice President for Academic Affairs at least three weeks before the last day of scheduled final examinations. This deadline has been set as late as possible in the term to accommodate the student; late manuscripts will not be accepted until the following term or summer session, and the student must refile for the degree at the beginning of each term until completion. Students are urged to follow meticulously the specifications for the master's thesis, copies of which are available from the office of the Dean of the School.

6. Four copies (three to be retained by the College) signed by the thesis chairman and ready for binding, together with the school or departmental clearance form must be submitted to the Dean of the School no later than one week before the last day of scheduled final examinations.

7. A student may arrange to have his 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 sessions 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.
COURSE NUMBERING SYSTEM

COURSE LEVEL IDENTIFICATION

<table>
<thead>
<tr>
<th>Course Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-99</td>
<td>Subcollegiate</td>
</tr>
<tr>
<td>100-299</td>
<td>Lower division courses designed primarily for freshmen and sophomores</td>
</tr>
<tr>
<td>300-499</td>
<td>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.</td>
</tr>
<tr>
<td>500-599</td>
<td>Graduate courses for degrees. These courses are open only to qualified graduate students.</td>
</tr>
<tr>
<td>600-699</td>
<td>Professional postbaccalaureate courses.</td>
</tr>
<tr>
<td>800-899</td>
<td>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.</td>
</tr>
</tbody>
</table>

During spring 1963 to spring 1967 appearance of the letter "G" 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:

- 492, 592, and 692: Workshops
- 494, 594, and 694: Field Work
- 295, 495, and 595: Selected Topics
- 496: Senior Seminars
- 498, 598, and 698: Individual Study
- 499 and 599: 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), (1-6), etc.

2. A notation such as (Formerly 450), at the end of a course description indicates the course was previously numbered 450.
ANTHROPOLOGY

Joel S. Canby, Ph.D., Professor, Chairman
Thomas E. Durbin, Ph.D., Associate Professor
Lewis K. Napton, Ph.D., Associate Professor
Corinne P. Armstrong, M.A., Assistant Professor
Carol P. Carson, M.A., Assistant Professor
Frank A. Young, Ph.D., Assistant Professor

The Department of Anthropology and Geography offers the Bachelor of Arts, Anthropology. The major is designed for students preparing for 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 used as a field for the degree Bachelor of Arts, Social Sciences. (For further information, see Social Sciences.)

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.
4. Completion of a minor is not required.

DEGREE MAJOR IN ANTHROPOLOGY

Prerequisites to the Major

ANTH 206. Introduction to Cultural Anthropology, 3 units
ANTH 208. Introduction to Physical Anthropology, 3 units
ANTH 209. Introduction to Prehistoric Archeology, 3 units

Those students requiring a biology course for their G.E. requirements should take ZOOL 105. Other courses which serve as useful background for anthropology include the following:

Recommended Courses to Support the Major:

BIOL 231. Human Genetics
BIOL 361. Evolution
ECON 250-251. Principles of Economics
ENGL 205. Technical and Report Writing
GEOG 202. Principles of Cultural Geography
GEOG 240-241. World Regional Geography I & II
GEOG 210. Principles of Geology
HIST 101-102. Western Civilization I & II
MATH 160. Statistics
MATH 200. Introduction to Computers
PHIL 110. Logic
PSCI 200. Introduction to Political Science
PSYC 201. Introduction to Psychology
PSYC 202. Introduction to Psychological Methods
SOCI 101. Introduction to Sociology
ZOOI 225. Anatomy
ZOOI 460. Animal Behavior

(The recommended courses, above, are not required, but the student will benefit greatly by including as many as practicable while completing his general educational requirements. Reading ability in at least one foreign language is also recommended.)

The Major

A minimum of 30 upper division units distributed as follows:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 365. History of Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>Ethnography and Ethnology</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Ethnology</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Prehistoric Archeology</td>
<td>3</td>
</tr>
<tr>
<td>Additional upper division units in anthropology</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

DEGREE MINOR IN ANTHROPOLOGY

Twenty-one units, including at least 12 units of upper division courses in anthropology, normally to be distributed as follows:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>The prerequisites to the major in anthropology</td>
<td>9</td>
</tr>
<tr>
<td>ANTH 365. History of Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>Ethnography and Ethnology</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Prehistoric Archeology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

(Minors wishing to specialize in one area of anthropology may do so with the approval of their minor adviser.)

TEACHING CREDENTIALS

Major in social sciences for elementary and secondary credentials: (See Social Sciences.)
Minor in anthropology for elementary and secondary credentials must complete the following:

1. Complete requirements for degree minor in anthropology; plus additional courses in the field of the minor to a minimum total of 24 units, as recommended by the minor adviser and approved by the credential adviser.

2. Secondary credential candidate must receive approval of the minor adviser as to subject matter competence.

Under provisions of the Ryan Act a student may also select anthropology as an area of concentration.

COURSE DESCRIPTIONS

Lower Division

ANTH 206. Introduction to Cultural Anthropology (3)

Meaning of culture, its diversity and degrees of elaboration among different peoples, organization and functioning of cultures.

ANTH 208. Introduction to Physical Anthropology (3)

Survey of human biology and physical anthropology; vertebrate evolution, primate evolution and behavior, human evolution and race.

ANTH 209. Introduction to Prehistoric Archeology (3)

Introduction to prehistory and culture growth; the basic theories, methods and goals of archeology; cultural and historical reconstructions based on interpretation of data recovered from worldwide archeological contexts.

ANTH 295. 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. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

ANTH 365. The History of Anthropology (3)

Study of the history of the development of anthropological methods and theories. A required course for all majors, minors and social science majors with an emphasis in anthropology. Prerequisite: ANTH 206; ANTH 203 and 209 desirable.
ETHNOGRAPHY AND ETHNOLOGY

Upper Division

ANTH 305. 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 206 or equivalent.

ANTH 306. Australia and Oceania (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. Prerequisite: ANTH 206 or equivalent.

ANTH 307. Sub-Saharan Africa (3)

Introduction to African cultures, combining a brief survey of the peoples of the sub-continent and a special focus on representative societies. Prerequisite: ANTH 206 or equivalent.

ANTH 310. East and South Asia (3)

Investigates the cultural development of China, Japan, India and the major off-shore islands. Also considers the life-ways of various primitive and advanced cultures of this region today. Prerequisite: ANTH 206 or equivalent.

ANTH 311. Peoples of the Soviet Union (3)

Examines the development of the European Russians into a nation, the rise of pastoral nomads of the steppes and their impact on Europe and presents selected samples of cultures of indigenous peoples of the Siberian taiga and tundra. (Formerly 305) Prerequisite: ANTH 206 or equivalent.

ANTH 335. 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 206 or equivalent.

ANTH 336. The Indians of California and Western North America (3)

Special 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 206 or equivalent.

ANTH 337. Native Peoples of Mexico (3)

A general survey course designed to acquaint students with the prehistoric and historic cultures of the Indians of Mexico and adjacent areas of Mesoamerica. The course consists of investigations of various theories of the origin of Middle American Indians and the application of the culture-area concept to an understanding of the various cultures. Prerequisite: ANTH 206 or equivalent.

ANTH 338. Native Peoples of Central and South America (3)

A general survey course designed to acquaint students with the prehistoric and historic cultures of the Indians of Central and South America. The course consists of investigations of various theories of the origin of Central and South American Indians and the application of the culture-area concept to an understanding of the various cultures. Prerequisite: ANTH 206 or equivalent.

ADVANCED ETHNOLOGY

Upper Division

ANTH 401. Culture and Personality (3)

Individual and modal personalities in relation to cultural background. Socialization in non-literate and other non-European societies. National character studies, basic personality structure, acculturation and cross-cultural studies of abnormality. Prerequisite: One course in Ethnography and Ethnology.

ANTH 405. Ethnographic Research Methods (4)

An introduction to techniques employed by anthropologists in performing primary and secondary research. Both basic statistical and non-statistical methods of handling data are presented. The course is not a field study course. Prerequisites: One course in Ethnography and Ethnology and consent of instructor.

ANTH 406. Anthropological Linguistics (4)

A survey of major topics in the fields of linguistics and language and culture. Both descriptive and historical approaches to language study are considered. Prerequisite: One course in Ethnography and Ethnology.
ANTH 407. Religion in Anthropological Perspective (4)

Introduction to anthropological approaches to the study of religious systems, including magic, witchcraft, ritual, symbolism, and dynamic religious movements. Prerequisite: ANTH 206 or equivalent or consent of instructor.

ANTH 416. Kinship Structures and Family Organization (3)

Basic kinship groupings from the nuclear family through larger affiliations such as the clan and the tribe, are defined and described. Both structural and functional aspects are taken into account. Prerequisite: One course in Ethnography and Ethnology.

ANTH 417. Economic and Subsistence Systems (3)

A survey of subsistence systems, exchange patterns, and non-European monetary systems. Additional consideration is given to culture classification schemes based upon various forms of economic organization. Prerequisite: One course in Ethnography and Ethnology.

ANTH 418. Traditional Political Systems in Contemporary Societies (4)

Study of the political processes and systems common in small scale societies, and the changes resulting from incorporating these societies into modern nations. (Formerly 404) Prerequisite: ANTH 206 or equivalent or consent of instructor.

ANTH 420. 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 206 or equivalent or consent of instructor.

ANTH 421. Cultural Dynamics (3)

Cultural stability and dynamics; with reference to geographical base, innovation, invention and technology. Prerequisite: One course of Ethnography and Ethnology.

ANTH 422. 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 206 or equivalent or consent of instructor.
ANTH 352. Method and Theory in Archeology (3)

Study of current methods in archeology, emphasis on applied and theoretical procedures in data sampling, collection, and evaluation; survey of method and theory in excavation of archeological sites; integration, analysis and interpretation of archeological phenomena. (Formerly 325) Prerequisite: ANTH 209 or equivalent or consent of instructor.

ANTH 356. Old World Archeology (3)

Survey of major developments in Old World prehistory from the dawn of man to the beginnings of the Classical cultures. Emphasis on the archeology of early men in Africa, the Paleolithic cultures of Europe, the Neolithic of the Near East viewed against the changing ecology of the Old World. (Formerly 326) Prerequisite: ANTH 209 or equivalent or consent of instructor.

ANTH 357. North American Archeology (3)

Survey of the prehistory of the American Indian from the arrival of man in the New World to the Historic Period. Study of the archeological sites, cultures, and culture areas in the New World north of Mexico. Emphasis on the relation of man and environment in prehistoric North America. Areas considered include the Great Basin and the Arctic. (Formerly 327) Prerequisite: ANTH 209 or equivalent or consent of instructor.

ANTH 359. Mesoamerican and South American Archeology (3)

A general survey course designed to acquaint the student with the development of prehistoric cultures in the New World Mesoamerican and Andean areas. (Formerly 329) Prerequisite: ANTH 209 or equivalent or consent of instructor.

ANTH 460. Archeological Field Methods (4)

Techniques of site survey, sampling, and excavation with special emphasis on application of systematic field procedures, problem design, excavation and recording of archeological evidence under controlled field conditions in the Central Valley. (Formerly 432) Prerequisite: ANTH 209 or equivalent or consent of instructor.

ANTH 461. Advanced Archeology (3)

Advanced studies in archeology, including planning and direction of archeological excavations and research projects; procedures in site and survey reporting, simulation in funding
and logistics in archeological field work, advanced synthesisization and analysis of archeological data. Recommended for advanced students in archeology. Prerequisite: ANTH 352 or consent of instructor.

ANTH 462. Science in Archeology (3)

Survey of applications in archeology 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 archeological sites. Prerequisite: ANTH 352 or consent of instructor.

ANTH 463. Archeological Expedition Proseminar (1-3)

Preparation for the Winter Term or Spring-Summer Session archeological expedition projects. The proseminar meets once each week during Fall or Spring semester, and is prerequisite for participation in the Winter Term archeological expedition. Subject matter includes lectures and assigned readings designed to acquaint the student with the culture, ecology, and relevant topics pertaining to the area to be investigated during the Winter Term or Summer Sessions. Prerequisite: Consent of instructor.

ANTH 494. Archeological Expedition (4-8)

Practical experience in archeological procedures under actual field conditions. The course may include study of known archeological sites, survey of archeologically unexplored areas, or excavation of specific sites. Instruction includes research design and methods of implementation, reconnaissance, mapping, recording, testing, and excavation of archeological data. Related studies include field photography, instrument survey, faunal identification, microanalysis, and expedition logistics. Individual initiative is encouraged. (Formerly 433) Prerequisites: Consent of instructor, and ANTH 209 or ANTH 352.

ADVANCED PHYSICAL ANTHROPOLOGY

Upper Division

ANTH 375. Human Evolution (3)

Survey of the evolutionary processes in the development of man; origin and phylogeny of hominids; study of fossil man and the extinct primates; fossil evidence for human evolution. (Formerly 345) Prerequisite: ANTH 208 or equivalent. Recommended: ZOOL 105.
ANTH 376. Primate Evolution and Anatomy (3)

Evolutionary history of the primates with special emphasis on their anatomy and its importance to the study of primate behavior and evolution. (Formerly 346) Prerequisite: ANTH 208 or equivalent. Recommended: ZOOL 105.

ANTH 377. Racial Variation in Human Populations (3)

History of the study of race; survey of variation and adaptation in human populations; relationship between race and culture; race and intelligence; study of processes of race formation. (Formerly 347) Prerequisite: ANTH 208 or equivalent. Recommended: ZOOL 105.

ANTH 378. 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. Prerequisite: ANTH 208 or equivalent. Recommended: ZOOL 105.

ANTH 475. Background for Human Evolution (4)

Study of human anatomy and its application to the understanding of human evolution; detailed studies of the fossil evidence for human evolution. Prerequisite: ANTH 375 may be taken concurrently. Recommended: ZOOL 105.

ANTH 476. Background for Primate Evolution (4)

Study of primate anatomy and its application to an understanding of primate evolution; detailed studies of the fossil evidence for primate evolution. Prerequisite: ANTH 376 may be taken concurrently. Recommended: ZOOL 105.

SPECIAL STUDIES

Upper Division

ANTH 495. Selected Topics in Anthropology (Topics to be specified in Class Schedule) (1-5)

Topics vary each term, thus may be repeated for credit. Prerequisite: Consent of instructor.
ANTH 496. 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. (Formerly 491) Prerequisite: Consent of instructor.

ANTH 498. Individual Study (1-5)

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 598. Individual Study (1-5)

For students capable of independent study in one of the fields of anthropology. May be repeated for credit; topics and supervising instructor may vary. Prerequisite: Available only for graduate credit.
ART

Martin L. Camarata, M.A., Professor, Chairman
Robert H. Colescott, M.A., Professor
Ralf Parton, M.A., Professor
James Piskoti, M.F.A., Assistant Professor
James M. Steven, M.F.A., Assistant Professor
Richard R. Taylor, M.A., Assistant Professor

The Department of Art offers the degree, Bachelor of Arts. Studio courses are offered in the areas of drawing, painting, sculpture and printmaking. Courses in art history and criticism and general offerings are available.

The art curriculum prepares students for various professions, for study at the graduate level, and for teaching. The curriculum also provides, through its general education offerings, varied opportunities for the cultural development of the liberal arts student.

REQUIREMENTS FOR THE BACHELOR OF ARTS, ART

Art majors are to:

1. Complete the requirements for the Bachelor of Arts Degree.
2. Complete the Foundation Program in Art.
3. Complete the major of not less than 30 upper division units, which includes a program of study in fields of specialization, as developed in consultation with the major adviser.
4. A minor is not required.

GENERAL REQUIREMENTS FOR THE ART MAJOR

1. A freshman or lower division transfer student will be evaluated for acceptance as a major in Art, upon completion of the Foundation Program, by submitting a portfolio for faculty approval.
2. Students entering the college at the upper division level will be evaluated, through portfolio, prior to admittance to the art program. (The Department of Art expects the work of transfer students to be of such quality as to meet the standards of the Department, and may require students to make up deficiencies in lower division course work. Upon completion of such deficiencies the student will be required to resubmit a portfolio for faculty approval.)
3. All art majors are required, during their senior year, to submit a representative portfolio of their art work to a faculty jury which will judge the work, on a qualitative basis, for evidence of personal, conceptual, and aesthetic concerns. Subsequent participation in an exhibition of works chosen from the portfolio is a requirement for the Department's recommendation for graduation as a major in Art. The Department believes that any art major can and should grow beyond the competency achieved in the required art program and has a professional obligation to do so.
The advanced art courses in all areas are offered for this purpose. The senior who rests on his technical achievements or skills attained in required art courses will not be automatically graduated, although all required units for the major have been fulfilled.

The Department of Art reserves the right to retain any student art work and/or slides of work for its permanent collection.

DEGREE MAJOR IN ART

Foundation Program - Prerequisites to the Major

All majors must take all foundation art courses in sequence.

ART 101. Drawing I, 3 units
ART 102. Drawing II, 3 units
ART 110. Design I, 3 units
ART 120. Design II, 3 units
ART 210. Art History Survey I, 3 units
ART 211. Art History Survey II, 3 units

The Major

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

Printmaking: .................................................. 2
ART 310. Printmaking I
ART 311. Printmaking II
ART 312. Lithography

Painting: .................................................. 2
ART 320. Problems in Painting I
ART 321. Problems in Painting II
ART 322. Problems in Painting III

Sculpture: .................................................. 2
ART 330. Sculpture I
ART 331. Sculpture II
ART 332. Sculpture III

To complete major requirements, a student must fulfill a total of 24 additional upper division units in studio courses as developed in consultation with major advisers.

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

DEGREE MINOR IN ART

(24 units as listed below)

ART 101. Drawing I ................................ 3
ART 102. Drawing II ................................ 3
ART 110. Design I ................................ 3
ART 120. Design II ................................ 3
ART 210. Art History Survey I .................. 3
ART 211. Art History Survey II .................. 3
All art minors must choose one course from each of the following areas:

**Printmaking:**
- ART 310. Printmaking I
- ART 311. Printmaking II
- ART 312. Lithography

**Painting:**
- ART 320. Problems in Painting I
- ART 321. Problems in Painting II
- ART 322. Problems in Painting III

**Sculpture:**
- ART 330. Sculpture I
- ART 331. Sculpture II
- ART 332. Sculpture III

Total: 24

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**TEACHING CREDENTIALS**

Majors in art seeking elementary and secondary credentials must fulfill the following requirements:

1. **Degree major in art.**
2. Secondary credential candidates must complete a minimum of 6 units in studio courses in Art as postbaccalaureate work and receive approval of the Department of Art as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

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**COURSE DESCRIPTIONS**

**Drawing and Foundation**

Lower Division

**ART 100. Drawing (3)**

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

**ART 101. Drawing I (3)**

Studio practice in drawing with emphasis on a variety of media and techniques for the art major. (Formerly 100) Prerequisite: Art major/minor.

**ART 102. Drawing II (3)**

Continued exploration of drawing. Emphasis on spatial concepts and expressive content using a variety of media and techniques. Prerequisite: ART 101

**ART 110. Design I (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: Art major/minor, or consent of instructor.

ART 120. Design II (3)

Further studio exploration of plastic elements as a basis for building a theoretical and practical vocabulary for design and composition in color. Emphasis on three-dimensional design. Prerequisite: ART 110

ART 210. Art History Survey I (3)

Survey of the major visual arts from Prehistoric times to High Renaissance.

ART 211. Art History Survey II (3)

Survey of the major visual arts from the Baroque era to major movements of the 20th Century. Prerequisite: ART 210, or consent of instructor.

Upper Division

ART 301. Drawing III (2)

Emphasis on figure as compositional element. Prerequisites: ART 101, 102, 110, 120.

ART 402. Advanced Drawing (2)

Advanced problems and techniques in drawing. Emphasis on drawing concepts and individual development. (Formerly 405) Prerequisites: ART 101, 102, 110, 120, 301. May be repeated.

PRINTMAKING

Upper Division

ART 310. Printmaking I (2)

Fundamental theories and practices involved in the processes of relief printing and silk screen printing. Prerequisites: ART 101, 102, 110, 120.

ART 311. Printmaking II (2)

Techniques of intaglio printmaking; emphasis on techniques and their relation to the graphic image. Prerequisites: ART 101, 102, 110, 120.

ART 312. Lithography (2)

Lithographic printmaking; emphasis on techniques and their re-
relationship to the graphic image. Prerequisites: ART 101, 102, 110, 120.

ART 410. Advanced Printmaking (2)

Advanced problems and new techniques in printmaking. Emphasis on printmaking concepts and individual development. Prerequisites: 2 printmaking courses chosen from: ART 310, 311, 312, or equivalent. May be repeated.

PAINTING
Upper Division

ART 320. Problems in Painting I (2)

Form and content in painting. Painting structure and composition. Basic media, techniques and concepts. Prerequisites: ART 101, 102, 110, 120.

ART 321. Problems in Painting II (2)

Painting problems with emphasis on media. Prerequisites: ART 101, 102, 110, 120.

ART 322. Problems in Painting III (2)

Painting problems with emphasis on techniques. Prerequisites: ART 101, 102, 110, 120.

ART 420. Advanced Painting (2)

Advanced problems and new techniques in painting. Emphasis on painting concepts and individual development. Prerequisites: 2 painting courses chosen from: ART 320, 321, 322, or equivalent. May be repeated.

SCULPTURE
Upper Division

ART 330. Sculpture I (2)

Exploration of modeling, its process and material. Prerequisites: ART 101, 102, 110, 120.

ART 331. Sculpture II (2)

Exploration of the use of metals in sculpture. Prerequisites: ART 101, 102, 110, 120.

ART 332. Sculpture III (2)

Exploration in carving, its process and its materials. Prerequisites: ART 101, 102, 110, 120.
ART 430. Advanced Sculpture (2)

Advanced problems and new techniques in sculpture. Emphasis on sculptural concepts and individual development. Prerequisites: 2 sculpture courses chosen from: ART 330, 331, 332, or equivalent. May be repeated.

ART HISTORY & CRITICISM
Upper Division

ART 340. Modern Art 1900-1945 (3)

An analysis and interpretation of the major artistic movements from 1900-1945. Emphasis will be placed on the changing aesthetic and artistic expressions of this period.

ART 341. Contemporary Art (3)

Analysis of development of style trends in the visual arts from 1945 to the present.

ART 440. Post Impressionism (3)

A study of the trends and major artists from Impressionism to the beginning of the 20th Century. An investigation into the relationship of these trends and artists to the art of this century.

ART 441. Art Criticism (3)

Study of the meaning of art and concepts such as expression, form and content, aesthetic judgment and evaluation. Emphasis will be placed on developing a personal concept of art.

GENERAL OFFERINGS
Lower Division

ART 295. Selected Topics in Art (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in art. Topics will vary. May be repeated. Prerequisite: Consent of instructor.

Upper Division

ART 451. Gallery Management (1)

Preparation for gallery managementship. Prerequisite: Consent of instructor.

ART 495. Selected Topics in Art (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in art. Topics will vary. May be repeated. Prerequisite: Consent of instructor.
ART 496. Senior Seminar (2)

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

ART 498. Individual Study (1-5)

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 whom the student wishes to work under. Prerequisite: Consent of instructor.

ART 598. Individual Study (1-5)

For graduate students with a baccalaureate 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 whom the student wishes to work under. Prerequisite: Consent of instructor.
The Department of Biological Sciences offers programs of study in the biological sciences for students seeking the Bachelor of Arts, Biological Sciences. Courses are offered to provide breadth and background in the natural sciences for the general student. Individual major programs are designed to prepare students for graduate work, careers in the biological sciences, and teaching. The student majoring in the biological sciences who wishes to prepare for a pre-professional program in such areas as dentistry, medicine, lab technology, nursing, and similar professions should consult with the major adviser early in his undergraduate program.

Students interested in marine biology and oceanography may elect coursework at the Moss Landing Marine Laboratories for partial fulfillment of their in-resident major and degree requirements.

REQUIREMENTS FOR THE BACHELOR OF ARTS, BIOLOGICAL SCIENCES

Biological 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, including course requirements as specified for the major.
4. Completion of a minor is not required.

BACHELOR OF ARTS DEGREE IN BIOLOGICAL SCIENCES

Prerequisites to the Major:

Required courses in the major field:

BOTY 105. Introduction to Botany, 4 units
ZOOL 105. Introduction to Zoology, 4 units
Required courses in supporting fields:

CHEM 110, 111. Principles of Chemistry I-II, 10 units
CHEM 301, 303. Organic Chemistry, 3 units, 1 unit
Mathematics (Statistics or Calculus), 3-4 units
Elective courses in chemistry, mathematics, or physics, 8-9 units

Students planning to seek advanced and professional degrees are advised to complete both a year sequence in college physics and a year sequence in organic chemistry. If interested in biochemistry, ecology, or molecular biology, the student should also elect a year sequence in calculus and a course in statistics.

THE MAJOR:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 331. Cellular and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 332. General Genetics</td>
<td>3</td>
</tr>
<tr>
<td>Course in Animal or Plant Diversity (approved by major adviser)</td>
<td>4</td>
</tr>
<tr>
<td>To be elected from the following: BOTY 310, BOTY 312, BOTY 370, MBIO 201, ENTO 300, ENTO 374, ZOOL 361, ZOOL 442, ZOOL 443</td>
<td></td>
</tr>
<tr>
<td>Course in Ecology (approved by major adviser)</td>
<td>4</td>
</tr>
<tr>
<td>To be elected from the following: BIOL 363, BIOL 365, BIOL 463</td>
<td></td>
</tr>
<tr>
<td>Course in Physiology (approved by major adviser)</td>
<td>4</td>
</tr>
<tr>
<td>To be elected from the following: BIOL 422, BOTY 420, ENTO 422, ZOOL 423</td>
<td></td>
</tr>
<tr>
<td>*Electives in the Biological Sciences (approved by major adviser)</td>
<td>14</td>
</tr>
<tr>
<td>TOTAL</td>
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</tr>
</tbody>
</table>

DEGREE MINOR IN BIOLOGICAL SCIENCES

(20 units, to include at least 12 units in upper division)

Lower Division

BOTY 105. Introduction to Botany, 4 units
ZOOL 105. Introduction to Zoology, 4 units
(equivalent courses may be substituted by minor adviser)

Upper Division

Courses as approved by minor adviser, 12 units

*A maximum of 8 units may be satisfied by courses at lower division level as approved by major adviser.
PREPARATION FOR GRADUATE WORK

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 (FORTRAN).

COURSE DESCRIPTIONS

BIOLOGY

Lower Division

BIOL 101. 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, to gross structural levels. (Lecture, 3 hours) Concurrent enrollment in BIOL 103 required. Prerequisite: None.

BIOL 103. Principles of Biology Laboratory (1)

Laboratory experiments, exercises and demonstrations illustrating biological principles. (Laboratory, 3 hours) Concurrent enrollment in BIOL 101 required. (Formerly included in BIOL 101)

BIOL 105, 106, 107. See Natural Science 105.

BIOL 231. Human Genetics (2)

Basic principles of heredity and evolution particularly as they apply to man. Not applicable for credit in biological science major. (Lecture, 2 hours) Prerequisite: None.

BIOL 265. 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. Not open to students with credit in BIOL 263. (Lecture, 2 hours; field trips) Prerequisite: None.

BIOL 295. 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 may be repeated for credit. Prerequisite: Consent of instructor.
BIOL 331. Cellular and Molecular Biology (3)

Basic concepts of cellular phenomena dealt with at the molecular level of organization. (Lecture, 3 hours) (Formerly 351) Prerequisites: BOTY 105, ZOOL 105 and CHEM 110, 111 or equivalent.

BIOL 332. General Genetics (3)

Mechanisms of inheritance illustrating the role of genetics in modern biology. (Lecture, 3 hours) Prerequisite: BIOL 331 or equivalent.

BIOL 363. Ecology (4)

Basic interrelationships of plants and animals within their physical environments. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: BOTY 105, ZOOL 105 and CHEM 110, 111 or equivalent, and statistics or calculus. (Satisfies ecology elective for the major)

BIOL 365. Aquatic Biology (4)

The biota of fresh water with emphasis on the ecology, identification, physiology and behavior of aquatic organisms. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BOTY 105, ZOOL 105 and CHEM 110, 111 or equivalent. (Satisfies ecology elective for the major)

BIOL 381. Evolution (2)

Basic concepts of evolutionary theory including evidence and mechanisms that underlie and support the evolution of living things. (Lecture, 2 hours) Prerequisites: BOTY 105, ZOOL 105 or equivalent; BIOL 332 recommended.

BIOL 422. General and Cellular Physiology (4)

Physico-chemical properties of protoplasm, permeability, metabolism and nuclear-cytoplasm interaction. (Lecture, 2 hours; laboratory, 6 hours) (Formerly 322) Prerequisites: Two years of college-level biology, CHEM 301, 303 or equivalent. (Satisfies physiology elective for the major)

BIOL 431. Histological and Cytological Techniques (3)

Principles and practice of preparing tissues for microscopy study. (Lecture, 1 hour; laboratory, 6 hours) (Formerly 451) Prerequisite: Two years of college-level biology or equivalent.
BIOL 463. 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, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BOTY 105, ZOOL 105 or equivalent and one semester invertebrate zoology or BOTY 414. (Satisfies ecology elective for the major)

BIOL 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.

BIOL 498. Individual Study (1-5)

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

BIOL 598. Individual Study (1-5)

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 105. Introduction to Botany (4)

Introduction to the fundamental aspects of plant biology; taxonomy, anatomy, morphology, physiology, and ecology. (Lecture, 3 hours; laboratory, 3 hours) (Formerly 105 and 106) Prerequisites: Grade of A or B in high school biology, satisfactory score on biology qualifying examination, or BIOL 101.

BOTY 295. 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 may be repeated for credit. Prerequisite: Consent of instructor.
Upper Division

BOTY 310. 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 105 or equivalent. (Satisfies diversity elective for the major)

BOTY 312. 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 105 or equivalent. (Satisfies diversity elective for the major)

BOTY 350. Introductory Plant Pathology (4)

Nature, cause, and control of plant diseases with emphasis on economic agricultural crops. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: BOTY 105 or equivalent.

BOTY 370. 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 105 or equivalent. (Satisfies diversity elective for the major)

BOTY 410. Plant Anatomy (4)

Microscopic study of structure and development of plant tissues with emphasis on tissues of seed plants. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: BOTY 312 or consent of instructor.

BOTY 414. Biology of the Algae (4)

Survey of the algae with emphasis on form, structure, heredity, development, and identification. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: BOTY 310 or equivalent. Offered alternate years.

BOTY 415. Biology of the Fungi (4)

Survey of the fungi with emphasis on form, structure, heredity, development, and identification. (Lecture, 2 hours; laboratory, 6 hours; field trips) (Formerly 315) Prerequisite: BOTY 310 or equivalent. Offered alternate years.
BOTY 420. Plant Physiology (4)

Selected topics pertaining to metabolism, nutrition, and growth of plants. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: BOTY 105 or equivalent, and CHEM 301, 303 or equivalent. (Satisfies physiology elective for the major)

BOTY 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.

ENTOMOLOGY
Upper Division

ENTO 300. 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 105 or equivalent. (Satisfies diversity elective for the major)

ENTO 333. 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 105 or equivalent.

ENTO 374. 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: ENTO 300 or consent of instructor. (Satisfies diversity elective for the major)

ENTO 422. Insect Physiology and Internal Anatomy (4)

Consideration of nutrition, digestion, excretion, circulation, respiration, detoxification processes, and the nervous and hormonal systems of insects. (Lecture, 3 hours; laboratory, 3 hours) Prerequisites: ENTO 300 and CHEM 301, 303 or equivalent or consent of instructor. (Satisfies physiology elective for the major)

ENTO 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.
MICROBIOLOGY

Lower Division

MBIO 201. Bacteriology (4)

Physico-chemical basis of the morphology and physiology of bacteria and other selected microorganisms; their role as agents of change in the natural processes important to industry, agriculture, and health. Recommended for biology major. (Lecture, 2 hours; laboratory, 6 hours) Prerequisites: One year college-level biology or equivalent, and CHEM 110 or equivalent or concurrent enrollment in CHEM 111. (Satisfies diversity elective for the major) Not open to students with credit in BIOL 353.

Upper Division

MBIO 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.

ZOOLOGY

Lower Division

ZOOL 105. 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 101.

ZOOL 223. Physiology (3)

Principles of functional anatomy and physiology of organ systems with special reference to human physiology. (Lecture, 3 hours) (Formerly 323) Prerequisite: ZOOL 105 or equivalent. (Does not satisfy the physiology elective for the major)

ZOOL 224. Physiology Laboratory (1)

Laboratory experiments, exercises, and demonstrations illustrating the principles of physiology with special reference to human physiology. (Laboratory, 3 hours) (Formerly included in 323) Prerequisite: ZOOL 223 or concurrent enrollment.
ZOOL 225. Anatomy Laboratory (2)

Gross morphology, anatomy, and histology of organ systems with special reference to human anatomy. (Laboratory, 6 hours) (Formerly included in 312) Prerequisite: ZOOL 223 or concurrent enrollment.

ZOOL 295. 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 may be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

ZOOL 313. Vertebrate Embryology (4)

Comparative study of microanatomy and development of several representative vertebrate forms. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: ZOOL 105 or equivalent.

ZOOL 315. 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 105 or equivalent.

ZOOL 361. 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. (Satisfies diversity elective for the major)

ZOOL 423. Animal Physiology (4)

A physiological approach to the evolution of vertebrate organ systems. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: Two years college-level biology or equivalent, and CHEM 301, 303 or equivalent. (Satisfies physiology elective for the major)

ZOOL 425. Endocrinology (2)

A comparison of animal endocrine systems at the cell, tissue and organ level. (Lecture, 2 hours) Prerequisites: BIOL 331 and CHEM 301, 303 or equivalent.
ZOOL 442. Invertebrate Zoology I (4)

Structure, classification, distribution, and life histories of invertebrates. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: BOTY 105, ZOOL 105 or equivalent. (Satisfies diversity elective for the major)

ZOOL 443. Invertebrate Zoology II (4)

Continuation of ZOOL 442. Structure and classification distribution, and life histories of invertebrates. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BOTY 105, ZOOL 105 or equivalent. ZOOL 442 recommended. (Satisfies diversity elective for the major)

ZOOL 444. 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.

ZOOL 460. Animal Behavior (Ethology) (3)

The interaction of animals in their environment with special emphasis on individual and social behavior patterns. (Lecture, 3 hours) Prerequisite: Two years of college level biology or consent of instructor.

ZOOL 462. 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 315 or ZOOL 361 or equivalent. Offered alternate years.

ZOOL 463. 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 315 or ZOOL 361 or equivalent. Offered alternate years.

ZOOL 464. Mammalogy (4)

Anatomy, behavior, classification, distribution, economic value, evolution, and life histories of mammals. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 315 or ZOOL 361 or equivalent. Offered alternate years.
ZOOL 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.
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 and soundly developed programs and courses of instruction; by engaging in a continuing research effort of modest proportions in support of this instruction; and by providing appropriate service to the community.

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 BA degree program are offered both during the daytime and the evening. Courses in the MBA program are offered during the evening only. The Division also cooperates with the College's Office of Continuing Education in offering a limited but growing number of courses in business and administration designed to meet specific needs of the local community. These courses are offered as demand warrants.

THE BACHELOR OF ARTS, BUSINESS ADMINISTRATION

This program is intended to provide a basic preparation for careers in business administration within the context of a liberal education.

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.
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

The business administration major has three principal components: (1) prerequisites to the major, (2) the business administration core, (3) the area of concentration.

The prerequisites to the major, 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, which comprises about two-thirds of the major, is a closely coordinated sequence of courses which introduces the student to the broad field of business administration, develops his 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, which comprises about one-third of the major, 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, Marketing, Operations Administration, and Personnel Administration. Coursework in the area of concentration is, for the most part, restricted to the senior year.

DEGREE REQUIREMENTS

Students seeking the Bachelor of Arts, Business Administration must:

1. Complete all college-wide requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major including both the business administration core and the selected area of concentration.
4. Complete with a grade of C or better all courses which are specified prerequisites to advanced courses in the student's major.*
5. Satisfy the Division's requirement for proficiency in English. (See below)

Completion of a minor is not required

*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.
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, most of which are, or can be, included in the General Education program, should be completed. Elective courses should be chosen in the following areas: behavioral sciences, economics, English, and mathematics.

DEGREE MAJOR IN BUSINESS ADMINISTRATION

Prerequisites to the Major

(a) Included in General Education Program:

- ECON 250, 251. Principles of Economics I-II, 6 units
- ENGL 205. Technical and Report Writing, 3 units
- MATH 150. Finite Mathematics, 3 units
- MATH 161. Statistics for Decision Making, 3 units
- PSYC 201. Introduction to Psychology, 3 units
- SOCL 101. Introduction to Sociology, 3 units

(b) Additional Requirements:

- BUS 200. Introduction to Computers, 2 units
- BUS 201. Computer Programming, 3 units
- BUS 206. Business Law, 3 units
- *BUS 211. Principles of Financial Accounting, 4 units

The Business Administration Core

- BUS 300. Quantitative Analysis for Business Decisions, 3 units
- BUS 301. Organization and Environment, 4 units
- BUS 313. Managerial Accounting, 4 units (Students concentrating in Accounting will substitute BUS 314. Cost Analysis, 4 units)
- BUS 322. Business Finance, 3 units
- BUS 341. Basic Marketing, 3 units
- BUS 408. Business Policy, 3 units
- ECON 315. National Income Analysis, 3 units

*Some colleges teach this subject in a 2 or 3 term sequence rather than in a single course. Students attempting to fulfill this requirement at one of these colleges should complete the entire sequence prior to transfer. Students who have not completed the requirement in financial accounting prior to transfer, will be required to complete BUS 211 at California State College, Stanislaus.
Area of Concentration

Each student will choose an area of concentration from those listed below.

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 311. Intermediate Accounting I, 3 units
BUS 312. Intermediate Accounting II, 3 units

Two of the following as approved by the major adviser:

BUS 411. Advanced Accounting, 4 units
BUS 412. Auditing, 4 units
BUS 414. Income Tax Accounting, 4 units
BUS 415. Seminar in Accounting Theory, 3 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 421. Security Analysis and Portfolio Management, 4 units
BUS 424. Management of Financial Institutions, 4 units
BUS 425. Financial Management, 4 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, etc.

Course requirements are as follows:

BUS 440. Consumer Behavior, 3 units
BUS 442. Marketing Research, 3 units
BUS 449. Problems in Marketing Strategy, 3 units

One of the following as approved by the major adviser:

BUS 443. Sales and Promotion Management, 4 units
BUS 444. Industrial Marketing, 3 units
BUS 445. Retailing, 3 units
BUS 448. Business Logistics, 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 436. Human Problems in Administration, 3 units
BUS 451. Production and Operations Administration, 3 units
BUS 455. Introduction to Management Science, 4 units

One of the following as approved by the major adviser:

BUS 405. Sample Surveys, 3 units
BUS 437. Introduction to Systems Analysis and Design, 3 units
BUS 446. Business Logistics, 3 units
BUS 452. Program Administration, 3 units
BUS 453. Simulation of Operating Systems, 4 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 436. Human Problems in Administration, 3 units
- BUS 461. Personnel Administration, 3 units
- BUS 462. Labor Management Relations, 3 units
- BUS 463. Manpower Planning, 3 units
- ECON 410. Labor Economics, 3 units

DEGREE MINOR IN BUSINESS

Prerequisites to the Minor

- BUS 211. Principles of Financial Accounting, 4 units
- ECON 250, 251. Principles of Economics I-II, 6 units

Required Courses in Minor Field

- BUS 301. Organization and Environment, 4 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 Chairman 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. However, a number of the courses currently offered by the division may be used in partial fulfillment of the requirements for the credential in secondary education. Interested students should consult the chairman of the Division of Education for assistance in program planning.

THE 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 quick flexible adjustment to rapidly 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 three principal components: (1) the foundation program, (2) the advanced program, (3) the area of specialization.

The Foundation Program is intended to give the student the essence of the undergraduate major in Business Administration. Students must complete all courses in the Foundation Program before enrolling in the Advanced Program. Suitable credit will be given for prior completion of these courses or their equivalents.

The Advanced Program consists of a core of 6 required courses (18 units) and an area of specialization (12 units). No courses completed prior to achieving classified standing may be applied toward the MBA Advanced Program.

Each student will develop a specialization in a functional or analytical field which will meet his or her own unique needs and interests. 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.

(Note: At least 6 of the 12 units must be in 500 level courses; not more than 10 units of the 30 unit Advanced Program may be taken in any one field.)

DEGREE REQUIREMENTS

In addition to successfully completing all required courses, candidates for the MBA must:

1. Meet all college-wide requirements for masters' degrees.
2. Pass a comprehensive examination.
3. Satisfy the Division's requirement for proficiency in English. (See above)
4. Complete all requirements for the degree (Foundation Program, Advanced Program, comprehensive examination) within seven years.

ADMISSION TO THE PROGRAM

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. 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. Personal interviews are not normally required as part of the application procedure. On occasion, interviews may be requested by the Admissions Committee when it believes that an interview would be helpful in the processing of a particular application for admission.
Unclassified Standing

The College admits qualified applicants in unclassified standing and classifies them when eligible. Unclassified graduate students are expected to make definite and timely progress toward the achievement of classified graduate 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 courses in the MBA Advanced Program. 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 Admission Test for Graduate Study in Business (ATGSB) — a minimum score of 450 is required.*
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. Letters of recommendation.
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.

*The Graduate Record Examination (GRE) is not an acceptable substitute for the Admission Test for Graduate Study in Business (ATGSB).
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 (30 semester units)

Course requirements are as follows:

BUS 322. Business Finance, 3 units
BUS 341. Basic Marketing, 3 units
BUS 484. Mathematics for Business, 3 units
BUS 485. Quantitative Methods, 4 units
BUS 486. Computers in Business, 3 units
BUS 487. Principles of Accounting, 5 units
BUS 488. Organizational Behavior, 3 units
BUS 489. Business Forecasting and Planning, 3 units
ECOW 315. National Income Analysis, 3 units

Advanced Program (18 semester units)

Course requirements are as follows:

BUS 511. Graduate Accounting Seminar I, 3 units
BUS 521. Managerial Finance, 3 units
BUS 531. Seminar in Management, 3 units
BUS 541. Marketing Management, 3 units
BUS 508. Business Policy, 3 units
BUS 509. Seminar in Business and Society, 3 units

Area of Specialization (12 semester units)

An approved sequence of courses in a functional or analytical field tailored to meet the unique needs and interests of the individual student. (Note: At least 6 of the 12 units must be in 500 level courses; not more than 10 units of the 30 unit Advanced Program may be taken in any one field.)
BUS 200. Introduction to Computers (2)
Computers and peripheral equipment and control software are considered as an integrated data processing system. Methods of problem definition and solution are explored along with the nature of data structures. Computer programming techniques are introduced. (Lecture, 1 hour; laboratory, 2 hours)

BUS 201. Computer Programming (3)
A continuation of BUS 200, with emphasis on computer programming in business applications. (Lecture, 1 hour; laboratory, 4 hours)
Prerequisite: BUS 200 or consent of instructor.

BUS 206. Business Law (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 211. Principles of Financial Accounting (4)
An introduction to the principles of analyzing, recording, summarizing, communicating, and interpreting financial data of the business firm. Prerequisite: Sophomore standing.

BUS 220. Personal Finance (2)
Study of problems involved in the management of personal finances: family financial planning, credit, insurance, home ownership, investments, Social Security. (Not open to students who have completed BUS 421)

BUS 295. Selected Topics in Business Administration (Topics to be specified in Class Schedule) (1-5) Development of a selected topic of business. Topics may vary each term. May be repeated for credit.
Prerequisite: Consent of instructor.

BUS 300. 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 150, 161, BUS 200.

BUS 301. Organization and Environment (4)
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 250, 251, PSYC 201, SOCL 101, and Junior standing or permission of instructor.

BUS 306. Advanced Business Law (3)
Law of business; emphasis on laws relating to sales, personal property, bailments, negotiable instruments, partnerships, corporations, real property and insurance. (Formerly BUS 317) Prerequisite: BUS 206.
BUS 311. 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 211.

BUS 312. 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 311 or consent of instructor.

BUS 313. 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 211 or consent of instructor.

BUS 314. Cost Analysis (4)
Principles and objectives of cost accounting, including budgeting, estimated and standard costs, distribution and administrative costs, differential costs, profit planning, direct costs, and pricing policies. Prerequisite: BUS 211.

BUS 322. Business Finance (3)
Analysis of investment opportunities, determination of funds requirements, sources and uses of funds, cost of capital, capital structure and funds management. Extensive use of case problems. Prerequisites: BUS 300, 313 or 314; concurrent enrollment permitted.

BUS 331. 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 341. 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 301; concurrent enrollment permitted.

BUS 401. 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. Prerequisite: Consent of instructor.
BUS 405. Sample Surveys (3)
Theory and methods of sampling; design of sample surveys; probability and nonprobability samples; interpretation of survey results; survey administration; applications in auditing, marketing research, and quality control. Prerequisites: MATH 161, BUS 201.

BUS 408. 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. Prerequisite: Completion of all other courses in the business administration core.

BUS 409. Business, Society, and the Individual (2)
Consideration of the role which the businessman and the business firm might play in alleviating some of the more pressing problems of contemporary American society. Prerequisite: Senior standing and consent of instructor.

BUS 411. Advanced Accounting (4)
Accounting principles applied to accounting for partnership, installment sales, consignments, insolvency, estates, trusts, and business combinations. Prerequisite: BUS 312 or consent of instructor.

BUS 412. Auditing (4)
Standards and procedures broadly applied to examination of financial statements, including a consideration of field of public accounting, professional ethics, internal controls, preparation of working papers, and audit reports. Prerequisites: BUS 311, 312.

BUS 414. Income Tax Accounting (4)
History and philosophy of federal income tax law and regulations and procedures for determining income tax liability of business firms and individuals. Prerequisite: BUS 211.

BUS 415. Seminar in Accounting Theory (3)
History and development of accounting theory; accounting standards, conventions and principles. Current problems, including a survey of current literature. Prerequisites: BUS 311, 312.

BUS 418. Managerial Accounting and Information Systems (3)
Analysis of internal (information) systems which are designed to provide management with a base of information of specified quality and scope in order to facilitate measurement and control of operations. Prerequisites: BUS 201, 301, 322, 341; concurrent enrollment permitted.
BUS 421. 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. (Field Trips) Prerequisite: BUS 322.

BUS 424. Management of Financial Institutions (4)
Analysis of the various types of financial institutions and money markets, both banking and non-banking; emphasis on supply of funds; differentiating functions and practices; interrelationships of financial intermediation and business firms. (Field Trips) Prerequisite: BUS 322 or ECON 332.

BUS 425. Financial Management (4)
Analysis of financial problems and policies of non-financial firms. Includes consideration of both long and short term capital problems. Extensive use of case problems and simulation exercises. Prerequisite: BUS 322.

BUS 436. 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 301 or 331 or consent of instructor.

BUS 437. Introduction to Systems Analysis and Design (3)
The methodology of management systems study. Analysis and documentation of existing systems, determination of system requirements, new systems design and implementation. (Field Trips) Prerequisite: BUS 451.

BUS 440. 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 341.

BUS 442. 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 300, 341.

BUS 443. Sales and Promotion Management (4)
Planning, direction, and control of sales promotion and selling activities as integral parts of the overall marketing program. Include study of methods of communicating to the market including advertising, sales promotion, publicity and their relation to personal selling. Emphasis is on managerial aspects rather than technical or creative techniques. Prerequisite: BUS 341.
BUS 444. 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 341.

BUS 445. 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 341.

BUS 448. Business Logistics (3)
Management of the physical movement of goods and the deployment of physical facilities to achieve desired flows. Considers the firm as a total system. Quantitative solutions to the problem of obtaining place and time utility. Case problems and simulation exercises. (Field Trips) Prerequisites: BUS 300, 341.

BUS 449. 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 440, 442, or consent of instructor.

BUS 451. 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) (Formerly BUS 433) Prerequisites: BUS 300, 301.

BUS 452. 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) (Formerly BUS 434) Prerequisites: BUS 300, 301.

BUS 453. Simulation of Operating Systems (4)
Study of basic computer simulation techniques as applied to business administration and management science; survey of various computer applications and languages; examination of theoretical and experimental considerations. The course will make extensive use of the computer. Prerequisites: BUS 201, 300, 301.
BUS 455. Introduction to Management Science (4)
Constrained optimization, integer, quadratic, and dynamic programming, waiting lines and simulation, applications in business. Prerequisites: BUS 201, 300, 301.

BUS 461. 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. (Formerly BUS 431) Prerequisite: BUS 301 or consent of instructor.

BUS 462. Labor Management Relations (3)
Perspectives on the internal relationship between management and unionized employees. (Formerly BUS 432) Prerequisite: BUS 461.

BUS 463. Manpower Planning (3)
The objectives of manpower management; determination of manpower needs; designing programs to provide the needed manpower; problems and potentials. Prerequisite: BUS 461.

BUS 484. Mathematics for Business (3)
Mathematics as applied to business. Includes: set theory, limits, differentiation, integration, maxima-minima, linear systems, matrices — with emphasis on business applications. Prerequisite: Graduate standing.

BUS 485. Quantitative Methods (4)
Analysis by quantitative techniques for managerial planning and decision making. The application of statistical methods to problems in Business Administration. Models and modeling, rational choice under uncertainty, linear and non-linear programming, etc. Prerequisite: BUS 484 or equivalent.

BUS 486. Computers in Business (3)
An introduction to computers, peripheral equipment and software capability within the business firm. A study of problem analysis and solution, and computer programming technology. The course will make extensive use of the computer. Prerequisite: Graduate standing.

BUS 487. Principles of Accounting (5)
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 488. 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 489. 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 495. Selected Topics in Business Administration (Topic to be specified in Class Schedule) (1-5)
Innovative course of study. May be repeated for credit. Prerequisite: Consent of instructor.

BUS 498. Individual Study (1-5)
For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 9 units. Prerequisites: Consent of instructor, and approval of Division chairman.

BUS 508. 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 511, 521, 531, and 541.

BUS 509. Seminar in Business and Society (3)
Examination of problems and issues involving the interaction and adaptation of business and its legal, political and social environment. The course is developed around a series of current problems chosen to raise some major issues. Prerequisite: Classified graduate standing.

BUS 511. Graduate Accounting Seminar I (3)
The application of advanced accounting theory in modern business. Emphasis on current issues and the development of accounting theory. Prerequisite: Classified graduate standing.

BUS 521. 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. Cases and problems provide application 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. Prerequisite: Classified graduate standing.

BUS 531. Seminar in Management (3)
Current issues and emerging concepts in management. The application of findings and concepts from the behavioral sciences and from management science to problems in management in business firms and other organizations. Prerequisite: Classified graduate standing.
BUS 541. Marketing Management (3)

Emphasis on managerial decision making and problem solving to formulate and administer effective marketing activities. Marketing as a total system designed to plan, price, distribute and promote goods and/or services to users. Extensive use of case problems covering buyer behavior, product, channel of distribution, pricing and promotion. Prerequisite: Classified graduate standing.
The Department of Chemistry offers the degrees Bachelor of Arts and Bachelor of Science, Chemistry. The Bachelor of Science program provides the comprehensive training in chemistry necessary for the student who wishes to become a professional chemist in industry or government, or plans to attend graduate school. In contrast, the Bachelor of Arts program is a program for those seeking to enter professions requiring only a moderate training in chemistry combined with training in other areas. Examples are medicine, dentistry and other health professions; technical sales, writing, and library work; chemical patent law; and high school teaching. The student should consult with his departmental adviser to determine which degree is more suitable for his career objectives.

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.
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.
4. Completion of a minor is not required.

BACHELOR OF ARTS DEGREE IN CHEMISTRY

Prerequisites to the Major:

Required courses in the major field:

CHEM 110, 111. Principles of Chemistry I-II, 10 units
CHEM 201. Quantitative Analysis and Basic Instrumental Techniques, 4 units

Required courses in supporting fields:

MATH 191, 192. Calculus with Applications I-II, 6 units
Either of the following sequences:

- PHYS 110, 111. Basic Physics I-II, 10 units
- PHYS 225, 226. General Physics I-II, 8 units
- PHYS 235, 236. General Physics Laboratory I-II, 2 units

### THE MAJOR:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 301, 302</td>
<td>Organic Chemistry I-II</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 303, 304</td>
<td>Organic Chemistry Laboratory I-II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 403</td>
<td>Physical Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 410</td>
<td>Advanced Instrumental Analysis</td>
<td>4</td>
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</table>

At least 6 credit hours from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>CHEM 402</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 404</td>
<td>Physical Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Advanced Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Coordination Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 430</td>
<td>Advanced Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 440</td>
<td>Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 441</td>
<td>Biochemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 495</td>
<td>Selected Topics in Chemistry</td>
<td>1-5</td>
</tr>
<tr>
<td>CHEM 498</td>
<td>Individual Study</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**TOTAL: 24 units**

### BACHELOR OF SCIENCE DEGREE IN CHEMISTRY

Prerequisites to the Major:

**Required courses in the major field:**

- CHEM 110, 111. Principles of Chemistry I-II, 10 units
- CHEM 201. Quantitative Analysis and Basic Instrumental Techniques, 4 units

**Required courses in supporting fields:**

- MATH 141, 142. Calculus I-II, 8 units
- MATH 241. Multivariate Calculus, 4 units
- MATH 242. Linear Algebra and Differential Equations, 4 units
- PHYS 225, 226. General Physics I-II, 8 units
- PHYS 235, 236. General Physics Laboratory I-II, 2 units

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</tr>
<tr>
<td>CHEM 303, 304</td>
<td>Organic Chemistry Laboratory I-II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 401, 402</td>
<td>Physical Chemistry I-II</td>
<td>6</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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</tr>
<tr>
<td>CHEM 403</td>
<td>Physical Chemistry Lab I-II</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 404</td>
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<td>Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 441</td>
<td>Biochemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 495</td>
<td>Selected Topics in Chemistry</td>
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<td>CHEM 498</td>
<td>Individual Study</td>
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</tr>
<tr>
<td>PHYS 352</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 445</td>
<td>Nuclear Physics</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 453</td>
<td>Thermal and Statistical Physics, I</td>
<td>3</td>
</tr>
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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 contemplating entrance into a graduate school specifying a foreign language or a substitute as an entrance requirement.

- GERM 101, 102. Elementary German I-II, 8 units
- MATH 200, 201. Introduction to Computers; Computer Programming, 5 units.

**DEGREE MINOR IN CHEMISTRY**

Consists of 18 units in chemistry as approved by the department, which must include at least 8 upper division units.

**Lower Division**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CHEM 100</td>
<td>Fundamentals of Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

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 elementary school teacher. Not open to students with previous college chemistry. (Lecture, 3 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105, 106, 107</td>
<td>See Natural Science 105.</td>
<td></td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Principles of Chemistry I</td>
<td>5</td>
</tr>
</tbody>
</table>

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) (Formerly 101-102) Prerequisite: Two years of high school algebra or consent of instructor.
CHEM 111. Principles of Chemistry II (5)

A continuation of CHEM 110, emphasizing gaseous and ionic equilibria, electrochemical principles, thermodynamics, radiochemistry, and descriptive chemistry of the elements. (Lecture, 3 hours; laboratory, 6 hours) (Formerly 102-103)

CHEM 201. Quantitative Analysis and Basic Instrumental Techniques (4)

Principles and practice of volumetric, gravimetric and instrumental methods of analysis. (Lecture, 2 hours; laboratory, 6 hours) (Formerly 211) Prerequisite: CHEM 111.

CHEM 295. Selected Topics in Chemistry (Topics to be specified in the Class Schedule) (1-5)

Development of a selected branch of chemistry. Topics may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

CHEM 301. 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 303 required. (Formerly 321-322). Prerequisite: CHEM 111.

CHEM 302. Organic Chemistry II (3)

Continuation of CHEM 301. (Lecture, 3 hours) Concurrent enrollment in CHEM 304 required. (Formerly 322-323) Prerequisite: CHEM 301.

CHEM 303. Organic Chemistry Laboratory I (1 or 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 301 required. (Formerly 324-325) Prerequisite: CHEM 111.

CHEM 304. Organic Chemistry Laboratory II (1 or 2)

Continuation of CHEM 303. (Laboratory, 3 or 6 hours) Concurrent enrollment in CHEM 302 required. (Formerly 325-326) Prerequisite: CHEM 303.
CHEM 401. 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) Concurrent enrollment in CHEM 403 required. (Formerly 461) Prerequisites: One year of calculus and one year of physics.

CHEM 402. Physical Chemistry II (3)

Continuation of CHEM 401. (Lecture, 3 hours) Concurrent enrollment in CHEM 404 required. (Formerly 462) Prerequisites: MATH 142, CHEM 401.

CHEM 403. Physical Chemistry Laboratory I (1)

Laboratory applications of the principles of physical chemistry. (Laboratory, 3 hours) Concurrent enrollment in CHEM 401 required. (Formerly 464)

CHEM 404. Physical Chemistry Laboratory II (1)

Continuation of CHEM 403. (Laboratory, 3 hours) Concurrent enrollment in CHEM 402 required. (Formerly 465) Prerequisite: CHEM 403.

CHEM 410. Advanced Instrumental Analysis (4)

Instrumental methods of chemical analysis. (Lecture, 2 hours; laboratory, 6 hours) (Formerly 412) Prerequisites: CHEM 201 and CHEM 302 or consent of instructor.

CHEM 420. Advanced Inorganic Chemistry (3)

Atomic structure, periodic properties, theories of bonding, structure, introduction to coordination chemistry, and reactions of representative elements. (Lecture, 3 hours) (Formerly 401) Prerequisite: CHEM 401 or consent of instructor.

CHEM 421. Coordination Chemistry (2)

Structure, bonding, spectra and reactions of representative metal complexes. (Lecture, 2 hours) Prerequisite: CHEM 420.

CHEM 430. Advanced Organic Chemistry (3)

Chemical equilibrium in organic systems, reaction kinetics, reactive intermediates, determination of reaction mechanisms, photochemistry, molecular orbital theory, modern synthetic reactions. (Lecture, 3 hours) (Formerly 427) Prerequisite: CHEM 302.
CHEM 440. Biochemistry (3)

The chemistry, metabolism, enzymology and energy relationships of important biological compounds and processes. (Lecture, 3 hours) (Formerly 480) Prerequisite: CHEM 302 or consent of instructor.

CHEM 441. Biochemistry Laboratory (1)

An introduction to biochemical techniques including chromatography, enzyme purification, spectrophotometry and fluorimetry. (Laboratory, 3 hours) Prerequisite: Concurrent enrollment in CHEM 440 or consent of instructor.

CHEM 495. Selected Topics in Chemistry (Topics to be specified in the Class Schedule) (1-5)

Development of a selected branch of chemistry. Topics vary each term, thus may be repeated for credit. Prerequisite: Consent of instructor.

CHEM 498. Individual Study (1-5)

For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

Graduate

CHEM 598. Individual Study (1-5)

For qualified graduate students in need of advanced or specialized study. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.
DMMA

Dougla~ McDeII!l!lott, Pt.D., Professor, Chairman
Bruce D. Hood, M.A., Associate Professor
Jere D. Wade, Ph.D., Associate Professor
Nobre T. Dinse, M.A.T., Assistant Professor
Richard Levering, M.A., Assistant 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 either 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.

DEGREE MAJOR IN DRAMA

Prerequisites to the Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 200</td>
<td>Basic Performance</td>
<td>1 unit</td>
</tr>
<tr>
<td>DRAM 210</td>
<td>Basic Theatre Management</td>
<td>1 unit</td>
</tr>
<tr>
<td>DRAM 221</td>
<td>Basic Makeup</td>
<td>1 unit</td>
</tr>
<tr>
<td>DRAM 222</td>
<td>Basic Lighting</td>
<td>1 unit</td>
</tr>
<tr>
<td>DRAM 223</td>
<td>Basic Technical Production</td>
<td>1 unit</td>
</tr>
<tr>
<td>DRAM 224</td>
<td>Basic Costuming</td>
<td>1 unit</td>
</tr>
<tr>
<td>DRAM 230</td>
<td>Theatre Workshop I</td>
<td>2 units</td>
</tr>
<tr>
<td>DRAM 250</td>
<td>Beginning Acting</td>
<td>3 units</td>
</tr>
</tbody>
</table>

THE MAJOR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DRAM 300.</td>
<td>Acting</td>
<td>4</td>
</tr>
<tr>
<td>DRAM 315.</td>
<td>Junior/Senior Forum</td>
<td>4</td>
</tr>
<tr>
<td>DRAM 320.</td>
<td>Stagecraft</td>
<td>4</td>
</tr>
<tr>
<td>DRAM 341.</td>
<td>Dramatic Theory and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 351.</td>
<td>History of Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 352.</td>
<td>History of Theatre II</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 430.</td>
<td>Theatre Workshop II</td>
<td>6</td>
</tr>
<tr>
<td>DRAM 460.</td>
<td>Directing</td>
<td>4</td>
</tr>
<tr>
<td>DRAM 461.</td>
<td>Senior Project</td>
<td>4</td>
</tr>
</tbody>
</table>
One of the following as recommended by the major adviser:

- DRAM 321. Makeup
- DRAM 322. Lighting
- DRAM 323. Scene Design
- DRAM 324. Costuming

Total: 38 units

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:

- DRAM 295/495 Selected Topics in Drama 1-5 units
- DRAM 325 Costume Design, 3 units
- DRAM 333 Contemporary Theatre, 3 units
- DRAM 400 Advanced Acting, 4 units
- DRAM 455 American Theatre, 3 units
- DRAM 498/598 Individual Study, 1-5 units

DRAMA COURSES FOR NON-MAJORS

Although all courses in the Drama Curriculum are available to non-majors provided prerequisites (if any) are met, the following are particularly recommended: Introduction to Theatre, Introduction to Cinema, the "basic techniques" courses, Beginning Acting, Stagecraft, Costuming, History of Theatre I and II, Contemporary Theatre, American Theatre, and Theatre Workshop.

LIBERAL STUDIES CONCENTRATION IN DRAMA

Twenty-three or twenty-four units as approved by a drama adviser.

Lower Division

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 210. Basic Theatre Management</td>
<td>1</td>
</tr>
<tr>
<td>DRAM 250. Beginning Acting</td>
<td>3</td>
</tr>
</tbody>
</table>

Two courses selected from the following:

- DRAM 221. Basic Makeup (1)
- DRAM 222. Basic Lighting (1)
- DRAM 224. Basic Costuming (1)

Upper Division

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 315. Junior/Senior Forum</td>
<td>1</td>
</tr>
<tr>
<td>DRAM 320. Stagecraft</td>
<td>4</td>
</tr>
<tr>
<td>DRAM 430. Theatre Workshop II</td>
<td>2</td>
</tr>
<tr>
<td>DRAM 460. Directing</td>
<td>4</td>
</tr>
</tbody>
</table>
Two courses selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 300</td>
<td>Acting (4)</td>
<td></td>
</tr>
<tr>
<td>DRAM 321</td>
<td>Makeup (3)</td>
<td></td>
</tr>
<tr>
<td>DRAM 322</td>
<td>Lighting (3)</td>
<td></td>
</tr>
<tr>
<td>DRAM 324</td>
<td>Costuming (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total ........................................................................ 6-7

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COURSE DESCRIPTIONS

Lower Division

DRAM 101. 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. (Formerly 220)

DRAM 200. Basic Performance (1)

Exercise in vocal and pantomimic technique for the beginning performer. Theatre games and improvisation designed to develop the human instrument.

DRAM 210. Basic Theatre Management (1)

An introduction to the methods of operating a theatre as a business; publicity, box office, and house management.

DRAM 221. Basic Makeup (1)

An introduction to the practice of making up for the stage.

DRAM 222. Basic Lighting (1)

An introduction to the practice of lighting the stage; basic electricity, creation of effects and operation of current devices.

DRAM 223. Basic Technical Production (1)

An introduction to the techniques of back stage operation.

DRAM 224. Basic Costuming (1)

An introduction to the practice of costuming a play; basic sewing techniques and methods of reproducing period costumes.

DRAM 230. Theatre Workshop I (1-2)

Practice in all phases of theatrical production for public performance. May be repeated for credit once each semester.
DRAM 250. Beginning Acting (3)

Vocal training and exercise in expressive movement. Basic steps in characterization, script analysis and rehearsal techniques. (Formerly 200 & 250) Prerequisite: DRAM 200 or consent of instructor.

DRAM 295. 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. May be repeated for credit.

Upper Division

DRAM 300. Acting (4)

Study and practice of acting through reading of prominent theories, rehearsal and performance of selected scenes from classic and modern plays. Prerequisite: DRAM 250 or consent of instructor.

DRAM 305. Introduction to Cinema (3)

Study of the cinema and its relationship to contemporary culture. Includes a survey of selected films, critical discussions and written appraisal of films. (Formerly 424) (Same as ENGL 305)

DRAM 315. Junior/Senior Forum (1)

Weekly colloquium for junior and senior Drama majors. Discussion and analysis of problems in current play production and departmental projects. Performance critiques. May be repeated for credit. Prerequisite: Standing as a junior or senior Drama major or consent of instructor.

DRAM 320. Stagecraft (4)

Principles and practice in the techniques of building, painting, mounting and rigging of stage scenery and properties for production. (Formerly 320 & 321)

DRAM 321. Makeup (3)

Principles and practice in the art of theatrical makeup. (Formerly 309) Prerequisite: DRAM 221 or consent of instructor.

DRAM 322. Stage Lighting (3)

Theory and practice in the art of designing effective stage lighting. Prerequisite: DRAM 320 and consent of instructor.
DRAM 323. Scene Design (3)

Principles and practice in the techniques of creating effective scenery for the stage. Prerequisite: DRAM 320 and consent of instructor.

DRAM 324. Costuming (3)

Principles and practice in the art of theatrical costuming. (Formerly 306) Prerequisite: DRAM 224 or consent of instructor.

DRAM 325. Costume Design (3)

Fundamentals of costume design and history of costume periods. (Formerly 307) Recommended prerequisite: DRAM 324.

DRAM 341. Dramatic Theory and Criticism (3)

Investigation of dramatic and theatrical works as art forms. Introduction to methods of critical analysis.

DRAM 351. History of Theatre I (3)

Historical analysis of theatre from its primitive origins through the neo-classic period in France. (Formerly 421 & 422)

DRAM 352. History of Theatre II (3)

Historical analysis of theatre from the time of the Restoration in England to the outbreak of World War II. (Formerly 422 & 423)

DRAM 353. Contemporary Theatre (3)

Historical analysis of the theatre since World War II. Emphasis on recent developments.

DRAM 400. Advanced Acting (4)

Rehearsal and performance of scenes selected for their particular challenge to the advanced student. Emphasis on special problems of the individual student. Enrollment limited. Prerequisites: DRAM 300 and consent of instructor.

DRAM 430. Theatre Workshop II (2)

Advanced practice in all phases of theatrical production for public performance. May be repeated for credit once each semester. Prerequisite: Consent of instructor.

DRAM 455. American Theatre (3)

Historical analysis of theatre and drama in the United States from Colonial times to the outbreak of World War II.
DRAM 460. Directing (4)

Examination of history, principles and procedures of the theatrical director. Practical scene work in composition, movement, and tempo. Practical scene work in period styles.

DRAM 461. Senior Project (4)

Senior Drama majors, in consultation with the Drama faculty, will produce a series of public performance projects. Prerequisites: Standing as a senior Drama major and consent of instructor.

DRAM 495. 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. May be repeated for credit.

DRAM 498. Individual Study (1-5)

For students capable of independent work and in need of advanced specialized study. May be repeated for credit. Prerequisite: Consent of instructor.

DRAM 598. Individual Study (1-5)

For graduate students capable of independent work, and in need of advanced specialized study. May be repeated for credit. Prerequisite: Consent of instructor.
The School of Behavioral and Social Sciences offers the degree Bachelor of Arts, Economics. The objectives of the major in economics are: (1) to provide a concentration in economics as the central core of a liberal 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 pre-professional base for the prospective law student; and finally, (4) to expand course offerings for the prospective business administration major enabling him to satisfy vocational objectives in government, business, and/or industry.

The College also offers the degree Bachelor of Arts, Social Sciences. The student seeking this degree may select his interdisciplinary major in economics and two other disciplines within the social sciences. (For further information, see Social Sciences.)

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.
4. Completion of a minor is not required.

DEGREE MAJOR IN ECONOMICS

Prerequisites to the Major

ECON 250, 251. 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 macrotheory and microtheory (ECON 400 and 420).
Quantitative Analysis (ECON 320), Senior Seminar (ECON 496), and at least one course each from four of the areas of specialization:

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

DEGREE MINOR IN ECONOMICS

Twelve units approved by the minor adviser are required, including at least 12 units in upper division courses.

TEACHING CREDENTIALS

Majors in economics for elementary and secondary credentials must fulfill the following requirements:

1. Degree major in economics.
2. Secondary credential students must complete 6 units in courses in economics as postbaccalaureate work and receive approval of Economics as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTIONS

Lower Division General Courses

ECON 250. Principles of Economics I (4)

Macroeconomics; scope, method, economic resources, monetary system, income determination, economic stability-instability, public finance.

ECON 251. 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.

ECON 295. 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. May be repeated for credit.
Upper Division

ECONOMIC THEORY AND DOCTRINES

ECON 315. 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 331. Managerial Economics (3)

Application of economics to management decision making; demand analysis and sales forecasting, production and cost analysis, pricing approaches, government regulations. Prerequisite: Principles of Economics or consent of instructor.

ECON 400. Intermediate Theory (Macroeconomics) (3)

Macroanalysis; income levels, expenditures, prices and employment; application to depression and inflation. Prerequisite: Economic Principles or consent of instructor.

ECON 401. 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 420. Intermediate Theory (Microeconomics) (3)

Theory of the firm; contemporary theory of demand, supply, production, and costs; market price under monopoly, monopolistic competition, oligopoly, and pure competition; theory of factor prices. Prerequisite: Economic Principles or consent of instructor.

MONEY AND BANKING

ECON 332. 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.
PUBLIC FINANCE AND FISCAL POLICY

ECON 454. Public Finance and Fiscal Policy (3)

Principles, problems, and policies of public expenditure, credit, debt, budgeting and fiscal policy. Prerequisite: Economic Principles or consent of instructor.

ECON 455. Taxation and the American Economy (3)

Principles, problems, policies of local, state and federal taxation; economics, ethics, law, administration of the tax system; influence of tax policy on the economic system; state and federal income tax returns. Prerequisite: Economic Principles or consent of instructor.

LABOR ECONOMICS

ECON 410. 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.

INTERNATIONAL ECONOMICS

ECON 405. Comparative Economic Systems (3)

Capitalism and alternative economic systems; differences and comparative performance. Prerequisite: Economic Principles or consent of instructor.

ECON 440. Economic Development (3)

Economic development of contemporary less developed countries; trade, agriculture, industry, education and industrial development problems; economic theories, and policy tools for case studies. Prerequisite: Economic Principles or consent of instructor.

ECON 441. International Trade (3)

Pure theory of international trade, commercial policies, tariff issues and other trade restrictions, balance of payments, foreign exchange, alternative international monetary systems, weaknesses of the contemporary system and proposals for its reform, current issues of international monetary relations and their latest developments.

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ECON 442. Soviet Economics (3)

Institutions and operating principles of the Soviet planned economy; economic performance to present; prospects for future.

ECON 445. Economic Planning (3)

Structure, methodology and application of economic planning; decentralized vs. centralized organization of economic activity; macroeconomic planning models. Prerequisite: Economic Principles or consent of instructor.

ECONOMIC HISTORY

ECON 415. Economic History of the United States (3)

Analysis of economic growth and development from colonial period to present; application of economic principles to the facts of history. (Formerly 311) Prerequisites: Economic Principles or consent of instructor; Sophomore standing.

ECON 416. Economic History of Europe (3)

Analysis of economic development from medieval period to present. Emphasis on the emergence and evolution of capitalism, the economics of imperialism, the industrial revolution and the European economic community. (Formerly 310) Prerequisite: Sophomore standing.

QUANTITATIVE ECONOMICS

ECON 320. Quantitative Analysis I (4)

Measurement and analysis of economic data, statistical inference, simple and multiple regression theory and its application, building of econometric models.

ECON 430. Mathematical Economics I (3)

Static analysis; comparative-static analysis; optimization problems, input-output analysis; linear programming and game theory. Prerequisite: Economic Principles or consent of instructor.

GENERAL COURSES

ECON 495. 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 may be repeated for credit. Prerequisite: Junior standing or consent of instructor.
ECON 496. 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 498. Individual Study (1-5)

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.
EDUCATION

Richard V. Jones, Jr., Ed.D., Professor, Chairman
James C. Cole, Ed.D., Professor
Charles R. Farrar, Ed.D., Professor
William F. McClintock, Ph.D., Professor
Haig A. Rushdoony, Ed.D., Professor
Lorna M. Swain, Ed.D., Professor
Joseph W. Corbin, Ed.D., Associate Professor
David Glenday, Ed.D., Associate Professor
Lawrence E. Gowin, Ed.D., Associate Professor
Jack A. Graves, Ed.D., Associate Professor
Priscilla R. Smith, Ed.D., Associate Professor
Roy Y. Yasui, Ph.D., Associate Professor
R.J. Moriconi, Ed.D., Associate Professor
Lloyd R. Thompson, Ed.D., Associate Professor
Edward R. Credell, Ph.D., Associate Professor

The College, in addition to curricula in the liberal arts, offers professional programs in the Division of Education to prepare candidates for elementary and secondary school teaching certification, school supervision, and school counseling and guidance. Those students interested in teaching credential programs should make application to the Office of the Division of Education. Graduate programs leading toward a Master of Arts in Education with concentrations in elementary or secondary curriculum, supervision, or in school counseling are also available to qualified students. Those students interested in graduate degree programs should obtain information from the Division of Education Office. The College also offers specialized preparation for teachers in the area of the speech and hearing handicapped, as described in the Speech Communications section of this catalog.

Professional programs in education are designed to help students achieve those competencies which are essential to effective teaching within the range of services authorized by the respective teaching credentials. Credential programs include study of the purposes of American education, the nature of modern society, human growth and development, the learning process, and instructional materials and techniques applicable at successive education levels. It is assumed that the student will also acquire a broad base of liberal arts preparation, including a major in a selected field of academic study. All credential programs are presently accepted by the California State Board of Education in fulfillment of certification regulations.*

* The California State Board of Education is 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.
Students in a credential program on November 1, 1971, are subject to the conditions and requirements stated in the Stanislaus State College Catalog of 1971-72. Students admitted to a credential program after November 1, 1971 may be subject to the requirements of the Teacher Preparation and Licensing Law of 1970.

Under this law, minimum requirements for the teaching credential are:

1. A baccalaureate degree or higher degree, (except in professional education).
2. A fifth year of study, 1(May be completed within seven years of the first employment of the certified employee.)
3. An approved program of professional preparation. 2
4. Passage of a subject matter examination. A subject matter examination authorizing single subject instruction is required for all subjects taught in California public secondary schools. The subject matter examination requirement may be waived for graduates of accredited institutions of higher education who hold specified subject matter degrees in any of the following categories:

   English
   Physical & Natural Science
   Mathematics
   Industrial Arts
   Physical Education

   Business
   Music
   Art
   Home Economics
   Foreign Languages

A general subject matter examination authorizing teaching multiple subjects (as in most elementary schools) shall include an examination of the candidate's knowledge of the following areas: English, Social Science, Fine Arts, General Science and Mathematics. The general subject matter examination may be waived for candidates who have completed "diversified" or "liberal arts" degrees or programs consisting of 84 semester hours equally distributed among the following four areas:

   English, including grammar, literature, composition and speech.
   Mathematics and the physical or life sciences.
   Social Sciences.
   Humanities and the fine arts, including foreign languages.

The Liberal Studies Major at California State College, Stanislaus meets this requirement for the elementary credential.

1 "Fifth year" means a full academic year, or its equivalent, at the postgraduate level taken at an approved college or university.
2 "Professional preparation" means professional education courses and one semester or its equivalent, of full-time student teaching.
5. Demonstration of a knowledge of the various methods of teaching reading.

TYPES OF CREDENTIAL PROGRAMS:

A candidate for a teaching credential may pursue one of the following: I -- the regular five-year pattern leading to a life credential; II -- the four-year pattern leading to a preliminary credential, or III -- the Internship Program (not being offered in the 1973-74 academic year).

The credential programs at California State College, Stanislaus lead to two kinds of authorization for teaching (credentials) as follows:

(a) Single subject instruction, for teaching specified subject matter courses as is commonly practiced in California high schools and most California junior high schools.
(b) Multiple subject instruction, as is commonly practiced in California elementary schools.

Details of programs leading to a Teaching Credential Authorizing Multiple Subject Instruction (Elementary) or a Teaching Credential Authorizing Single Subject Instruction (Secondary) are contained in the Handbook for Students Seeking a Teaching Credential, Part III, available from the Division of Education.

Students interested in credential programs should contact the Division of Education early in their academic career.

MASTER OF ARTS IN EDUCATION

The Master of Arts in Education is designed to meet the professional growth needs of teachers. Course work is offered late afternoons and evenings. Concurrent programming for advanced credentials is offered. The masters program may be completed in one of three areas of specialization: (1) Curriculum & Instruction (Elementary, Secondary, and Early Childhood Education); (2) Supervision & Administration; and (3) School Counseling. The program requires each candidate to complete (one of the following) a thesis, a project, three approved masters of arts papers, or a comprehensive examination, in addition to 30 semester units of required course work and approved electives. Each M.A. student is also required to pass an oral examination.

Programming worksheets which outline required and elective course work for each specialization may be obtained in the Division of Education Office. Preadmission screening data must be filed with the division well in advance of registration in order that the Division of Education may select the students to be admitted under existing quotas.
Applicants should contact the Division of Education for descriptive materials concerning admission procedures and advisement. These materials are available in the division.

Prior to admission as a Pre-Candidate in the Education M.A. Program, the applicant will submit the following:

1. Completed CSCS Application Form (Registrar's office)
2. A Declaration of Intent (to pursue the M.A. Program)
3. Two letters of recommendation from (1) a supervisor; (2) a college professor.
4. A vita or resume which summarizes the candidate's educational background and professional experience.
5. Transcripts from all colleges attended.
6. A recent snapshot.

Upon the completion of approximately eight semester units of course work and the Graduate Record Examination, the pre-candidate will be re-evaluated for acceptance to full graduate standing.

In addition to the completion of an approved thesis, project, three masters papers, or a comprehensive examination, the student is required to complete at least 30 units of required and elective units for the degree. Listed below are specific course requirements for each of the three areas of specialization in the M.A. Program. It should be noted, however, that the specific course requirements for the individual student will be determined through advisement.

Curriculum & Instruction (Elementary, Secondary, or Early Childhood Education)

One from: EDUC 501, 502, 503, 504
Required: EDUC 505, 506, and 9-15 semester units in Curriculum & Instruction
Plus electives on advisement

School Counseling

One from: EDUC 501, 502, 503, 504
Required: EDUC 505, 506, plus 16-20 semester units in Counseling and related areas
Plus electives on advisement

Supervision & Administration

One from EDUC 501, 502, 503, 504
Required: EDUC 505, 506, plus 13 semester units in Supervision - Administration and related areas
Completion of at least 12 semester units in the student's academic major is required for the supervision credential.
Plus electives on advisement.
COURSE DESCRIPTIONS
Lower Division

EDUC 100. 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.

EDUC 200. Introduction to Education (2)
An overview of the field of education and the responsibilities of teaching. Designed for students contemplating entrance into the field of teaching at the elementary, secondary or college level, and for others who desire a general overview of education in the U.S. Recommended, but not required in the credential program. Prerequisite: Medical clearance must be obtained prior to public school observation.

EDUC 295. Selected Topics in Education (Topics to be specified in Class Schedule) (1-5)
Development of a selected branch of education. Topics may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

EDUC 300, The Instructional Aide (2)
Observation and participation in a classroom as a teacher's aide. Study of the role of teaching in today's schools. Discussion of problems and issues in the public school classroom. Prerequisites: Consent of instructor, medical clearance.

EDUC 301. Foundations of Elementary Education (3)
Study of selected sociologically and psychologically based knowledge, skills and understandings related to teaching in the elementary schools. Prerequisites: Admission to the credential program and Junior or higher standing. EDUC 200 & 300 recommended.

EDUC 302. Foundations of Secondary Education (3)
Study of selected sociologically and psychologically based knowledge, skill and understandings related to teaching in the secondary schools. Prerequisites: Admission to the credential program and Junior or higher standing. EDUC 200 & 300 recommended.
EDUC 303. Ethnic Groups in Public Education (2)

Sociological study of selected ethnic groups in American public education; consideration of characteristics, trends, problems and general instructional implications. Formerly 414. Prerequisite: Junior standing.

EDUC 312. Elementary Curriculum & Instruction I (3)

Introduction to the skill subject of language arts and mathematics. Emphasis will be on the communication skills of speaking, listening, reading and writing in the elementary school. There will be major emphasis given to developing skills for the teaching of mathematics. Prerequisites: Consent of instructor, admission to credential program.

EDUC 313. Elementary Curriculum & Instruction II (3)

Teaching concepts and applications of social studies and science in grades K-9; instructional planning, demonstrations and materials based on modern strands and techniques. Prerequisite: EDUC 301 or equivalent, or consent of credential adviser.

EDUC 315. The Secondary School Program (3)

Introduction to teaching in secondary schools (grades 7-12). The purposes of secondary education; scope of the instructional program; current trends and practices. Analysis of educational practices appropriate to culturally different groups. Prerequisites: EDUC 301 and consent of credential adviser.

EDUC 316. Curriculum & Instruction: Selected Subjects (3)

Preparation for teaching in major and minor fields; analysis of current trends and practices. Review of courses of study and instructional materials; use of instructional techniques and evaluation. Prerequisites: EDUC 301 and consent of credential adviser.

EDUC 317. Secondary Curriculum & Instruction: Social Sciences (3)

Contemporary trends in social studies education. Curriculum development, selection, and organization of materials and procedures for the secondary school. Formerly 454. Prerequisite: Consent of credential adviser.

EDUC 318. Curriculum & Instruction: Art (3)

Contemporary trends in art education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. Formerly 452. Prerequisite: Admission to student teaching and consent of credential adviser.
EDUC 319. Curriculum & Instruction: Physical Education (3)

Preparation for teaching physical education in the secondary schools. Current trends and practices, instructional materials and techniques. Prerequisite: EDUC 302 or equivalent, consent of credential adviser or teaching experience. (Same as PHED 319).

EDUC 320. Curriculum & Instruction: English (3)

Contemporary trends in English education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. Formerly 453. Prerequisite: Consent of credential adviser or teaching experience. (Same as ENGL 461).

EDUC 321. Curriculum & Instruction: Foreign Language (3)

Current practices in modern foreign language instruction, with emphasis on laboratory procedures and the audio-lingual-visual approaches. Formerly 451. Prerequisite: Consent of credential adviser or teaching experience.

EDUC 325. 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. Formerly 425. Prerequisite: Consent of credential adviser.

EDUC 336. Instructional Media (2)

Use of libraries, instructional materials centers, and audio-visual materials and equipment. Preparation and evaluation of instructional materials. Formerly 436. Prerequisite: Admission to credential program or teaching experience.

EDUC 347. Reading in Secondary Schools (3)

Selection and organization of materials; instructional procedures for the developmental reading programs (7-12), reading and the content subjects; analysis of research concerning reading needs. Formerly 447. Prerequisite: Admission to credential program, or consent of instructor.

EDUC 381. Elementary School Student Teaching I (4)

Supervised observation-participation and student teaching in public elementary school settings. Includes a weekly on-campus meeting dealing with legally required instruction in elementary schools, the structure of public education, and student teaching problems. P or F grade is given. Formerly 441. Prerequisites: EDUC 301 or equivalent and one curriculum course. (May be taken concurrently).
EDUC 382. Secondary School Student Teaching I (4)

Supervised observation-participation and student teaching in public secondary school settings. Includes a weekly seminar dealing with methodology, materials of instruction, and problems encountered in student teaching experiences. P or F grade is given. Formerly 460. Prerequisite: Consent of credential adviser.

EDUC 400. The Counselor Aide (2)

The role of the counselor's assistant in the public schools for students who desire an introductory experience in counseling under professional supervision. A regular assignment at times convenient to the student as a counselor aide. Medical clearance required. Prerequisite: Upper division or graduate standing and consent of instructor.

EDUC 410. Improving Reading In the Elementary School (3)

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. Designed for practicing teachers. Prerequisite: Teaching experience and consent of instructor.

EDUC 412. Seminar: Diagnostic Teaching (3)

Methods of diagnosing student difficulties and prescribing remediation in terms of instruction and curriculum. Performance based instruction evaluation. Prerequisite: EDUC 481 or 482 or equivalent.

EDUC 420. 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. Formerly 422. Prerequisite: Upper division standing.

EDUC 421. Outdoor Education (2)

Introduction to outdoor teacher education, with appropriate teaching procedures and instructional materials. Includes one week-end directed outdoor school field experience. Formerly 434. Prerequisite: One curriculum course.
EDUC 423. Principles of Early Childhood Education (3)

An analysis of the early childhood education program from its beginning to today. An overview of the relationships among the school, the child and the home. Prerequisite: Consent of instructor.

EDUC 424. 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. Prerequisite: EDUC 325 or 410 or equivalent, or consent of instructor.

EDUC 425. Reading Instruction In the Intermediate Grades (2)

Emphasis on reading to learn, particularly reading-study skills; individualized instruction; extension of reading concepts. Prerequisite: EDUC 325 or 410 or equivalent, or consent of instructor.

EDUC 430. Health & P.E. in Elementary Schools (2)

Purposes, materials, activities and techniques applicable in elementary school health and physical education. Prerequisite: EDUC 301 or equivalent, or consent of instructor.

EDUC 481. Elementary School Student Teaching II (8)

Supervised observation, participation and student teaching in public elementary school settings. Includes a weekly on-campus seminar meeting dealing with professional ethics and activities, use of audio-visual equipment and student teaching problems. P or F grade is given. Formerly 443. Prerequisite: EDUC 381 and two curriculum courses, (one may be taken concurrently).

EDUC 482. Secondary School Student Teaching II (8)

Supervised observation-participation and student teaching in public secondary schools. Includes weekly seminars dealing with instructional evaluation and problems encountered in student teaching experiences. P or F grade is given. Formerly 461. Prerequisites: EDUC 382 or equivalent and consent of credential adviser.

EDUC 483. Student Teaching, Outdoor Education (2)

Directed observation-participation and student teaching of sixth graders for one school week out-of-doors at a selected campsite; includes on-campus pre-outdoor and post-outdoor teaching meetings. Formerly 444. Prerequisites: EDUC 421 and consent of credential adviser.
EDUC 484. Seminar: Analysis & Strategies of Teaching (3)

Analytical methods used to study the instructional process. Investigation theories and methods in instructional analysis. Emphasis on strategies of teaching. Prerequisite: EDUC 481, 482 or equivalent, or consent of credential adviser.

EDUC 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.

EDUC 498. Individual Study (1-5)

For qualified undergraduate students in need of specialized study not available through the regular program. Request for individual study must be presented to the Chairman of the Division of Education prior to registration. May be repeated for a total of 6 units. Prerequisites: Divisional approval and consent of instructor.

Graduate Courses

EDUC 501. Education in Society (3)

Study of social forces influencing the educative process, the curriculum, and institutional and professional roles in American public education. Prerequisite: Completion of student teaching or consent of adviser.

EDUC 502. History of Education (2)

History of Education, Western and U.S., emphasizing the use of historical data and methods in interpreting problems and issues in public education. Prerequisites: EDUC 301 or 302 or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 503. Comparative Education (2)

Study of representative national educational programs, emphasis on the political, social and economic determinants, and contemporary issues and trends. Prerequisite: EDUC 301 or 302 or equivalent, or consent of instructor. Teaching experience recommended.
EDUC 504. Philosophy of Education (2)

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. Prerequisite: EDUC 301 or 302 or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 505. 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: EDUC 301 or 302 or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 506. Theories of Instruction (3)

Analysis and evaluation of instructional theories as they apply to the classroom. Study of human learning as applied in the public schools. Prerequisite: EDUC 301 or 302 or consent of instructor. Teaching experience recommended.

EDUC 523. Curriculum in Early Childhood (3)

An in-depth study of early childhood curriculum class organization, methods and materials. Prerequisite: EDUC 301 or consent of instructor.

EDUC 525. Reading Diagnosis & 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. Formerly 520. Prerequisites: EDUC 325, 347 or 410, teaching experience, and consent of instructor.

EDUC 526. Curriculum & Instruction in Social Studies (3)

Analysis and evaluation of social studies curriculum and instruction in the public schools. Prerequisites: EDUC 313, teaching experience, and consent of graduate adviser and instructor.

EDUC 527. Curriculum & Instruction in Language Arts, (K-12) (3)

Analysis and evaluation of language arts curriculum in elementary and secondary schools. Prerequisites: EDUC 325 or 425 or 347, teaching experience, and consent of graduate adviser or instructor.
EDUC 528. Curriculum & Instruction in Math, (K-12) (3)

Analysis and evaluation of the mathematics curriculum in elementary and secondary schools. An opportunity for in-depth study in selected aspects of curriculum planning and instruction. Prerequisite: EDUC 313 or 315 or equivalent, or consent of instructor.

EDUC 529. Curriculum & Instruction in Science (K-12) (3)

Analysis and evaluation of science curriculum in K-12 schools. Opportunity for extensive study in selected aspects of contemporary planning and instruction. Prerequisite: EDUC 313, or equivalent or consent of instructor.

EDUC 530. Individualizing Instruction (2)

Developing instructional plans, instructional materials and learning strategies to implement individualized instruction. Analysis and evaluation of individualized systems. Prerequisite: Teaching experience or consent of instructor.

EDUC 531. Curriculum Planning & Development (3)

Analysis of models in curriculum development; systematic planning for curriculum improvement; behavioral objectives. Formerly 564. Prerequisite: Teaching experience or consent of instructor.

EDUC 532. New Developments in Education (2)

Evaluation of new developments in elementary and secondary education; philosophical bases, organizational structure, curriculum innovations, instructional materials and methodology. Formerly 587. Prerequisite: Teaching experience or consent of instructor.

EDUC 550. 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. Formerly 561. Prerequisite: Teaching experience or consent of instructor.

EDUC 551. Supervision of Instruction (3)

Techniques and practices used in school supervision; selection, placement and evaluation of school personnel; analysis or personnel administration. Formerly 562. Prerequisite: Teaching experience or consent of instructor.
EDUC 552. Legal & Financial Aspects of Education (3)

Legal principles related to education as defined by laws and judicial interpretations, with special references to the Education Code of California. Introduction to financing and budgeting systems. Formerly 580. Prerequisite: Consent of instructor.

EDUC 553. Counseling & Testing in Education (3)

Introduction to counseling programs and processes; measurement and evaluation of learning; techniques of test construction for classroom use; statistical aspects of testing; selection and use of standardized tests; evaluation of progress. Intended as an introductory course in the masters and credential sequence. Prerequisite: Teaching experience or consent of instructor.

EDUC 554. Exceptional Children & Youth (3)

Physical, intellectual, social and emotional deviations among children and youth; community resources, educational adjustments. Formerly 576. Prerequisite: Consent of instructor.

EDUC 555. Administration of Individual Schools (2)

An analysis of personnel process and utilization of appropriate materials and procedures to promote staff development; an analysis of specific school programs; an exploration of basic principles in administration appropriate for elementary and secondary administration and supervision. Prerequisites: Admission to the administration/supervision credential program and consent of instructor.

EDUC 556. 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. Formerly 563. Prerequisite: Consent of graduate adviser.

EDUC 560. Family Counseling & Community Resources (3)

Dynamics of relationships of family, community and school; community wide services; agency-school relationships; family visiting, including conferences, interviews and referrals. Formerly 532. Prerequisite: Consent of instructor.
EDUC 561. Educational & 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. Formerly 581. Pre-requisite: Consent of instructor.

EDUC 562. Advanced Counseling (3)

Counseling practices including commonly-used methods of psychotherapy. Practice in techniques of counseling. (Same as PSYC 578). Prerequisites: PSYC 379 and consent of graduate adviser.

EDUC 563. Counseling Theory (3)

Introduction to major theories of counseling. Demonstrations and reviews of current literature. Formerly 579. Pre-requisite: PSYC 331 or 332. (Same as PSYC 379.)

EDUC 564. The Counselor (3)

Focus on the person as counselor, the becoming self of the counselor, his personal identity and integrity, and his 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: Graduate standing and consent of instructor.

EDUC 570. Seminar in Elementary Education (2)

Analysis and synthesis of relationship of content curricula to elementary school organization. Formerly 521. Prerequisites: Work in EDUC 525-529 series; and permission of graduate adviser.

EDUC 571. Seminar in Secondary Education (2)

An analysis and evaluation of curriculum instructional policies and practices in the contemporary secondary school. Formerly 548. Prerequisite: Consent of graduate adviser.

EDUC 572. Seminar in School Supervision & Administration (2)

Case study analysis of practical problems in school administration and supervision. Open to practicing principals, supervisors and consultants and students in administration and supervision credential program. Formerly 583. Prerequisite: Consent of graduate adviser.
EDUC 575. Seminar in Reading Research (2)

Investigation and review of research and writings in reading; student must select one topic for in-depth analysis. Prerequisite: EDUC 325 or 347 or 410 or equivalent, teaching experience, consent of instructor. (Formerly 575).

EDUC 576. Pupil Personnel Services Seminar (2)

Current practices in pupil personnel services. Organization and administration of pupil personnel services. Open to practicing personnel and those near completion of program. Formerly 535. Prerequisite: Consent of instructor.

EDUC 595. 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 may be repeated for credit.

EDUC 598. Individual Study (1-5)

For classified graduate students in need of advanced and specialized study related to a thesis. Prerequisite: Approval of student's graduate committee and consent of instructor. May be repeated for a total of 6 units.

EDUC 599. Thesis or Project (2)

This enrollment involves individual consultation in the preparation of a masters thesis or project. Prerequisite: Approval of student's graduate committee and consent of instructor. May be repeated for a total of 4 units.

EDUC 694. Field Work - Supervision (2-4)

Actual work experience in the field for which student is seeking credential. Joint supervision by district and college personnel.

Field Work - Counseling (2-4)

Actual work experience in the field for which student is seeking credential. Joint supervision by district and college personnel.

EDUC 698. Individual Study (1-5)

For qualified graduate students in need of advanced or specialized study. Requests for individual study must be presented to the Chairman of Division of Education six weeks prior to registration. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.
ENGLISH AND FOREIGN LANGUAGES

Douglas H. Taylor, Ph.D., Associate Professor of English, Chairman
James P. Jensen, Ph.D., Professor of English
Lawrence D. Berkoben, Ph.D., Associate Professor of English
Joseph Brewer, Ph.D., Associate Professor of English
Lola V. Johnson, M.A., Associate Professor of English
Paul P. Reuben, Ph.D., Associate Professor of English
Robert K. Anderson, Ph.D., Assistant Professor of Spanish
John E. Carroll, Ph.D., Assistant Professor of English
Michael C. Fuller, Ph.D., Assistant Professor of French
Gerhard Mack, Ph.D., Assistant Professor of German
George Settera, Jr., Ph.D., Assistant Professor of English
Jack W. Williams, M.A., Assistant Professor of English

The Department of English and Foreign Languages offers the degrees: Bachelor of Arts, and Master of Arts, English; Bachelor of Arts, French; Bachelor of Arts, Spanish; and a degree minor in German. Courses are offered in language, literature, and criticism, and are designed not only to familiarize the student with a body of knowledge and learning, but also to prepare and encourage him to make informed and independent critical evaluations.

Although most courses in language and literature fulfill college-wide needs regardless of the student's major field, they also provide preparation for various professions. Certain courses are indispensable for a proper grounding in the various programs of the department, but beyond these the student encounters a wide selection of courses during his career.

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.
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

Prerequisites to the Major

ENGL 100. English Composition, 4 units
ENGL 101. Introduction to Literature, 3 units
ENGL 201. Critical Approaches to Literature, 3 units
The Major

Students are expected to demonstrate proficiency in
Advanced Composition ................................. 3
Completion of 30 units in upper division English courses as
approved by the major adviser, to include at least one
course from each of the areas listed below ............ 30
Total .................................................... 33

1. A major figure
2. A genre study
3. English literature before 1800
4. English literature after 1800
5. American literature

DEGREE MINOR IN ENGLISH

(18 units, to include at least 10 upper division units)

Lower Division
ENGL 100. English Composition, 4 units
ENGL 101. Introduction to Literature, 3 units

Upper Division

Completion of a minimum of 10 upper division units in English
as approved by the minor adviser.

TEACHING CREDENTIALS

Majors in English for elementary and secondary credentials must
fulfill the following requirements:

1. Degree major in English.
2. Complete ENGL 300 by course or examination.
3. Secondary credential candidates must complete 6 units in
courses in English as post-baccalaureate work and receive
approval of the English and Foreign Languages Department
as to subject matter competence.
4. Complete requirements for credential as presented by the
   Education Department.
5. Elementary credential candidates may not waive the academic
   minor.

COURSE DESCRIPTIONS

Lower Division

ENGL 100. English Composition (4)

Directed writing based upon analytical reading of documents to
include: expository prose, fiction, drama, journals.
ENGL 101. Introduction to Literature (3)

Introduction to literature of various types. Readings in fiction, poetry, and drama.

ENGL 150. Perspectives in World Literature (3)

Readings in various world literary masterpieces with emphasis upon their contemporary relevance. Work may be organized according to a theme such as "Man and Society," or "Man and His Myths." For the non-major. (Formerly 215)

ENGL 201. Critical Approaches to Literature (3)

Basic theories, approaches, techniques, and terminology in the study of literature with special emphasis on the study of poetry. Prerequisites: ENGL 100, 101 or equivalent.

ENGL 205. Technical and Report Writing (3)

Principles of technical writing and the composition of technical reports. Directed writing in various technical fields. Recommended for students in the natural sciences and business administration. Prerequisite: ENGL 100.

ENGL 295. Selected Topics in English (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in English. Topics may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

ENGL 300. Advanced Composition (3)

Advanced expository writing based on analytical reading of selected documents. Prerequisite: ENGL 100 or equivalent.

ENGL 301. Writing Workshop (3)

Practice in the methods and techniques of various types of writing. Workshop may vary from term to term. Typical courses include: Journalistic Writing; Creative Writing. Offered each semester. Prerequisite: ENGL 100 or equivalent.

ENGL 305. Introduction to Cinema (3)

Study of the cinema and its relationship to contemporary culture. Includes a survey of selected films, critical discussions and written appraisal of films. (Formerly 424) Prerequisite: Consent of instructor. (Same as Drama 305)
ENGL 310. Studies in English Literature to 1800 (3)

Studies in various aspects of English literature to 1800. Course content may vary from term to term. Typical courses include: Medieval Poetry; The Tradition of Courtly Love; Renaissance Epic Verse; The Literature of Love 1557-1603; Elizabethan and Jacobean Tragedy; Augustan Satire; Women in the Literature of England 1600-1800. Offered each semester. Different titles may be repeated for credit under this course number.

ENGL 320. Studies in English Literature after 1800 (3)

Studies in various aspects of 19th and 20th century English literature. Course content may vary from term to term. Typical courses include: Major Romantic Poets and Essayists; Victorian Faith and Doubt; Survey of Modern British Poetry. Offered each semester. Different titles may be taken for credit under this course number.

ENGL 330. Studies in American Literature (3)

Studies in various aspects of American literature. Course content may vary from term to term. Typical courses include: The Realistic American Novel; The Romantic American Novel; Literature of the Lost Generation; The American Renaissance; The Revolution and After. Offered each semester. Different titles may be taken for credit under this course number.

ENGL 340. Studies in Major Figures (3)

Studies in various major figures in English and American literature. Writers may be studied singly or in pairs. Typical courses include: Shakespeare's Romances; Shakespeare and Renaissance Historiography; Milton's Major Poetry; Chaucer; Dickens and Carlyle; Whitman and Dickinson; James Joyce; D. H. Lawrence. Offered each semester. Different titles may be taken for credit under this course number.

ENGL 350. Genre Studies (3)

Studies in the various genres. Course content may vary from term to term. Typical courses include: The 18th Century English Novel; The Victorian Novel; Modern Drama; The Modern British Novel. Offered each semester. Different titles may be taken for credit under this course number.

ENGL 370. Studies in Minority Literature (3)

Studies in the various aspects of literature written by minority groups. Course content may vary from term to term. Typical courses include: Black Classics; Native American Literature; American Jewish Writers. Offered each semester. Different titles may be taken for credit under this course number.
ENGL 380. 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.

ENGL 381. 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 pre-historic times to the present, but other languages will be treated.

ENGL 393. World Literature in Translation (2-5)

Studies in various aspects of world literature in English translation. Course content may vary from term to term. Typical courses include: Arthurian Romances; Goethe and Schiller; Masterpieces of the Spanish Golden Age; Greek and Roman Literature. Offered each semester. Different titles may be taken for credit under this course number. (Same as French, German, Spanish 393)

ENGL 400. Special Study in Major Figures (2-5)

Advanced study of a major figure or pair of major figures. Course content may vary from term to term. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.

ENGL 405. Special Study in Genre, Style, Mode (2-5)

Studies in various genres, styles, or modes of literary expression. Course content may vary from term to term. Typical courses include: The Utopian Dream in American Literature; Tragedy; Rhetoric and Literature; Realism in the English Novel. Offered each semester. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.

ENGL 410. Special Study in Medieval Literature (2-5)

Advanced study in Medieval Literature. Course content may vary from term to term. Typical courses include: Fabliaux; Chaucer's Early Poetry; Critical Approaches to Medieval Literature. Offered at least once every two years. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.

ENGL 420. Special Study in the Renaissance (2-5)

Advanced study in the Renaissance. Course content may vary from term to term. Typical courses include: Caroline Court Poetry; Ben Jonson; Antique Poets Historical; Metaphysical Poetry. Offered each year. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.
ENGL 430. Special Study in the Enlightenment and 18th Century (2-5)

Advanced study in the literature of the Enlightenment and 18th century. Course content may vary from term to term. Typical courses include: Transitional Poets of the Late 18th Century; London and 18th Century Literature; The Age of Skepticism. Offered at least once every two years. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.

ENGL 440. Special Study in the 19th Century (2-5)

Advanced study in the literature of the 19th century. Course content may vary from term to term. Typical courses include: Victorian Ideas; Wordsworth and Coleridge; The American and English Novel; A Study in Contrasts; The Romantic Ode. Offered each year. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.

ENGL 450. Special Study in the 20th Century (2-5)

Advanced study in the literature of the 20th century. Course content may vary from term to term. Typical courses include: Contemporary American Poetry; Currents in Modern European Literature; The Poetry and Criticism of T. S. Eliot; Contemporary British Poetry. Offered each year. Different titles may be taken for credit under this course number. Prerequisite: Consent of instructor.

ENGL 460. 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.

ENGL 461. Curriculum and Instruction: English (2)

Contemporary trends in English education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. (Formerly 453) Prerequisites: Admission to student teaching and consent of credential adviser and the department. (Same as Education 320)

ENGL 462. Children's Literature (3)

Introduction to children's literature; fiction, poetry, drama, fantasy, fairy tales, and folklore, ethnic materials. Analysis of children's literature and investigation of the techniques of teaching literature to children.

ENGL 463. Adolescent Literature

Introduction to adolescent literature; fiction, poetry, drama. Analysis of the literature and investigation of the techniques of teaching literature to adolescents.
ENGL 470. Interdepartmental Study (2-5)

Studies in various interdepartmental topics. Course content may vary from term to term. Typical courses include: Literature of Urban Life; Medieval English Drama; Literature, Backgrounds and Contemporary Performance; Myth in Art and Literature; Backgrounds of American Literature; The Political Novel. Courses will be team-taught with other academic departments. Prerequisite: Consent of instructor.

ENGL 495. Selected Topics in English (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in English. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

ENGL 498. Individual Study (1-5)

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.

MASTER OF ARTS DEGREE IN ENGLISH

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 select either the Thesis or the Non-Thesis Programs described below.

Prerequisites for Admission to the General Program

1. BA degree with a major or minor in English.
2. Undergraduate GPA of 3.0 in English courses.

Requirements for the Degree

1. Completion of at least 30 units to include the following:

   A. English 500. Seminar: Graduate Studies in English .......................... 5
   B. Minimum of 20 units to be completed from among seminars in the following subject areas:* .... 20
      English 510. Seminar: Medieval Literature
      English 520. Seminar: The Renaissance
      English 530. Seminar: The Enlightenment and 18th Century
      English 540. Seminar: The Nineteenth Century
      English 550. Seminar: The Twentieth Century

*Specific seminar titles will be announced in the Class Schedules
C. A maximum of five units to be chosen from the following:
   1. Thesis
   2. Upper division courses in English selected in consultation with the student's graduate adviser.

Total

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 and Foreign Languages.

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. A one-hour oral examination upon the thesis and the written examination.

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. A one-hour oral examination upon the seminar papers and the written examination.

COURSE DESCRIPTIONS

Graduate

General Prerequisites: Normally, an undergraduate major or minor in English is expected for admission to graduate seminars. Consultation with an English graduate adviser and his approval is required for all graduate credit courses.

ENGL 500. 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 510. 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.
ENGL 520. 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.

ENGL 530. 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.

ENGL 540. 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.

ENGL 550. Seminar: The 20th 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.

ENGL 595. Selected Topics in English (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in English. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

ENGL 598. Individual Study (1-5)

For qualified graduate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

ENGL 599. Thesis (3-5)
REQUIREMENTS FOR 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.
4. Completion of an academic minor is not required but is strongly recommended for secondary credential candidates.

DEGREE MAJOR IN FRENCH

Prerequisites to the Major

FREN 101, 102. Elementary French I, II, 8 units*
FREN 201, 202. Intermediate French I, II, 6 units*

The Major

Required courses in the major field:

FREN 301, 302. Advanced French Grammar and Composition I, II .................. 6
FREN 350. French Phonetics ........................................ 3
FREN 351. French Conversation ................................. 1

Elective courses in the major field:
Two courses from the sequence 330, 331, 332, 333 .......... 6
Upper division elective courses to total not less than 8 units .................................... 8
Total .............................................................. 24

*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.

DEGREE MINOR IN FRENCH

(26 units, to include at least 12 units in upper division, with a minimum of 14 college units)

Lower Division

FREN 101, 102. Elementary French I, II, 8 units*
FREN 201, 202, Intermediate French I, II, 6 units*

Upper Division

FREN 301, 302. Advanced French Grammar and Composition I, II, 6 units
One course from the sequence 330, 331, 332, 333, 3 units
Upper division electives, 3 units
COURSE DESCRIPTIONS
Lower Division

FREN 101. Elementary French I (4)

First year French: audio-lingual approach; understanding, speaking, reading and writing. No Prerequisite.

FREN 102. Elementary French II (4)

Continuation of FREN 101. Prerequisite: FREN 101 or equivalent or consent of instructor.

FREN 201. Intermediate French I (3)

Second year French, emphasizing the audio-lingual approach. Extensive review of the morphology and syntax of the language. Prerequisite: FREN 102 or equivalent or consent of instructor.

FREN 202. Intermediate French II (3)

Continuation of FREN 201. Prerequisite: FREN 201 or equivalent or consent of professor.

FREN 295. Selected Topics in French (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in French. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

FREN 301. Advanced French Grammar and Composition I (3)

Oral and written practice in French, syntactical analysis, written and oral composition and supplementary reading. Taught in French. Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 302. Advanced French Grammar and Composition II (3)

Continuation of FREN 301. Prerequisite: FREN 301 or equivalent or consent of professor.

FREN 330. Aspects of French Non-Fiction (3)

A course dealing with the development and evolution of French non-fiction, particularly essays, from Montaigne to the present. Conducted in French. Prerequisite: FREN 202 or equivalent or consent of instructor.
FREN 331. Aspects of French Drama (3)

A course dealing with selected French dramatic works, beginning with the Middle Ages and going to the present. Conducted in French. Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 332. 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 202 or equivalent or consent of instructor.

FREN 333. Aspects of the French Novel (3)

A course dealing with the development and evolution of the French novel, from its beginnings to the present. Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 350. 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. Prerequisites: FREN 202 or equivalent or consent of instructor.

FREN 351. 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) (Formerly 400) Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 393. French Literature in Translation (1-5)

Reading, discussion and interpretation of literature originally written in French with emphasis on determining the contributions of these works to world literature. Course may be repeated for credit. No prerequisite.

FREN 407. 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. (Formerly 425) Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 408. 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. Prerequisite: FREN 202 or equivalent or consent of instructor.
FREN 409. Modern French Poetry (3)

French poetry from the Parnassians to the present. Study of trends of the poetry from the mid-19th century to the present. Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 410. Modern French Fiction (3)

French novels from the end of the Romantic period to the present, stressing Flaubert, Zola, Proust, Gide, Mauriac, Saint-Exupéry, Camus, Sartre and the new novelists. Prerequisite: FREN 202 or equivalent or consent of instructor.

FREN 495. Selected Topics in French (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in French. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

FREN 498. Individual Study (1-5)

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 9 units. Prerequisite: Consent of instructor.

FREN 598. Individual Study (1-5)

For graduate students prepared for independent work, and in need of advanced and specialized study in French. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

DEGREE MINOR IN GERMAN

(26 units, to include at least 12 units in upper division, with a minimum of 14 college units)

Lower Division

GERM 101, 102. Elementary German I, II, 8 units*
GERM 201, 202. Intermediate German 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 German or the equivalent is required for admission to upper division courses.

Upper Division

GERM 301. Advanced German Grammar and Conversation, 3 units
GERM 310. Modern Germany, 3 units
Upper Division electives, 6 units
COURSE DESCRIPTIONS
Lower Division

GERM 101. Elementary German I (4)
First year German, audio-lingual approach. No prerequisite.

GERM 102. Elementary German II (4)
Continuation of GERM 101. Prerequisite: GERM 101 or equivalent or consent of instructor.

GERM 201. 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. Prerequisite: One year of college level German or equivalent or consent of instructor.

GERM 202. Intermediate German II (3)
Continuation of GERM 201. Prerequisite: German 201 or equivalent or consent of instructor.

GERM 295. Selected Topics in German (Topics to be specified in Class Schedule) (1-5)
Development of a selected topic in German. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

GERM 301. Advanced German Grammar and Conversation (3)
Oral and written practice of the language, syntactical analysis of selected writings, written composition and oral reports. Prerequisite: two years of college German or equivalent or consent of instructor.

GERM 310. Modern Germany (3)
A study of the major cultural, social and economic developments of the contemporary German scene, with special attention to accurate and idiomatic expression in written and spoken German. Prerequisite: Two years of college German or equivalent or consent of instructor.

GERM 320. The German Classics (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 German or equivalent or consent of instructor.
GERM 321. Modern German Literature (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, Boell. Prerequisite: Two years of college German or equivalent or consent of instructor.

GERM 393. German Literature in Translation (3)

Reading, discussion and interpretation of literature and criticism originally written in German with emphasis on determining the contributions of these works to world literature and philosophical movements. Course may be repeated for credit. No prerequisite.

GERM 495. Selected topics in German (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in German. Topics vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

GERM 498. Individual Study (1-5)

For advanced undergraduate student prepared for independent work, and in need of advanced and specialized study in German. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

GERM 598. Individual Study (1-5)

For qualified graduate students in need of advanced or specialized study, and may be repeated for a total of 9 units. Prerequisite: Consent of instructor.

REQUIREMENTS FOR BACHELOR OF ARTS, SPANISH

Spanish 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.
4. Completion of an academic minor is not required but is strongly recommended for secondary credential candidates.

DEGREE MAJOR IN SPANISH

Prerequisites to the Major

SPAN 101, 102. Elementary Spanish I, II, 8 units*
SPAN 201, 202. Intermediate Spanish I, II, 8 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.
The Major

SPAN 301, 302. Advanced Spanish I, II .................. 6
Additional courses in upper division Spanish,
as approved by the major adviser, to total not less
than 18 units ............................................ 18
Total ...................................................... 24

DEGREE MINOR IN SPANISH
(28 units, to include at least 12 units in upper division,
with a minimum of 14 college units)

Lower Division

SPAN 101, 102. Elementary Spanish I, II, 8 units*
SPAN 201, 202. Intermediate Spanish I, II, 8 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.

Upper Division

SPAN 301, 302. Advanced Spanish I, II, 6 units
Additional courses in upper division Spanish, as approved by
the department, to total not less than 6 units.

COURSE DESCRIPTIONS

Lower Division

SPAN 101. Elementary Spanish I (4)
First year Spanish. Audio-lingual approach. No prerequisite.

SPAN 102. Elementary Spanish II (4)
Continuation of SPAN 101. Prerequisite: SPAN 101 or equiva-
 lent.

SPAN 201. Intermediate Spanish I (4)
Second year Spanish, with emphasis on audio-lingual work in
the language laboratory. Includes review of language structure
patterns and reading assignments. Prerequisite: One year college
level Spanish or equivalent.

SPAN 202. Intermediate Spanish II (4)
Continuation of Spanish 201. Prerequisite: SPAN 201 or equiva-
 lent.
SPAN 295. Selected Topics in Spanish. (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in Spanish. Topics will vary. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

SPAN 301. 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 302. Advanced Spanish II (3)

Continuation of SPAN 301. Required of majors and minors. Prerequisite: SPAN 301 or equivalent or consent of instructor.

SPAN 320. Literature of Spain I (3)

A study of selected complete works by Spanish writers. Prerequisite: The equivalent of two years of college level Spanish or consent of instructor.

SPAN 321. Literature of Spain II (3)

A study of selected complete works by Spanish writers. Prerequisite: The equivalent of two years of college level Spanish or consent of instructor.

SPAN 330. Literature of Spanish America I (3)

From the beginnings to 1880. Prerequisite: Two years of college level Spanish or consent of instructor.

SPAN 331. Literature of Spanish America II (3)

From 1880 to the present. Prerequisite: Two years of college level Spanish or consent of instructor.

SPAN 350. History of the Spanish Language (2)

A study of the historical phonological, morphological, and syntactical changes of the language from vulgar Latin to modern times. Required of majors. Prerequisite: The equivalent of two years of college level Spanish or consent of instructor.

SPAN 351. Spanish Phonemics and Phonetics (2)

A study of the phonological morphological and syntactical features of the language through linguistic analysis. Prerequisite: SPAN 350 or equivalent or consent of instructor.
SPAN 360. History and Civilization of Spain (3)

A brief survey of the history of Spain, its culture and civilization. No prerequisite.

SPAN 361. History and Civilization of Spanish America (3)

A survey course of the history and civilization of Spanish America. No prerequisite.

SPAN 393. Spanish Literature in Translation (1-5)

Reading, analysis and discussion of literary masterworks originally written in Spanish with emphasis on their contributions and underlying philosophical influences. Course may be repeated for credit. No prerequisite.

SPAN 400. Advanced Conversation (2)

A course for students who are fluent in the language. Class work will include discussion of current events and of relevant topics as well as talks by students. Prerequisite: Consent of instructor.

SPAN 401. Advanced Composition (2)

Practice in composition on assigned and free topics. Study of styles. Prerequisite: Three years of college level Spanish or consent of instructor.

SPAN 402. Business Spanish (2)

Practice in writing business letters and forms in Spanish. Prerequisite: Consent of instructor.

SPAN 420. El teatro en Espana (3)

A study of Spanish theatre from early times to the present, including the reading of selected plays. Prerequisite: Two years of college level Spanish or consent of instructor.

SPAN 423. La literatura picaresca (3)

A study of the development of the picaresque genre in Spain and Spanish America, including the reading of selected complete works. Prerequisite: The equivalent of two years of college level Spanish or consent of instructor.

SPAN 424. Cervantes (3)

A study of the works of Cervantes including Don Quijote. Prerequisite: Two years of college level Spanish or consent of instructor.
SPAN 451. Curriculum and Instruction: Spanish (3)

Current practices in modern foreign languages instruction, with emphasis on laboratory procedures and the audio-lingual-visual approach. Prerequisite: Admission to credential program or teaching experience or consent of instructor. (Same as EDUC 321)

SPAN 460. Literatura Mexicana (3)

Authors of Mexico and their works from Cortes to the contemporary period. Prerequisite: Consent of instructor.

SPAN 495. Selected Topics (Topics to be specified in Class Schedule) (1-5)

Topics vary each term; may be repeated for credit. Prerequisite: Consent of instructor.

SPAN 498. Individual Study (1-5)

For students prepared for independent work, and in need of advanced or specialized study. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

SPAN 598. Individual Study (1-5)

For graduate students needing advanced or specialized study. May be repeated for 9 units. Prerequisite: Consent of instructor.
ETHNIC STUDIES

Richard L. Luevano, M.A., Co-Director
Delo E. Washington, M.S.W., Co-Director

Ethnic Studies is a multi-disciplinary 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 quarter. Further information may be obtained by consulting directly with the Ethnic Studies faculty members.

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 200. Contemporary Black Studies (3)
ETHS 210. Contemporary Chicano Studies (3)
ETHS 220. Contemporary Asian-American Studies (3)
ETHS 230. Contemporary Native-American Studies (3)

Category II

A detailed study of the cultural development of ethnic groups in America.

Category III

A detailed study of the historical development of each minority group in America:

HIST 371. Mexican-American History (3)
HIST 373. Afro-American History (3)
ANTH 335. The North American Indian (3)
ANTH 336. Indians of California and Western North America (3)
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 303. Ethnic Groups in Public Education (2)
EDUC 420. Teaching the Culturally Different (3)
SOCL 301. Race and Ethnic Relations (3)

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 495. Selected Topics in Ethnic Studies (1-5)
ETHS 496. Seminar in Ethnic Studies (3)
ETHS 498. Individual Study in Ethnic Studies (1-5)

COURSE DESCRIPTIONS

ETHS 200. 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 210. 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 bi-linguality.

ETHS 220. 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 crises and contacts among Asian-Americans.

ETHS 230. 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 495. 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 may be repeated for credit. Prerequisite: Consent of instructor.

ETHS 496. Seminar in Ethnic Studies (3)

A synthesis of existing knowledge from Ethnic Studies material. Relating pertinent background information to special independent field projects. Prerequisites: Course work in Ethnic Studies and consent of instructor.

ETHS 498. Individual Study (1-5)

For students capable of independent work and in need of advanced or specialized study. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.
GEOGRAPHY

Joel Canby, Ph.D., Professor, Chairman
Department of Anthropology/Geography
Melvin H. Aamodt, Ph.D., Associate Professor
Ida I. Bowers, Ph.D., Assistant Professor
Leon S. Pitman, Ph.D., Assistant 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 a meaningful knowledge of the world's peoples in their different physical settings.

The Department of Anthropology/Geography offers courses in geography as an area of concentration in the social sciences major and the liberal studies 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 DEGREE, SOCIAL SCIENCES

See Social Sciences, Requirements for Bachelor of Arts

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE, LIBERAL STUDIES

See Liberal Studies, Requirements for Bachelor of Arts

TEACHING CREDENTIALS

Major in social sciences for elementary and secondary credentials, see Social Sciences.

DEGREE MINOR IN GEOGRAPHY

Sixteen 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) Systematic Human Geography
(2) Systematic Physical Geography
(3) Regional Geography

COURSE DESCRIPTIONS

Lower Division

GEOG 201. Principles of Physical Geography (3)

Analysis of the distribution and character of the major...
elements of the physical environment, including landforms, climates, soils, vegetation, minerals, water resources and their significance and meaning to man; man's impact on and use of these elements. (Lecture, 2 hours; laboratory, 2 hours.)

GEOG 202. Principles of 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. Field trip may be required.

GEOG 240. World Regional Geography I (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.

GEOG 241. World Regional Geography II (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.

GEOG 295. Selected Topics in Geography (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of geography. Topics may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

UPPER DIVISION

SYSTEMATIC HUMAN GEOGRAPHY

GEOG 330. Economic Geography (3)

Study of world economic activity from a geographic point of view; analysis of agricultural and other economic systems of different regions of the world in relation to their natural and cultural settings.

GEOG 335. Urban Geography (4)

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 on land use. Field trips may be required.

GEOG 402. Human Ecology (3)

A theoretical analysis of the relationships between the natural environment and man's cultural achievements, with special problems relating to both primitive and modern man. Prerequisite: Any 200 level geography course or consent of instructor.

GEOG 430. Geography of Resource Planning (3)

A survey of the geography of resource management and regional planning; the development of planning regions; population elements in relation to management and planning; techniques of data collection for resource analysis; case studies from developed and underdeveloped countries. Prerequisite: Any 200 level geography course or consent of instructor.

SYSTEMATIC PHYSICAL GEOGRAPHY

GEOG 310. Climatology (3)

The elements and controls of weather and climate; analysis of climatic regions of the world. Prerequisite: GEOG 201 or consent of instructor.

REGIONAL GEOGRAPHY

GEOG 351. 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: Any 200 level geography course or consent of instructor.

GEOG 355. 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: Any 200 level geography course or consent of instructor.

GEOG 357. 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: Any 200 level geography course or consent of instructor.

GEOG 359. Geography of Asia (4)

A comprehensive survey of the physical, cultural, and economic geography of Asia excluding Asiatic Russia. Prerequisite: Any 200 level geography course or consent of instructor.

GEOG 420. Geography of Underdeveloped 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 of geography.

GEOG 451. Geography of California (3)

An interpretive description of the natural environment of the state with an analysis of past and present settlement patterns and current utilization of natural resources. Prerequisite: Any 200 level course in geography or consent of instructor.

GEOG 461. Historical Geography of the United States (3)

A study of the evolution of cultural landscapes in the United States. Emphasis on initial and sequential settlement patterns, routes of diffusion and migration, and use of resources in light of cultural traditions. Comparative analysis of regional differences in material folk culture. Prerequisites: Junior standing and consent of instructor.

METHODOLOGY OF GEOGRAPHY

GEOG 370. Map and Aerial Photo Interpretation (4)

Introduction to thematic cartography; fundamentals of interpretation of the physical and cultural landscape from topographic maps and aerial photographs; cartographic portrayal. Prerequisite: Six units of geography or consent of instructor. (Lecture, 3 hours; laboratory, 2 hours.)

GEOG 471. Field Studies (3)

Methods of field observation; techniques of data collection and analysis; investigations of rural and urban land use in the San Joaquin Valley. Prerequisite: Six units of geography.
GEOG 480. Survey of Geographic Thought and Literature (3)

A pro-seminar designed to give majors and minors an aware-
ness of the heritage of academic geography, to acquaint them
with the breadth of its literature, and to refine their skills in
geographical research and writing. Prerequisite: Six upper
division units in geography (may be concurrent).

GEOG 484. Geography and 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 elemen-
tary, 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 495. Selected Topics in Geography (Topics to be specified
in the Class Schedule) (1-5)

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

GEOG 496. Senior Seminar (3)

Problems on a particular aspect of the field of geography.
Topic changes each year offered. Each student will be expected
to report on an individual project. May be repeated for a maxi-
num of 6 units. Prerequisite: Consent of instructor.

GEOG 498. Individual Study (1-5)

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.
HISTORY

John E. Caswell, Ph.D., Professor, Chairman
John P. Rasmussen, Ph.D., Professor
J. W. Smurr, Ph.D., Professor
David Bentheim Stenzel, Ph.D., Professor
Britten Dean, Ph.D., Associate Professor
Curtis R. Grant, Ph.D., Associate Professor
Franklin B. Holder, Ph.D., Associate Professor
Phede Ann Marr, Ph.D., Associate Professor
Ronald Jay VanderMolen, Ph.D., Associate Professor
Austin Metumara Ahanotu, Ph.D., Assistant Professor
Samuel A. Oppenheim, Ph.D., Assistant Professor
Robert R. Smith, Ph.D., Assistant Professor
John R. Kern, M.A., Assistant 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, intelligence work, journalism, law, as well as teaching.

The Department of History offers the degrees Bachelor of Arts, and Master of Arts, History. The college also offers the degree Bachelor of Arts, Social Sciences for those seeking a General Elementary 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 not less than 30 upper division units.

DEGREE MAJOR IN HISTORY

Recommended Lower Division Courses

HIST 101-102: Western Civilization I-II
HIST 104-105: Western Civilization discussion sections I-II
HIST 205: History of Early African, American, East Asian and Middle Eastern Civilizations
HIST 206: History of the Third World in the Age of Imperialism

Two years of a foreign language. If courses are not taken, a reading knowledge should be attained.
Prerequisites to the Major

Required courses in the major field:

HIST 290. Library Resources and Bibliographical Control for Historical Research
HIST 299. Introductory Seminar in History

The Major

Two courses in upper-division Western history from the following list:

HIST 312, 314, 315, 321, 322, 323, 324, 325, 361, 362, 363, 364

Two courses in upper-division non-Western history from the following list:

HIST 311, 351, 352, 380, 381, 386, 387, 388, 390, 391, 392, 403, 404

At least two of the above four required courses must be in the pre-modern era. Courses which fulfill this requirement are:

HIST 311, 312, 314, 315, 321, 322, 380, 386, 390, 445

Two courses in Directed Reading (HIST 496)

Senior Thesis (HIST 499)

Elective courses to bring the total number of units in the major to 30 upper-division semester units.

HISTORY HONORS PROGRAM: RECOMMENDED AND REQUIRED COURSES

The honors candidate must fulfill the following requirements in addition to the major described above:

An additional HIST 299, so that one HIST 299 is taken in Western history and the other is taken in non-Western history.

Two additional courses in Western and one additional course in non-Western history, with the following qualifications:

1. The Western courses must include one course from each of the following groups: HIST 311, 312; and HIST 314, 315, 321, 322.
2. The non-Western courses must include at least one course from the following list: HIST 351, 380, 386, 390.
3. The courses taken to fulfill the non-Western requirement may be taken in two separate geographic areas, but not
more than two.

4. If a student chooses Directed Reading in Western History, he is required to take only three lecture courses in Western history; similarly, if the Directed Reading is done in non-Western history he is required to take only two non-Western courses.

Pass a Senior examination covering coursework and reading undertaken in the history major.

Three courses in liberal arts outside of history.

Reading knowledge of an appropriate foreign language.

DEGREE MINOR IN HISTORY

Sixteen units in history, of which ten units must be upper-division history courses.

The courses for the degree minor in history are selected in consultation with and are to be approved by the minor adviser.

TEACHING CREDENTIALS

History majors completing secondary credentials must fulfill the following requirements:

1. Complete General Education requirements.
2. Have a degree major in history.
3. Students seeking the elementary credential, whose primary interest is history, may complete (1) the Liberal Studies major, (2) twenty upper-division units in history, (3) complete the Education Department's requirement for the credential.
4. Complete 6 units in history as post-baccalaureate work and receive approval of the History Department as to subject matter competence.

MASTER OF ARTS DEGREE

Applications for admission to the master of arts program in history and for advancement to candidacy should be filed in the office of the Department of History. Each student admitted to the program will be assigned an adviser whom the student will consult in planning his program.

Prerequisites for Admission to the Program

Twenty-four units of upper division history to include HIST 499, Senior Thesis, or equivalent. 
A grade point average of 3.0 in the undergraduate major.
Satisfactory performance in the Graduate Record Examinations,
both general aptitude and history.
Reading knowledge of an appropriate foreign language as
determined by the Department of History.

Students may at times be admitted to the college for graduate
work without completion of the last two requirements, at the
discretion of the Department, if there is satisfactory evi-
dence of plans for prompt completion of the requirements.

Requirements for the Degree

Completion of at least 12 units from the following upon ad-
visement:

HIST 593. History of Historical Writing (4) (required of all
candidates)
HIST 590. Graduate Studies (4) (two sections required of all
candidates)
HIST 598. Individual Study
HIST 599. Thesis

Eighteen additional units selected from the above 500-level
courses or from approved 400-level courses, upon advisement.

Demonstration of knowledge of subject matter as well as com-
petence in the following four skills:

- Working knowledge of the seminal works
- Ability to perform research operations
- Analytical skills
- Literary skills

This competence will be evaluated by the candidate's com-
mittee by means of a comprehensive written examination cov-
ering all graduate work, by a Graduate Committee judgment on
all research papers or analytical studies submitted to ful-
fill program requirements, and by any other suitable means.

Additional Requirements: at least 24 units must be taken in
residence; at least 15 of these units are to be completed
after admission to classified graduate standing.

No course work below "B" grade level will be accepted in
fulfilling any M.A. requirements. If the candidate earns
less than a "B" average in any single semester, departmental
review of the candidate's eligibility is mandatory. With-
drawal of candidacy may result.
COURSE DESCRIPTIONS

Lower Division

HIST 101. 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. Optional discussion section available (see HIST 104 below).

HIST 102. Western Civilization II (3)

Continuation of HIST 101. The modern world since 1500. Optional discussion section available (see HIST 105 below).

HIST 104. Problems in Western Civilization I (1)

Small group discussion of some of the issues raised in HIST 101. Students desiring class discussion must register for HIST 101 as well as for that HIST 104 section offered by their HIST 101 lecturer. Prerequisites: Concurrent enrollment in HIST 101 and consent of instructor.

HIST 105. Problems in Western Civilization II (1)

Small group discussion of some of the issues raised in HIST 102. Students desiring class discussion must register for HIST 102 as well as for that HIST 105 section offered by their HIST 102 lecturer. Prerequisites: Concurrent enrollment in HIST 102 and consent of instructor.

HIST 205. History of Early African, American, East Asian and Middle Eastern Civilizations (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 206. History of the Third World in the Age of Imperialism (4)

An integrated history of the civilizations of Africa, the Americas, East Asia and the Middle East focusing on a comparative analysis of their subjugation by Euro-American imperialism and their struggle for liberation and independence. Prerequisite: HIST 205.
HIST 260. Problems in U. S. History (3)

Conflicting interpretations of crucial issues in U. S. History.

HIST 290. 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.

HIST 295. 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. May be repeated for credit. Prerequisite: Consent of instructor.

HIST 299. Introductory Seminar in History (4)

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.

Upper Division

HIST 308. Modern World History, 1850-1945 (3) *

Integrated global history and discussion of selected problems of global significance during the period. Prerequisite: Sophomore standing.

HIST 309. Modern World History Since 1945 (3) *

Integrated global history and discussion of selected problems of global significance during the period. Prerequisite: Sophomore standing.

HIST 311. Ancient Mediterranean World I (4) *

From early Sumer to Alexander the Great. Prerequisite: Sophomore standing. HIST 101 or 205 recommended.

HIST 312. Ancient Mediterranean World II (4) *

The Hellenistic Age, Roman Republic and Empire, and the

* Not offered 1973-74
triumph of Christianity. Prerequisite: Sophomore standing. HIST 311 recommended.

HIST 314. Medieval Europe I (3)

Western Europe from the fading of Roman rule to 1100. Prerequisite: Sophomore standing. HIST 101 recommended.

HIST 315. Medieval Europe II (3)

Western Europe from 1100 to 1500. Prerequisite: Sophomore standing. HIST 101 recommended. HIST 314 should precede HIST 315 when possible.

HIST 321. 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 322. 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.

HIST 323. Nineteenth Century Europe (3)

Democratization in the age of nationalism; Napoleon to Sarajevo. Prerequisite: Sophomore standing.

HIST 324. Twentieth Century Europe (3)

Prerequisite: Sophomore standing.

HIST 325. Eastern Europe Since 1453 (3)

A survey of Europe between the German lands and Russia from the period of medieval and early modern sovereignty through national subjection to independence and communism. Prerequisite: Sophomore standing.

HIST 351. Latin America in Traditional and Colonial Times (3)

A survey of Latin American history emphasizing the pre-Columbian Indian cultures, the cultural conflict engendered by the conquest, and the major trends of the new colonial society. Prerequisite: Sophomore standing. HIST 206 recommended.
HIST 352. Latin American States Since Independence (4)

From the struggle for independence to the mid-twentieth century. (Formerly 252) Prerequisite: Sophomore standing.

HIST 356. Cuba Since 1898. (3) *

Emphasis on the pattern of politics, Cuba's relations with the United States, and the changes resulting from the Castro Revolution. Prerequisite: Sophomore standing.

HIST 361. 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 362. Ante-Bellum America (3)

United States, 1789-1865. Founding of the Union through the Civil War; quest for cultural independence; interaction of popular democracy and economic growth; slavery, sectionalism and nationalism. Prerequisite: Sophomore standing.

HIST 363. 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 364. 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 367. California History (3)

Spanish exploration and settlement; environment, political, economic and social developments which give California its unique character. Prerequisite: Sophomore standing.

HIST 368. Westward Movement (3) *


* Not offered 1973-74
HIST 371. 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 373. Afro-American History (3) *

The development of the Black community in the United States. African origins, American slavery, reconstruction, the foundations of the Black community in modern America, and the struggle for Black identity. Prerequisite: Sophomore standing.

HIST 380. East Asia in Traditional Times (3)

Origins and development of the principal institutions and cultural patterns of China, Japan, and Korea from earliest times to the mid-nineteenth century. (Formerly 280) Prerequisite: Sophomore standing.

HIST 381. 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 mid-nineteenth century. (Formerly 281) Prerequisite: Sophomore standing.

HIST 386. 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. (Formerly 286) Prerequisite: Sophomore standing.

HIST 387. 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. (Formerly 287) Prerequisite: Sophomore standing.

HIST 388. 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. (Formerly 386) Prerequisite: Sophomore standing.

* Not offered 1973-74
HIST 389. East Asian Intellectual History (3) *

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 390. Islamic Civilization I, 600-1500 (3)

The Islamic Middle East from the rise of Muhammad to the 16th century. Establishment of Islam, its political and social institutions; the rise of medieval empires; intellectual and cultural achievements of Islam; Islam on the eve of Western expansion. (Formerly 284) Prerequisite: Sophomore standing.

HIST 391. Islamic Civilization II, 1500-1914 (3)

The Islamic Middle East from the 16th century to World War I. The political and social institutions of the Ottoman and Safavid empires and their decline; the encroachment of Western powers; the emergency of national movements; the origins of present conflicts. (Formerly 284) Prerequisite: Sophomore standing.

HIST 392. Contemporary Middle East (4)

The Middle East from World War I to the present. Results of Colonial rule, establishment of independent states, Arab-Israeli problem, impact of oil and rise of radical socialist regimes. (Formerly 285) Prerequisite: Sophomore standing.

HIST 403. 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 404. Rise and Fall of European Colonial Systems, 1830-1965 (3)

New colonialism of the 19th century in Asia and Africa and its collapse in the 20th century. Prerequisite: One year of college-level history or consent of instructor.

HIST 408. Introduction to Comparative Civilization I (3) *

The art and science of determining the basic patterns of man's career by comparing the great societies. Fundamental

* Not offered 1973-74
instruction in the methods of Toynbee and his successors. Pre-
requisites: Advanced training in literature or history or social
science or philosophy, and consent of instructor.

HIST 409. Introduction to Comparative Civilization II (3) *

Individual student investigations using techniques acquired
in HIST 408. Prerequisite: HIST 408.

HIST 420. Modern Spain (3) *

Spanish political, economic, and cultural life from 1492 to
World War II. Prerequisite: One year of college-level history or
consent of instructor.

HIST 430. 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. Prerequi-
site: One year of college-level history or consent of instructor.

HIST 435. 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 440. Modern Germany (3)

Germany since 1648. Prerequisite: One year of college-level
history or consent of instructor.

HIST 442. Russia to 1917 (3)

Russia from earliest times to the revolutions of 1917. Pre-
requisite: One year of college-level history or consent of
instructor.

HIST 443. Soviet Russia (3)

Russia and the Soviet Union from the revolutions of 1917 to
the end of the Khrushchev era. (Formerly 442) Prerequisite:
One year of college-level history or consent of instructor.

HIST 445. England to 1603 (3)

Political and constitutional history from the Anglo-Saxon
invasion to the creation of a modern nation state. Prerequisite:

* Not offered 1973-74

199
One year of college-level history or consent of instructor.

HIST 446. Modern Britain, 1603 to the Present (3) *

Political, social, and intellectual developments from the Stuart era to the present. Prerequisite: One year of college-level history or consent of instructor.

HIST 450. History of Mexico (3)

From independence to the mid-twentieth century. Prerequisite: One year of college-level history or consent of instructor.

HIST 452. Social Change in Contemporary Latin America (3) *

An intensive study of the major groups, policies, leaders, and countries involved in important social change in Latin America. Prerequisite: One year of college-level history or consent of instructor.

HIST 463. The Middle East in International Affairs (3)

The Middle East as a focus of international power struggles from the 19th century to the present. The interests and roles of great powers in the area, the Arab-Israeli dispute, the arms race, and the present super-power balance in the area will be considered. Prerequisite: One year of college-level history or consent of instructor.

HIST 466. African Social History (3) *

Historical study of the evolution of social differentiation, of the racial and ethnic components of social legislation, and of the impact on foreign policy. Prerequisite: One year of college-level history or consent of instructor. (Replaces 489)

HIST 467. 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. (Replaces 487 and 488)

HIST 470. 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.

* Not offered 1973-74
HIST 474. 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 476. American Religious History (3)

History of American religious institutions and thought from colonial origins to the present; importance of European backgrounds and American environment in producing a unique American religious tradition; impact of religion upon American social and cultural development. Prerequisites: Junior standing and two courses in American history.

HIST 478. American Intellectual and Social History I (3)

American thought and institutions from their colonial origins to the mid-nineteenth century, with emphasis on the initial and continuing impact of the European experience and the American environment in helping to shape the character of America's political, social, economic, religious, and cultural life and thought. Prerequisite: One year of college-level history or consent of instructor.

HIST 479. American Intellectual and Social History II (3)

Evolution of American thought and social institutions from the mid-nineteenth century to the present, with emphasis on the impact of industrialism, urbanism, and "great power" status upon the cultural milieu. Prerequisite: One year of college-level history or consent of instructor.

HIST 480. Modern China (3)

Analysis of the main trends of nineteenth and twentieth century imperialism in China and the consequent rise of Chinese anti-imperialism; and analysis of the 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 484. Modern Japan (3) *

Development of Japan from a feudalistic 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.

* Not offered 1973-74
HIST 486. North Africa (3) *

Morocco, Algeria, Tunisia and Libya during the nineteenth and twentieth centuries. Colonial rule, independence movements, and the political and social structures of the states which evolved. Prerequisite: One year of college-level history or consent of instructor.

HIST 495. Selected Topics in History (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. May be repeated for credit. Prerequisite: Consent of instructor.

HIST 496. Directed Reading in History (3)

Reading in a theme or period of the student's choice. Prerequisite: Consent of instructor.

HIST 498. Individual Study (1-5)

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 499. 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 590. Graduate Studies (4)

Reading of major secondary works or intensive original research in American or European history, as designated in the Class Schedule. Prerequisites: Advanced course work in American or European history as appropriate, and consent of instructor.

HIST 593. 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.

* Not offered 1973-74
HIST 595. Selected Topics in History (Topics to be specified in Class Schedule) (1-5)

Innovative course of study. May be repeated for credit. Prerequisite: Consent of instructor.

HIST 598. Individual Study (1-5)

For qualified graduate students in need of advanced and specialized study. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

HIST 599. Thesis (3-6)

Thesis research. Prerequisite: Consent of instructor.
LIBERAL STUDIES

Advisory Committee

Max C. Norton, Ph.D., Professor of Speech and Communication Science, Chairman
William H. Hayes, Ph.D., Professor of Philosophy
Richard V. Jones, Ed.D., Associate Professor of Education
James M. Goodwin, Ph.D., Assistant Professor of Physics
Richard G. Mendes, Ph.D., Assistant Professor of Political Science

The Bachelor of Arts Degree program is an interdisciplinary-based curriculum which is designed to provide the student with the opportunity to pursue a liberal education in the following academic areas: Social Sciences, Mathematics-Science, Arts-Humanities, and English-Speech.

The Bachelor of Arts Degree fulfills the following career objectives:

1. It provides the academic major prerequisite for students who are planning to pursue teaching careers leading to credentials to teach multiple and single subjects in elementary and secondary schools.

2. It provides an interdisciplinary-based degree program for students who are pursuing professional careers and occupations requiring a strong interdisciplinary background in the liberal arts. In addition to providing a strong interdisciplinary background, the program provides the student the opportunity to develop a program concentration in a single academic discipline.

REQUIREMENTS FOR THE BACHELOR OF ARTS, LIBERAL STUDIES

I. Basic Liberal Studies Requirements

<table>
<thead>
<tr>
<th>Units Required</th>
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</thead>
<tbody>
<tr>
<td>A. Social Sciences (See list below) . . . . 18</td>
</tr>
<tr>
<td>B. Mathematics-Science (See list below) . . 18-19</td>
</tr>
<tr>
<td>C. Arts-Humanities (See list below) . . . . 18</td>
</tr>
<tr>
<td>D. English-Speech (See list below) . . . . 18</td>
</tr>
</tbody>
</table>

This pattern of courses satisfies the general education requirements for the degree. No minor is required. For other requirements see "General Requirements for Degrees."

II. Completion of a Concentration . . . . . . . . 20

A concentration shall include 20 units, at least 15 of which must be in the upper division. The concentration must be selected from the following list of single disciplines.
III. Completion of Electives Outside the Area of Concentration .......................... 4

IV. Upper Division Electives ........................................... 24

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 permanent multiple subject credential within five years may use the upper division electives to complete a minor or a second major.

V. Health and Physical Education: ................................. 2

VI. Other units determined by advisement .......................... 2

Minimum Total Units Required .......................... 124

OPTIONS AVAILABLE

1. A Bachelor of Arts in Liberal Studies with a concentration as outlined.

2. A candidate for a multiple subject credential may obtain the Bachelor of Arts in Liberal Studies with a concentration outlined, and also complete his professional education pre-requisites and student teaching within four years, obtaining a preliminary credential. The full credential is awarded upon completion of a fifth year of studies. (See the Catalog section on Education.) Under this option, no more than 15 semester units of the fifth year may be required in professional education. Since the remaining units must be in
academic subjects, the students may also complete a second bachelor's degree in any other major offered by the College. (See "Requirements for an Additional Baccalaureate Degree" in the Catalog.)

3. A student may complete the Bachelor of Arts in Liberal Studies with a concentration, and may also complete the requirements for a second academic major, possibly in the area of his concentration. He would then qualify for a dual major.

4. A multiple subject credential candidate may complete a bachelor's degree in liberal studies with a full major, rather than a concentration, by postponing his student teaching until his fifth year. This option should be considered by students planning to continue to higher degrees.

**LIBERAL STUDIES AREA A**

**SOCIAL SCIENCES**

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
<tr>
<td>206</td>
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<tr>
<td>18</td>
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</table>

<table>
<thead>
<tr>
<th>1. PSCI 120. American Government</th>
<th>3</th>
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<tbody>
<tr>
<td>2. History: One of the following:</td>
<td>3</td>
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<tr>
<td>HIST 361. Colonial America</td>
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<tr>
<td>HIST 362. Ante-Bellum America</td>
<td></td>
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<tr>
<td>HIST 363. America After Civil War</td>
<td></td>
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<tr>
<td>HIST 364. Contemporary America</td>
<td></td>
</tr>
<tr>
<td>3. PSYC 201. Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>4. Anthropology or Geography</td>
<td>3</td>
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<tr>
<td>One of the following:</td>
<td></td>
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<tr>
<td>ANTH 206. Introduction to Cultural Anthropology</td>
<td></td>
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<tr>
<td>GEOG 240. World Regional Geography I</td>
<td></td>
</tr>
<tr>
<td>GEOG 241. World Regional Geography II</td>
<td></td>
</tr>
<tr>
<td>5. Additional work selected from the social sciences upon advisement</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Units Required 18
LIBERAL STUDIES AREA B

MATHEMATICS-SCIENCE

1. Core Requirements ........................................... 16
   MATH 103-104. Elementary Foundations of Mathematics I-II (6 units)
   *BIOL 101, 103. Principles of Biology, Lec & Lab (4 units)
   *CHEM 100. Fundamentals of Chemistry (3 units)
   PHYS 150. Energy & Matter, Lec & Lab (3 units)

2. One course from the following .................................. 2-3
   ASTR 210. Descriptive Astronomy (3 units)
   *BIOL 265. Environmental Biology (2 units)
   GEOL 210. Principles of Geology (3 units)
   *PHSC 130. Environmental Pollution (2 units)

Total Units Required ........................................... 18-19

LIBERAL STUDIES AREA C

ARTS-HUMANITIES AREA

1. Three units from each of the following areas ............ 12
   ART 100. Drawing (3 units)
   or ART 210. Art History Survey I (3 units)
   DRAMA 101. Introduction to Theatre (3 units)
   FOR LANG: FREN 393 or GERM 393 or SPAN 393
   Literature in Translation (3 units)
   MUS 119. Music Fundamentals (3 units)

2. Three units elected from one of the following areas .. 3
   ART 101. Drawing I, or an additional art history course (3 units)
   DRAM 230. Theatre Workshop (1-2 units)
   FOR LANG: An additional 393 course (3 units)
   MUS 100. Introduction to Music (3 units)
   PHIL 101. Introduction to Philosophy (3 units)
   or PHIL 110. Logic (3 units)

3. PHIL 300. Humanistic Inquiry ............................... 3

Total Units Required ........................................... 18

*Environmental topics will be emphasized in these courses.
LIBERAL STUDIES AREA D

ENGLISH-SPEECH

Units

1. Core Requirements ........................................ 13-14
   ENGL 100. Freshman Composition (4 units)
   ENGL 101. Introduction to Literature (3 units)
   or ENGL 150. Perspectives in World Literature (3 units)
   SPCH 200. Speech Communication (3 units)
   or SPCH 201. Oral Communication Processes (4 units)
   SPCH 301. Language and Speech Development (3 units)

2. Additional units to be selected from the following courses upon advisement ....... 4-5
   ENGL 201. Critical Approaches to Literature (3 units)
   ENGL 360. Introduction to Linguistics (3 units)
   ENGL 381. Introduction to Historical Linguistics (3 units)
   ENGL 460. Tutorial Projects in English (3 units)
   ENGL 462. Children's Literature (3 units)
   ENGL 463. Adolescent Literature (3 units)
   SPCH 240. Oral Interpretation (3 units)
   SPCH 291 & 391. Speech Activities (2 units)
   SPCH 300. Phonetics (3 units)
   SPCH 305. General Semantics (3 units)
   SPCH 340. Oral Interpretation of Children's Literature (3 units)
   SPCH 341. Oral Interpretation of Literature (3 units)
   SPCH 401. Structural and Psycholinguistics (5 units)

Minimum Total Units Required .................. 18

LIBERAL STUDIES AREA E

HEALTH-PHYSICAL EDUCATION

1. HLTH 100. Health in Today's Society ............... 1

2. PHED 100. Any 100 level activity class ............ 1

Total Units Required .................... 2
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.

COURSE DESCRIPTIONS

MSCI 301. General Oceanography (4)

An interdisciplinary examination of physical and chemical characteristics of seawater, distribution and effects of ocean currents, geology of the ocean floor, and relations of organisms to the marine environment. (Lecture, 3 hours; lab and field, 3 hours) Prerequisites: College chemistry and college math. This course is recommended for all full time students new to MLML. (MLML MSci 101)

MSCI 302. Marine Science Techniques (3)

Introductory field and laboratory practice in the techniques of collection, analysis, and interpretation of data on the marine environment. (Lecture, 2 hours; lab and field, 3 hours) This course required with MSCI 301. (MLML MSci 102)

MSCI 321. Marine Invertebrate Zoology (4)

A field-oriented study of adaptations and responses of invertebrate animals to their marine and estuarine habitats, and interrelationships of organisms within these environments; emphasis on field observation, collection, identification, and systematics. (Lecture, 2 hours; lab and field, 6 hours) Prerequisite: College zoology or equivalent. (MLML MSci 121)
MSCI 324. Marine Plankton (4)

Identification, systematics, morphology, distribution and abundance of marine phytoplankton and zooplankton. Introduction to sampling and analytical procedures. (Lecture, 2 hours; lab and field, 6 hours) Prerequisites: MSCI 301 and MSCI 321; MSCI 331 is recommended. (MLML MSci 124)

MSCI 331. Marine Algology (4)

A field-oriented study of ecological associations, physiology, identification, and systematics of marine and estuarine algae, with emphasis upon community relationships. (Lecture, 2 hours; lab and field, 6 hours) Prerequisite: College botany or equivalent. (MLML MSci 131)

MSCI 333. Micropaleontology (3)

A study of some living and fossil microorganisms with emphasis on environmental significance of foraminifera. (Lecture, 2 hours; lab and field, 3 hours) Prerequisite: College general geology or zoology. (MLML MSci 133)

MSCI 336. Physical and Chemical Oceanography (3)

The quantitative description of the distributions of properties (salinity, temperature, dissolved oxygen, etc.) in the oceans and the relation between these distributions and the physical and biochemical processes. (Lecture, 2 hours; lab and field, 3 hours) Prerequisites: Differential calculus and college chemistry or consent of instructor. (MLML MSci 136)

MSCI 353. Marine Science Diving (3)

Skin and scuba diving course; five ocean dives include underwater sampling and survey techniques. Successful completion gives NAUI certification. (Lecture, 1 1/2 hours, MLML; pool 2 1/2 hours, Cabrillo College) Prerequisites: Upper division science major; ability to pass swimming test. (MLML MSci 153)

MSCI 361. Marine Ecology (4)

A field-oriented exploration of the physical parameters of marine, estuarine, and freshwater environments, with emphasis upon ecological and physiological responses of plants and animals to limiting factors of those environments. (Lecture, 2 hours; lab and field, 6 hours) Prerequisites: College math, college chemistry, MSCI 302 (concurrent registration satisfactory). (MLML MSci 161)
MSCI 495. Selected Topics in Marine Science (Topics to be specified in Class Schedule) (1-5)

An advanced undergraduate course in a special subject area; lecture, discussion, laboratory and field components; topics change each semester. May be repeated for credit. Prerequisite: Consent of instructor. (MLML MSci 155)

MSCI 498. Individual Study (1-5)

Faculty-directed study of selected research problems; open to undergraduate students with adequate preparation. Prerequisite: Consent of instructor. (MLML MSci 180)

GRADUATE COURSES

MSCI 577. Human Ecology of Monterey Bay (3)

A graduate level investigation and analysis of changes produced by human impact on the coastal environment with emphasis upon physiographic alterations and ecological implications. (Lecture, 2 hours; lab and field, 3 hours) Prerequisites: College background in biology and geology or geography. (MLML MSci 277)

MSCI 585. Graduate Seminar (2)

Meeting for the presentation and discussion of advanced studies in special field by faculty, guests, and students. May be repeated for full credit. All full time graduate students new to MLML must be enrolled. (Lecture, 2 hours) (MLML MSci 285)

MSCI 598. 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 MSci 298)

MSCI 599. Master's Thesis (1-4)

Graduate, by arrangement. (MLML MSci 299)
Courses in mathematics are designed primarily to provide quality, thorough undergraduate training in mathematics and to serve the needs of majors in mathematics, the natural and social sciences, and other fields. Prospective teachers in the elementary and secondary schools may obtain teaching majors or minors in mathematics.

The department offers the degrees Bachelor of Arts, and Bachelor of Science, Mathematics. The work required for either degree presupposes 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 general physics.

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 as specified for a Bachelor of Arts Degree or for a Bachelor of Science Degree.
4. Completion of a minor is not required.

DEGREE MAJOR FOR THE BACHELOR OF ARTS, MATHEMATICS

Prerequisites to the Major:

MATH 141, 142. Calculus I-II, 8 units
MATH 200. Introduction to Computers, 3 units
MATH 241. Multivariate Calculus, 4 units
MATH 242. Linear Algebra and Differential Equations, 4 units
THE MAJOR:

Two of the following year sequences of courses as approved by the major adviser.

Units
MATH 355, 356. Algebra I-II  
MATH 415, 416. Analysis I-II  

Upper division courses in mathematics as approved by the major adviser  8

TOTAL  24

DEGREE MAJOR FOR THE BACHELOR OF SCIENCE, MATHEMATICS

Prerequisites to the Major:

MATH 141, 142. Calculus I-II, 8 units  
MATH 200. Introduction to Computers, 3 units  
MATH 201. Computer Programming, 2 units  
MATH 241. Multivariate Calculus, 4 units  
MATH 242. Linear Algebra and Differential Equations, 4 units

THE MAJOR:

Two of the following year sequences of courses as approved by the major adviser.

Units
MATH 325, 326. Ordinary Differential Equations, Partial Differential Equations  
MATH 365, 366. Probability and Statistics I-II  
MATH 435, 436. Numerical Analysis I-II  
MATH 445, 446. Introduction to Operations Research I-II  16

Upper division courses in mathematics as approved by the major adviser.  8

TOTAL  24

DEGREE MINOR IN MATHEMATICS

(18 units including at least 10 units in upper division)

MATH 141, 142. Calculus I-II

Additional upper division courses as approved by the minor adviser, 10 units.
COURSE DESCRIPTIONS

Lower Division

MATH 100. Math for Liberal Arts Students (3)

Sets, numeration systems; the systems of natural numbers, integers, rational numbers, and real numbers; selected topics from elementary number theory, probability, geometry, logic and other areas of mathematics. Recommended for general students seeking an understanding of the nature of mathematics. Not open to students who have received credit for MATH 141, MATH 150 or their equivalent. Not applicable to the major or minor in Mathematics.

MATH 103. 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 104. Elementary Foundations of Mathematics II (3)

Continuation of MATH 103. Functions and graphs, elementary probability and statistics, Euclidean geometry, measure, introduction to analytic geometry. Recommended for students seeking an elementary teaching credential. Prerequisite: MATH 103 or MATH 100.

MATH 105. 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 100 or MATH 103.

MATH 110. 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 105.

MATH 141. 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 110 or equivalent.
MATH 142. Calculus II (4)

Trigonometric and Exponential functions, parametric equations, through techniques of integration, applications of the definite integral, L'Hopital's rule, infinite series. Prerequisite: MATH 141.

MATH 150. Finite Mathematics (3)

Truth tables, deductive reasoning, algebra of sets, theory of partitions and counting, elementary probability theory, vectors and matrices, and application of matrix theory of Markov chains. Prerequisite: Two years of high school algebra or MATH 105 or consent of the instructor.

MATH 160. 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) Pre-requisite: One year of high school algebra or MATH 100 or MATH 103.

MATH 161. Statistics for Decision Making (3)

Introductory course for students in Business Administration. Organization and analysis of data, index numbers, elementary probability, distributions, sampling and estimation, correlation and regression, time series. Prerequisite: Two years of high school algebra or MATH 105.

MATH 191. 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. Prerequisite: MATH 105. This course is not open to students who are seeking a Bachelor of Arts degree in Mathematics, Physical Sciences, or Physics; nor is it open to students seeking a Bachelor of Science degree in Chemistry or Mathematics.

MATH 192. 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 integrations, applications of the definite integral, introduction to calculus in higher dimensions. Prerequisite: MATH 191 or MATH 141. This course is not open to students seeking a Bachelor of Arts degree in Mathematics, Physical Sciences, or Physics; nor is it open to students seeking a Bachelor of Science degree in Chemistry or Mathematics.
MATH 200. Introduction to Computers (3)

This course includes history of development, principles of operation, development of programming skills, actual and possible applications. The language used will be FORTRAN and/or BASIC. (Lecture, 2 hours; laboratory, 2 hours) Prerequisite: MATH 105 or two years of high school algebra.

MATH 201. Computer Programming (2)

A continuation of MATH 200 with emphasis on more sophisticated applications of programming and use of the capabilities of the computer. Laboratory projects will involve the student's area of interest when possible. (Lecture, 1 hour; laboratory, 2 hours) Prerequisite: MATH 200 or equivalent.

MATH 241. Multivariate Calculus (4)

Vectors in three dimensions, solid analytic geometry, partial differentiation, multiple integration, differentiation under the integral sign, vector field theory. Prerequisite: MATH 142.

MATH 242. Linear Algebra and Differential Equations (4)

Matrices and determinants, vector spaces, linear transformations, introduction to differential equations, linear systems with constant coefficients. Prerequisite: MATH 241.

MATH 295. Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of mathematics. Topics vary each term. May be repeated for credit. Prerequisite: Sophomore standing and consent of instructor.

Upper Division

MATH 300. History of Mathematics (3)

Origin and development of mathematical ideas from early civilizations to the present. Prerequisite: MATH 142 or consent of instructor.

MATH 305. Foundations of Analysis (4)

Brief introduction to logic, naive set theory, axiomatic set theory, construction of the real number system. Recommended for elementary and junior high teachers seeking an advanced course in mathematics. (Formerly 301, 302) Prerequisite: MATH 142 or consent of instructor.
MATH 306. Foundations of Geometry (4)

Incidence geometries, distance, separation, angular measure, congruence, non-Euclidean geometry, Euclid's Fifth Postulate, similarity, area, volume. (Formerly 303) Prerequisite: MATH 305 or MATH 415.

MATH 325. Ordinary Differential Equations (4)

Linear ordinary differential equations, existence and uniqueness, series solutions, special functions, Laplace transforms, systems of linear equations. (Formerly 321, 322) Prerequisite: MATH 242 or consent of instructor.

MATH 326. 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. (Formerly 323) Prerequisite: MATH 242 or consent of instructor.

MATH 330. Introduction to Topology (3)

Naive set theory, metric spaces, separation properties, continuous functions, connectedness, compactness, completeness, general topological spaces, selected applications. (Formerly 332) Prerequisite: MATH 241.

MATH 355. Algebra I (4)

Group theory, subgroups, Lagrange's Theorem, morphisms, quotient groups, ring theory, quotient rings, ring morphisms, integral domains, fields, field of quotients, polynomial rings and Euclidean rings. Prerequisite: MATH 142 and junior standing.

MATH 356. Algebra II (4)


MATH 365. Probability and Statistics I (4)

Concept of probability; concepts of random variables, expected value, variance and covariance; continuous probability distributions, binomial distribution and its limiting cases, normal distribution and Poisson distribution, Markov chains. Prerequisite: MATH 142 or consent of instructor.
MATH 366. Probability and Statistics II (4)

Sampling and sampling distributions, decision theory, estimation, testing hypothesis, simple linear regression, queuing theory. Prerequisite: MATH 365.

MATH 400. Mathematical Logic (3)

Propositional calculus, quantifiers, properties of first-order theories including completeness theorems. Prerequisite: MATH 305 or PHIL 110 or consent of instructor.

MATH 415. Analysis I (4)

Real number system, sequences, limits, metric spaces, point set topology, continuity, differentiation, implicit and inverse function theorems. Prerequisite: MATH 242.

MATH 416. Analysis II (4)

Riemann-Stieltjes integral, sequences and series of functions, Weierstrass approximation theorem, Baire category theorem, Lebesgue measure and integration, convergence theorems. Prerequisite: MATH 415.

MATH 435. Numerical Analysis I (4)

Errors, power series computation of functions, numerical methods for solution of nonlinear equations, systems of linear equations, matrix inversion, the algebraic eigenvalue problem. Emphasis on methods appropriate for use with computers. Prerequisite: MATH 200 and MATH 242.

MATH 436. Numerical Analysis II (4)

Interpolation and approximation, numerical differentiation and quadrature, difference equations, solution of differential equations. Emphasis on methods appropriate for use with computers. Prerequisite: MATH 435.

MATH 445. Introduction to Operations Research I (4)

Vectors and matrices, classical optimization methods, theory of the simplex method, duality, post-optimal analysis. Prerequisite: MATH 142 and MATH 200, or consent of instructor.

MATH 446. Introduction to Operations Research II (4)

Special types of linear programming, network analysis, dynamic programming, game theory, advanced topics in linear programming, integer programming. Prerequisite: MATH 445.
MATH 450. 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. (Formerly 440) Prerequisite: MATH 142.

MATH 460. Complex Variables (3)

Complex numbers, analytic functions, Cauchy-Riemann equations, Cauchy Theorem, Laurent Series, calculus of residues, selected applications. Prerequisite: MATH 241.

MATH 470. Differential Geometry (3)

Curves, elementary theory of surfaces, the fundamental equations, geometry on a surface. (Formerly 469) Prerequisite: MATH 242.

MATH 495. Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of mathematics. Topics vary each term. May be repeated for credit. Prerequisite: Senior standing and consent of instructor.

MATH 496. Seminar in Mathematics (2)

Presentation and discussions of selected topics in mathematics from the current literature. Prerequisite: Consent of the instructor.

MATH 498. Individual Study (1-5)

For students capable of independent work and in need of advanced and specialized study. May be repeated for a total of 8 units. Prerequisite: Senior standing and consent of instructor.

Graduate

MATH 598. Individual Study (1-5)

For qualified graduate students in need of advanced and specialized study. May be repeated for a total of 8 units. Prerequisite: Post-baccalaureate standing and consent of the instructor.
Professional Postgraduate

MATH 603. Foundations of Mathematics I (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. (Formerly 600)

MATH 604. Foundations of Mathematics II (3)

Metric and nonmetric geometry, introduction to analytic geometry, functions and graphs, mathematical systems, probability. Recommended for elementary and junior high school teachers seeking an advanced course in mathematics. (Formerly 601)
MUSIC

R. Scott Coulter, M.M., Associate Professor, Chairman
Joseph E. Bruggman, Ed.D., Professor
Gene C. Wisler, Ed.D., Professor
Sylvia M. Chigliere, M.M., Associate Professor
Gary L. Unruh, M.M., Associate Professor
Ross Shub, M.M., Assistant Professor

The College offers the degree Bachelor of Arts, Music. Completion of the major in music prepares a student to enter the credential program, to apply for graduate level study, or for professional work, dependent upon specific field of specialization and student interest. Emphasis is placed on the cultivation of individual student creative potential through study and experience in performance, theory, history, literature and composition. Courses in music also provide cultural and aesthetic enrichment for the student in liberal arts.

REQUIREMENTS FOR THE BACHELOR OF ARTS, MUSIC

Music 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 35 upper division semester units.
4. Completion of a minor is not required.

GENERAL REQUIREMENTS FOR MUSIC MAJOR AND MINOR

1. Freshmen and transfer students contemplating a major or minor in music are required to declare a major performing medium (voice, piano, or orchestral instrument) upon entering the program.
2. Transfer students contemplating a major or minor in music are required to take proficiency tests in piano, singing, sightreading, ear training, theory and major instrument. Students whose scores indicate a degree of inadequacy will be required to enroll in appropriate lower division courses.
3. A freshman or lower division transfer will be evaluated during the final semester of the sophomore year for acceptance as a major or minor in music. Students entering as transfers at the upper division level will be evaluated for acceptance as a major or minor in music during the latter part of the first semester in which they enroll in music courses in the college. Evaluation will be based upon lower division course work completed in music and audition in the major medium of performance conducted by a committee of the music faculty.
4. Students are required to perform in recital each semester as part of a course in applied music as determined by the instructor.
5. All students are required to demonstrate an acceptable level of performance skills in both piano and voice. Minimum requirements are: sight-read and sight-sing hymns, improvise a simple piano accompaniment to well-known melodies and demonstrate knowledge of basic technique as expected in technical exercises and simple literature. Lower division students should fulfill these requirements by the end of the sophomore year. Students transferring in at the upper division level should complete these requirements by the end of the first semester of the junior year. Class instruction is offered at the beginning level in both piano and voice.

6. The music major is required to participate in at least one major performing group (chorus, band, or orchestra) each term involving his major performance medium. Piano majors must consult their adviser regarding this requirement.

7. At the conclusion of each term of study, music majors and minors will be expected to demonstrate proficiency on their instrument or in voice before a panel of faculty members.

8. During the senior year all music majors are required to present themselves in solo or chamber ensemble recital.

DEGREE MAJOR IN MUSIC

Prerequisites to the Major

MUS 122,123. Theory I-II, 8 units
MUS 240, 241, 244. Major Group Performance, 4 units
MUS 261 thru 267. Applied Music (major performing medium), 4 units
MUS 296. Music in History, 3 units
Demonstrate proficiency in voice and piano (See #5 under "General Requirements for Music Majors and Minors")

The Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 322,323. Theory III-IV</td>
<td>8</td>
</tr>
<tr>
<td>MUS 327. Basic Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUS 401-405. Music Period Literature Series (choose 2 courses)</td>
<td>7-8</td>
</tr>
<tr>
<td>MUS 440, 441, 444. Major Group Performance</td>
<td>4</td>
</tr>
<tr>
<td>MUS 461 thru 467. Applied Music (major performing medium)</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete one of the following groups of courses 10

Keyboard

MUS 320. Counterpoint, 2 units
MUS 321. Analysis and Composition, 2 units
MUS 345. Piano Literature and Pedagogy, 2 units
Electives as approved by major adviser, 4 units
Choral/Voice

MUS 321. Analysis and Composition, 2 units
MUS 457. Vocal/Choral Literature Seminar, 3 units
Electives as approved by major adviser, 5 units

Instrumental

MUS 324. Orchestration, 2 units
MUS 329. Instrumental Conducting, 2 units
MUS 365 thru 369. Instrumental Technique Series, 4 units
Electives as approved by major adviser, 2 units

Total ........................................ 35-36

Students preparing for the credential program in music are to include courses in string, woodwind, brass and percussion techniques.

DEGREE MINOR IN MUSIC

Lower Division

Units

MUS 122, 123. Theory I-II .................... 8
Either MUS 296. Music in History, 3 units
or MUS 262, 263 or 267. Applied Music (may be fulfilled at upper division level by students who qualify at that level), 4 units ............... 3-4
Demonstrate proficiency in voice and piano (See #5 under "General Requirements for Music Majors and Minors.")

Upper Division

4 or 5 units from the following courses; which may be repeated for credit: 4-5
MUS 440. 1 unit
MUS 441. 1 unit
MUS 444. 1 unit

One course from the following courses: 3-4
MUS 401. 4 units
MUS 403. 4 units
MUS 405. 3 units

Total ........................................ 19-20

CONCENTRATION IN MUSIC FOR LIBERAL STUDIES MAJOR

Lower Division

Units

MUS 161. Basic Class Piano .................... 1
MUS 163. Basic Class Voice .................... 1
One course selected from the following: 3
MUS 100. Introduction to Music, 3 units
MUS 296. Music in History, 3 units

Lower Division Total .......................... 5

223
Upper Division

Five units selected from the following as approved by concentration adviser:

MUS 327. Basic Conducting, 2 units
MUS 340. American Music, 3 units
MUS 365-369. Instrumental Technique Series, 5 units
MUS 440, 441, 444. Major Group Performance .......... 4
MUS 330. Music Literature I ................................ 3
MUS 331. Music Literature II ............................... 3
Upper Division Total ..................................... 15

TEACHING CREDENTIALS

Majors in music seeking an elementary credential must complete the following:

1. Degree major in music.
2. In the undergraduate program: MUS 327 and 335 or 336; acquire and demonstrate basic competency in voice and piano.
3. In the graduate program: requirements of the Education Department for the elementary teaching credential.

Majors in music seeking a secondary credential in music must complete the following:

1. Degree major in music.
2. MUS 327; 328 or 329; 335 or 336; 337; 365; 366; 367; 368; 369; 455 or 457; and 4 units of courses as approved by the credential adviser in music.
3. Requirements of the Education Department for the secondary teaching credential.

MUSIC COURSES FOR NON-MAJORS

For the student not majoring in music the Music Department offers courses for cultural and aesthetic enrichment; MUS 100. Introduction to Music; MUS 119. Music Fundamentals; MUS 161. Basic Class Piano; MUS 162. Basic Class Guitar; MUS 163. Basic Class Voice; MUS 231. History of Jazz; MUS 296. Music in History; MUS 340. American Music; MUS 401. Renaissance and Baroque Music; MUS 403. Classical and Romantic Music; and MUS 405. 20th Century Music. The general student is welcome to participate in the various performance courses (band, orchestra, chorus, small ensembles).

COURSE DESCRIPTIONS

THEORY

Lower Division

MUS 119. 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 122. No prerequisite.

MUS 122. Theory I (4)

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, and sight-singing and dictation. Drill in rhythms will also be stressed. (Formerly 101 & 122) Prerequisite: Ability to read treble and bass clefs.

MUS 123. Theory II (4)

Continuation of Music 122; 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. Work in aural perception will include recognition of harmonic motion plus more sophisticated rhythmic drills. (Formerly 122 & 123) Prerequisite: MUS 122.

Upper Division

MUS 320. 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 323.

MUS 321. Analysis and Composition (2)

Analysis of various types of musical structures, including large forms; emphasis on the comparison of styles and the development of an ability to write in various forms. Prerequisite: MUS 323.

MUS 322. Theory III (4)

Continuation of Music 123. Emphasis will be on an understanding of 19th century harmonic practice, i.e., utilization of varied seventh and ninth chords, augmented sixth and other chromatic chords, and 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. Work in aural perception includes more sophisticated drill in rhythmic, melodic and harmonic dictation. (Formerly 222 & 223) Prerequisite: MUS 123.
MUS 323. Theory IV (4)


MUS 324. 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 323 or consent of instructor.

MUS 327. 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 328. Choral Conducting (2)

A study of choral conducting technique with emphasis upon performance of standard choral literature. (Formerly 326) Prerequisite: MUS 327 or consent of instructor.

MUS 329. Instrumental Conducting (2)

A continuation of Music 327 with emphasis on instrumental and orchestral literature. Study and application of the interpretive aspect of conducting. (Formerly 325) Prerequisite: MUS 327 or consent of instructor.

MUS 421. Composition I (2)

Detailed exploration of tonal compositional resources. Student will undertake the composition of at least one complete work: a 3-movement sonata for solo instrument, a work in sonata form for varied instrumental combinations, a song cycle, or another work of significant proportions. Individual sessions between student and instructor will coordinate with class discussions relating to particular problems in composition. Public performance of student projects is required. Prerequisites: MUS 320, 321 and 324.

MUS 422. Composition II (2)

Continuation of Music 421. Exploration of tonal and of atonal or other nontonal compositional techniques. Student will be encouraged to develop his own personal idiom of expression based upon a thorough knowledge of the various compositional methods. A major
work and its public performance is required from each student. Pre-
requisite: MUS 421.

HISTORY AND LITERATURE
Lower Division

MUS 100. Introduction to Music (3)

A course for the general student, tracing the growth and develop-
ment of music from early times to the present. Emphasis is placed on
becoming acquainted through listening and analysis of the various
historical periods in music. No prerequisite.

MUS 231. History of Jazz (3)

An introduction to jazz; with concentration on its evolution
and its development in the United States. No prerequisite.

MUS 296. Music in History (3)

A survey of music from the 16th century to the present. Pre-
requisite: Consent of instructor.

Upper Division

MUS 330. Music Literature I (3)

A study of music literature of the baroque and classical per-
iods. Designed primarily for the student pursuing the Liberal
Studies major and the general student. Prerequisite: MUS 119 or
ability to read music.

MUS 331. Music Literature II (3)

A study of music literature of the 19th century Romantic and
20th century periods. Designed primarily for the student pursuing
the Liberal Studies major and the general student. Prerequisite:
MUS 119 or ability to read music.

MUS 340. American Music (3)

A comprehensive survey and study of the music of the United
States and the contributions of American composers from the Amer-
ican Revolution to the present. Prerequisite: MUS 100.

MUS 346. Harpsichord Literature (2)

A study of the various styles and forms of harpsichord litera-
ture from the 16th through the 18th centuries with some performance
of smaller pieces. Prerequisite: Consent of instructor.

MUS 401. Renaissance and Baroque Music (4)

An intensive analysis of vocal and instrumental forms from the
late 14th century to 1750. (Formerly 401 & 402) Prerequisite: Consent of instructor.

MUS 403. Classical and Romantic Music (4)

An in-depth examination of vocal and instrumental forms from 1750-1900, with emphasis on works of the Viennese classisists and musical concepts and ideals of the Romantic Era. (Formerly 403 & 404) Prerequisite: Consent of instructor.

MUS 405. 20th Century Music (3)

A critical examination of impressionism and expressionism in music of Debussy and Schoenberg. Polytonal and atonal ramifications; primitivism of Stravinsky. Prerequisite: Consent of instructor.

MUS 455. 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. (Formerly 450) Prerequisite: Consent of instructor.

MUS 457. 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. (Formerly 451) Prerequisite: Consent of instructor.

MUS 496. Senior Seminar (4)

Individual research in specific problems. Emphasis on introduction to musicology; a comprehensive examination and research paper are part of completion of the course. Open only to seniors with consent of instructor.

APPLIED MUSIC
Lower Division

MUS 161. 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. No prerequisite.

MUS 162. Basic Class Guitar (1)

A basic course in simple guitar skills designed for those who may or may not have any previous musical training. No prerequisite.
MUS 163. 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. (Formerly 164) No prerequisite.

MUS 261. Intermediate Piano (1-2)

For music majors whose performance medium is piano. Study and performance of the smaller compositions in the standard piano literature. The second unit is earned through instruction and experience in supervised accompanying. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MUS 262. Intermediate Class Piano (1-2)

For general students, music minors, and music majors whose performance area is not piano. Keyboard experience in reading and playing music of intermediate level. The second unit is earned through instruction and experience in supervised accompanying. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MUS 263. Intermediate Class Voice (1-2)

Continuation of Music 163. Class study of the easier song literature of such composers as Brahms, Schumann, Barber and others. The second unit is earned through instruction and experience in small vocal ensembles. May be repeated for a total of 6 units. Prerequisite: MUS 163 or consent of instructor.

MUS 264. Intermediate Voice (1-2)

Continuation of Music 163. Development of expressive singing for solo and ensemble performance. A course for music majors and minors. The second unit is earned through instruction and experience in small vocal ensembles. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MUS 267. Intermediate Orchestral Instruments (1)

Instruction in orchestral instruments: strings, woodwinds, brasses, and percussion. May be repeated for a total of 8 units. Prerequisite: Consent of instructor.

MUS 365. String Technique I (1)

Basic performance techniques of playing the violin. Prerequisite: Consent of instructor.

MUS 366. String Technique II (1)

Continuation of Music 365. Performance technique of playing the violin. Prerequisite: MUS 365 or consent of instructor.
MUS 367. Woodwind Technique (1)

Performance techniques of playing the clarinet. Prerequisite: Consent of instructor.

MUS 368. Brass Technique (1)

Performance techniques of playing trumpet, horn, trombone, baritone, and tuba. Prerequisite: Consent of instructor.

MUS 369. Percussion Technique (1)

Techniques of playing snare drum, bass drum, timpani, melodic percussion instruments. Prerequisite: Consent of instructor.

MUS 370. Instrumental Laboratory (1)

Utilization of techniques in an orchestral setting of skills gained in Music 365, 366, 367, 368, 369. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

Upper Division

MUS 460. Harpsichord (1)

Study and performance of the various styles and types of harpsichord literature (solo and ensemble) from the Renaissance to the present. May be repeated for 6 units of credit. Prerequisite: Consent of instructor.

MUS 461. Advanced Piano (1-2)

For music majors whose performance medium is piano. Study and performance of advanced repertoire with emphasis upon development of style and interpretation as well as technique. The second unit is earned through supervised experience in accompanying. May be repeated for a total of 8 units. Prerequisite: Consent of instructor.

MUS 464. Advanced Voice (1-2)

Vocal technique for the advanced student; study of German Lieder, French and Italian repertoire, and solo material in cantata, oratorio, and opera. A course for music majors and minors. The second unit is earned through instruction and experience in small vocal ensembles. May be repeated for a total of 8 units. Prerequisite: MUS 264 or equivalent.

MUS 467. Advanced Orchestral Instruments (1)

Advanced instruction in orchestral instruments; strings, woodwinds, brasses, and percussion. May be repeated for a total of 8 units. Prerequisite: Consent of instructor.
MUSIC EDUCATION

MUS 335. Music in the Classroom I (3)
A study of music experience for young children, pre-school through third grade. Prerequisite: MUS 119 or ability to read music.

MUS 336. Music in the Classroom II (3)
A study of music experiences for children in the intermediate grades; fourth through sixth grades. (Formerly 335) Prerequisite: MUS 119 or ability to read music.

MUS 337. Music in the Classroom III (3)
A study of music experiences for children in the junior high school; general music for the non-performer. (Formerly 336) Prerequisite: MUS 119 or ability to read music.

MUS 345. Piano Literature and Pedagogy (2).
Study of selected major piano works of representative master composers from Haydn to the present. Discussion of the practical procedures for teaching piano in the smaller works of piano repertory. Prerequisite: Consent of instructor.

GROUP PERFORMANCE
Lower Division

MUS 240. Orchestra (1)
The study and performance of standard orchestra music. Students will participate in all public performances. May be repeated for a total of 8 units. (Formerly 268) Prerequisite: An acceptable degree of performance skill.

MUS 241. Chorale (1)
Study and performance of choral masterworks. Open to all students. A voice test will be given. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 8 units. Prerequisites: Ability to read music and an acceptable singing voice.

MUS 243. 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. Student conducting will be encouraged. May be repeated for a total of 8 units. Prerequisites: Ability to read music and consent of instructor.

MUS 244. Symphonic Wind Ensemble (1)
Study and performance of materials for the concert band. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill.
MUS 245. String Ensemble (1)

Study and performance of materials for small string ensembles. Students are expected to participate in all public performances. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill.

MUS 246. Brass Ensemble (1)

Study and performance of materials for small brass ensembles. Students are expected to participate in all public performances. May be repeated for a total of 8 units. Prerequisites: An acceptable degree of performance skill and consent of instructor.

MUS 247. Woodwind Ensemble (1)

Study and performance of materials for small woodwind ensembles. Students are expected to participate in all public performances. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill.

MUS 248. Jazz Ensemble (1)

Study and performance of materials for the Jazz Ensemble. Students will participate in jazz concerts and study the art of improvising. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance ability.

Upper Division

MUS 440. Orchestra (1)

The study and performance of standard orchestra music. Students will participate in all public performances. May be repeated for a total of 8 units. (Formerly 468) Prerequisite: An acceptable degree of performance skill.

MUS 441. Chorale (1)

Study and performance of choral masterworks. Open to all students. A voice test will be given. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 8 units. Prerequisites: Ability to read music and an acceptable singing voice.

MUS 443. 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. Student conducting will be encouraged. May be repeated for a total of 8 units. Prerequisites: Ability to read music and consent of instructor.
MUS 444. Symphonic Wind Ensemble (1)

Study and performance of materials for the concert band. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill.

MUS 445. String Ensemble (1)

Study and performance of materials for small string ensembles. Students are expected to participate in all public performances. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill.

MUS 446. Brass Ensemble (1)

Study and performance of materials for small brass ensembles. Students are expected to participate in all public performances. May be repeated for a total of 8 units. Prerequisites: An acceptable degree of performance skill and consent of instructor.

MUS 447. Woodwind Ensemble (1)

Study and performance of materials for small woodwind ensembles. Students are expected to participate in all public performances. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance skill.

MUS 448. Jazz Ensemble (1)

Study and performance of materials for the Jazz Ensemble. Students will participate in jazz concerts and study the art of improvising. May be repeated for a total of 8 units. Prerequisite: An acceptable degree of performance ability.

SPECIAL STUDY PROJECTS

Lower Division

MUS 295. Selected Topics in Music (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of music. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

MUS 495. Selected Topics in Music (Topics to be specified in Class Schedule) (1-5)

Consideration of selected topics in music. Since topics change each term, this course may be repeated for credit. Prerequisite: Consent of instructor.
MUS 498. Individual Study (1-5)

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 598. Individual Study (1-5)

For graduate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.
NATURAL SCIENCES

The School of Natural Sciences offers a sequence of two courses, which are team taught by faculty from the biological sciences, chemistry, and physical sciences departments. This sequence is designed to help the student see the relationship of the disciplines in the sciences and gain an appreciation of the importance of science.

COURSE DESCRIPTIONS

NSCI 105. Natural Science I (4)

A non-mathematical descriptive survey of physics, chemistry, and biology emphasizing the unity of the scientific disciplines. (Lecture, 4 hours) (Formerly BIOL 105, CHEM 105, PHYS 105) No prerequisite:

NSCI 106. Natural Science II (4)

Continuation of Natural Science 105 with the inclusion of a laboratory. (Lecture, 3 hours; laboratory, 3 hours) (Formerly BIOL 107, CHEM 107, PHYS 107) Prerequisite: NSCI 105.
PHILOSOPHY
William H. Hayes, Ph.D., Professor

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.

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.

DEGREE MINOR IN PHILOSOPHY

Thirteen to fourteen units distributed as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHIL 101 or 110</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 220 or 223</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 330 or 340</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 425 or 445 or 450</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13-14</strong></td>
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</table>

CONCENTRATION IN PHILOSOPHY FOR LIBERAL STUDIES MAJOR

Twenty-one units distributed as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHIL 101 or 110</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 220 or 223</td>
<td>3</td>
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<tr>
<td>PHIL 330 or 340</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 425</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 445</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 450</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

TEACHING CREDENTIALS

Students who wish to offer philosophy as a subject area for a teaching credential should consult with advisers in both Philosophy and Education to plan an appropriate program of studies.

COURSE DESCRIPTIONS

Lower Division

PHIL 101. Introduction to Philosophy (3)

Introduction to philosophical method by examining traditional
and contemporary philosophical problems.

PHIL 110. Logic (3)

Analysis of the methods and principles of deductive reasoning, including traditional logic; introduction to symbolic logic and to inductive argument. (Formerly 110 & 111)

PHIL 220. Ancient Greek Philosophy (3)

A general survey of the history of Western philosophy from the pre-Socratics to the end of the Classical Period. (Formerly 250) Prerequisite: 3 units in Philosophy.

PHIL 223. Seventeenth and Eighteenth-Century Philosophy (3)

A general survey of the history of Western philosophy from the Renaissance through the Eighteenth Century. (Formerly 252) Prerequisite: 3 units in Philosophy.

PHIL 295. Selected Topics in Philosophy (Topics to be-specified in Class Schedule) (1-5)

Development of a selected topic in Philosophy. Topics vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

PHIL 300. Humanistic Inquiry (3)

Nature and inter-relationships of the humanistic disciplines, including the performing and creative arts, and their relations with the natural and social sciences. Prerequisite: At least one course in each of three of the following fields: art, drama, foreign languages and literature, music, philosophy.

PHIL 330. Theory of Knowledge (4)

Analysis of the concepts of knowledge, truth, belief, evidence, certainty; readings in classical and contemporary theories. (Formerly 320) Prerequisite: 6 units in Philosophy.

PHIL 340. 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. Prerequisite: 6 units in Philosophy.

PHIL 425. Recent and Contemporary Philosophy (4)

A general survey of the history of Western philosophy from
the end of the Enlightenment to the present day. Prerequisite: 9 units in Philosophy.

PHIL 445. Philosophy of Religion (3)

Analysis of religious concepts with emphasis on the logic of religious discourse. (Formerly 302 & 303) Prerequisite: 9 units in Philosophy.

PHIL 450. Aesthetics (4)

Philosophy of art; analysis of aesthetic experience; principles of criticism. (Formerly 346 & 347) Prerequisite: 9 units in Philosophy.

PHIL 495. Selected Topics in Philosophy (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in Philosophy. Topics vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

PHIL 498. Individual Study (1-5)

For undergraduate students prepared for independent study to supplement regular course offerings. May be repeated for credit. Prerequisite: Consent of instructor.

PHIL 598. Individual Study (1-5)

For graduate students prepared for independent work, and in need of advanced and specialized study in Philosophy. May be repeated for credit. Prerequisite: Consent of instructor.
The Department of Physical Education and Health offers the degree Bachelor of Arts, 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 as outlined below.
4. Consult with the major adviser during each advising period concerning requirements, changes in curriculum, waivers, etc.

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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Principles of Biology (Lec.)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 103</td>
<td>Principles of Biology (Lab.)</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td>ZOOL 105 Introduction to Zoology</td>
<td>4 units</td>
</tr>
<tr>
<td>HLTH 100</td>
<td>Health in Today's Society</td>
<td>1</td>
</tr>
<tr>
<td>PHED 100</td>
<td>Physical Education Activity</td>
<td>1</td>
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Required courses in related fields:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ZOOL 223</td>
<td>Physiology</td>
<td>3</td>
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<tr>
<td>ZOOL 224</td>
<td>Physiology</td>
<td>1</td>
</tr>
<tr>
<td>ZOOL 225</td>
<td>Anatomy</td>
<td>2</td>
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</table>
### Required courses in major field:

<table>
<thead>
<tr>
<th>Group One</th>
<th>All courses required</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHED 310</td>
<td>Foundations, History &amp; Philosophy of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 410</td>
<td>Curriculum Organization and Administration of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 420</td>
<td>Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>PHED 430</td>
<td>Measurement and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>PHED 440</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHED 450</td>
<td>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 210 - 213

<table>
<thead>
<tr>
<th>PHED 210 - 213</th>
<th>Sports Officiating, 1-4 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHED 340</td>
<td>Elementary Physical Education, 3 units</td>
</tr>
<tr>
<td>PHED 350</td>
<td>Community Recreation, 2 units</td>
</tr>
<tr>
<td>PHED 360</td>
<td>Intramural Programs, 2 units</td>
</tr>
<tr>
<td>PHED 370</td>
<td>Sociology of Sport, 3 units</td>
</tr>
<tr>
<td>HLTH 220</td>
<td>School Health and Safety, 2 units</td>
</tr>
<tr>
<td>HLTH 300</td>
<td>Prevention &amp; Care of Athletic Injuries, 2 units</td>
</tr>
</tbody>
</table>

#### Group Three: Four units from the following:

| PHED 320 | Coaching of Football, 2 units |
| PHED 321 | Coaching of Basketball, 2 units |
| PHED 322 | Coaching of Baseball, 2 units |
| PHED 323 | Coaching of Track and Field, 2 units |
| PHED 324 | Coaching of Volleyball, 2 units |

#### Group Four: Eight units from the following:

| PHED 330 | Theory and Analysis of Aquatic Sports, 2 units |
| PHED 331 | Theory and Analysis of Combative Activities | 2 units |
| PHED 332 | Theory and Analysis of Dance, 2 units |
| PHED 333 | Theory and Analysis of Golf-Archery, 2 units |
| PHED 334 | Theory and Analysis of Gymnastics, 2 units |
| PHED 335 | Theory and Analysis of Racquet Sports, 2 units |
| PHED 336 | Theory and Analysis of Team Sports, 2 units |

**TOTAL**: 38 units
DEGREE MINOR IN PHYSICAL EDUCATION
(20 units approved by the minor adviser)

Upper Division:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>HLTH 300 Prevention and Care of Athletic Injuries</td>
<td>2</td>
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<tr>
<td>Courses from Group One of Major Program</td>
<td>6</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>
<td>4</td>
</tr>
<tr>
<td>Courses from Group Four of Major Program</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

CREDIT BY EXAMINATION

Students with a broad background in today's health concerns may complete HLTH 100 on a written examination basis. Activity courses may be challenged by a proficiency and written examination.

ACTIVITY COURSES (1 unit)

<table>
<thead>
<tr>
<th>Category</th>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>Fitness and Conditioning</td>
<td>PHED 105</td>
<td>Jogging - Aerobics</td>
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<td></td>
<td>PHED 107</td>
<td>Judo</td>
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<td></td>
<td>PHED 108</td>
<td>Karate</td>
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<tr>
<td></td>
<td>PHED 111</td>
<td>Personal Defense (W)</td>
</tr>
<tr>
<td></td>
<td>PHED 113</td>
<td>Weight Training (M)</td>
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<tr>
<td></td>
<td>PHED 114</td>
<td>Weight Training (W)</td>
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<tr>
<td></td>
<td>PHED 116</td>
<td>Wrestling</td>
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<td>Aquatics</td>
<td>PHED 161</td>
<td>Swimming</td>
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<td></td>
<td>PHED 162</td>
<td>Intermediate Swimming</td>
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<td></td>
<td>PHED 163</td>
<td>Advanced Swimming</td>
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<tr>
<td></td>
<td>PHED 164</td>
<td>Life Saving</td>
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<tr>
<td>Team Sports</td>
<td>PHED 170</td>
<td>Baseball</td>
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<td>PHED 172</td>
<td>Advanced Baseball</td>
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<td>PHED 174</td>
<td>Basketball (M)</td>
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<td>PHED 182</td>
<td>Soccer</td>
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<td>PHED 184</td>
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<td>PHED 185</td>
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<td>PHED 186</td>
<td>Track</td>
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<td>PHED 187</td>
<td>Volleyball</td>
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<td>PHED 188</td>
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<td>Ballet</td>
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<td></td>
<td>PHED 192</td>
<td>Modern Dance</td>
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<td></td>
<td>PHED 194</td>
<td>Advanced Modern Dance</td>
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<tr>
<td></td>
<td>PHED 195</td>
<td>Social Dance</td>
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<tr>
<td></td>
<td>PHED 197</td>
<td>Folk Dance</td>
</tr>
</tbody>
</table>

2/1
PHED 210 - 213. Sports Officiating (1)

The study and interpretation of rules for various sports; procedures, mechanics and practice in officiating. May be repeated for a total of 2 units. PHED 210, Football; PHED 211, Basketball; PHED 212, Baseball; PHED 213, Track and Field. (Formerly 200)

PHED 250 - 257. Intercollegiate Athletics (1)

Theory, practice, and game performance of competitive intercollegiate athletics. Limited to students trying out for the varsity or freshmen-junior varsity teams. May be repeated for credit. (Formerly 251) Prerequisite: Consent of instructor. PHED 250, Baseball; PHED 251, Basketball; PHED 252, Cross Country; PHED 253, Golf; PHED 254, Tennis (M); PHED 255, Tennis (W); PHED 256, Track and Field; PHED 257, Volleyball.

PHED 295. 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. May be repeated for credit. Prerequisite: Consent of instructor.

PHED 310. 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 319. Curriculum and Instruction; Physical Education (3)

Preparation for teaching in physical education in secondary schools. Current trends and practices, instructional materials and techniques. Prerequisites: EDUC 302 or equivalent, consent of credential adviser or teaching experience. (Same as EDUC 319)

PHED 320 - 324. Theory of Coaching (2)

Limited to physical education majors and minors or consent of instructor. Principle and coaching techniques underlying participation in competitive interscholastic athletics. (1 lecture, 2 laboratory hours) PHED 320, Football; PHED 321, Basketball; PHED 322, Baseball; PHED 323, Track and Field; PHED 324, Volleyball.
PHED 330 - 336. Theory and Analysis of Physical Education Activities (2)

Limited to physical education majors and minors or consent of instructor. 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, and evaluation techniques. (Two 2 hour laboratories) PHED 330, Aquatic Sports; PHED 331, Combative Activities; PHED 332, Dance; PHED 333, Golf-Archery; PHED 334, Gymnastics; PHED 335, Racquet Sports; PHED 336, Team Sports.

PHED 340. Elementary Physical Education (3)

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.

PHED 350. Community Recreation (2)

Study of leisure in a technological society, recreational programs and recreational organizations.

PHED 360. Intramural Programs (2)

The organization, administration and motivation of intramural activities for schools including practical field experience.

PHED 370. Sociology of Sport (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 380. 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 490) Prerequisites: ZOOL 225 is recommended.

PHED 410. Curriculum Organization and Administration of Physical Education (3)

Curriculum development and evaluation in school programs of physical education including the instructional program, intramural sports and interscholastic athletics. Administrative policies and procedures pertaining to staff, facilities, equipment, budget and
Identification of the content of a well-rounded physical education program; instructional time allotments, unit planning, staff utilization, intramurals, extramurals, and interscholastic athletics.

PHED 420. Motor Learning (3)

The application of motor learning principles as they relate to methods of teaching movement to various age groups. Emphasis will also be placed on the development of motor patterns in the child from prenatal stages through adolescence.

PHED 430. Measurement and Evaluation in Physical Education (3)

A study of practical measurements for evaluation in physical education with emphasis on fitness and sports skills. (Formerly 480)

PHED 440. 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) (Formerly 484) Prerequisites: ZOOL 225, PHYS 150 is recommended.

PHED 450. Physiology of Exercise (3)

Study of different body systems and the effects of physical exercise on each system and physical performance. (Lecture, 2 hours; laboratory, 3 hours) (Formerly 487) Prerequisite: ZOOL 223 and 224.

PHED 490. Field work or Practicum in Physical Education (1)

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 3 units. Prerequisite: Consent of Department Chairman.

PHED 495. 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. May be repeated for credit. Prerequisite: Consent of instructor.

PHED 498. Individual Study (1-5)

For students capable of independent work in need of advanced or specialized study. May be repeated for 6 units. Prerequisite: Consent of Department Chairman.
HEALTH

HLTH 100. Health in Today's Society (1)

Attention is focused on contemporary health problems and concerns. Typical topics covered are mental health, drugs, weight control, family planning and pollution. (Formerly 101)

HLTH 220. 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 300. Prevention and Care of Athletic Injuries (2)

Principles and practices of conditioning athletes, with emphasis on the prevention and care of athletic injuries, bandaging, therapy, health habits, and protective equipment. (Formerly 310)
PHYSICS AND PHYSICAL SCIENCES

Walter John, Jr., Ph.D., Professor of Physics, Chairman
Carl Gatlin, Ph.D., Professor of Applied Sciences
Ervin H. Schwarcz, Ph.D., Professor of Physics
Vladimir S. Tuman, Ph.D., Professor of Physics
James M. Goodwin, Ph.D., Associate Professor of Physics
Tai-Low Chow, Ph.D., Assistant Professor of Physics

The Department of Physical Sciences offers the degree of Bachelor of Arts, Physics and Bachelor of Arts, Physical Sciences. A minor in physics or in physical sciences is also available.

The curriculum in physics is designed to give the student a broad and thorough understanding of the fundamentals of physics and to prepare him for a teaching career, industrial work, or graduate school.

The degree in physical sciences is intended for the student who desires a broader training in the physical sciences rather than an intensive training in physics.

A student entering either program is expected to have completed the following high school courses: three years of mathematics, one year of physics, and one year of chemistry. Any deficiencies may be made up by proper selection of lower division courses. The student interested in a major or minor in physics or physical sciences should consult with an adviser in the Physical Sciences Department for proper selection of courses.

REQUIREMENTS FOR BACHELOR OF ARTS, PHYSICS

Physics 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 25 upper division units of physics.

DEGREE MAJOR IN PHYSICS

Prerequisites to the Major:

Required courses in major field:

PHYS 225, 226. General Physics I-II, 8 units
PHYS 235, 236. General Physics Laboratory I-II, 2 units

Required courses in supporting field:

PHSC 120. Current Developments in Physical Science
2 units
MATH 141, 142. Calculus I-II, 8 units
MATH 241. Multivariate Calculus, 4 units
CHEM 110, 111. Principles of Chemistry I-II, 10 units

THE MAJOR:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHYS 301</td>
<td>Introduction to Theoretical Physics I</td>
<td>3</td>
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<tr>
<td>PHYS 314, 315</td>
<td>Analytical Mechanics I-II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 332, 333</td>
<td>Electricity and Magnetism I-II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 352</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 353</td>
<td>Quantum Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 410</td>
<td>Advanced Physics Laboratory</td>
<td>3</td>
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<tr>
<td>PHYS 453</td>
<td>Thermal Physics I</td>
<td>3</td>
</tr>
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</table>

**TOTAL** .................................................................. 25

The following courses are recommended for students who are planning to attend graduate school:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHYS 302</td>
<td>Introduction to Theoretical Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 354</td>
<td>Quantum Mechanics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 454</td>
<td>Thermal Physics II</td>
<td>2</td>
</tr>
<tr>
<td>MATH 325</td>
<td>Ordinary Differential Equations, 4 units</td>
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</tr>
<tr>
<td>MATH 326</td>
<td>Partial Differential Equations, 4 units</td>
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</tbody>
</table>

**DEGREE MINOR IN PHYSICS**

Consists of 14 units in Physics as approved by the minor adviser, to include at least 8 units in upper division.

**REQUIREMENTS FOR BACHELOR OF ARTS, PHYSICAL SCIENCES**

Physical 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 24 upper division units.
4. No minor is required.

**DEGREE MAJOR IN PHYSICAL SCIENCES**

Prerequisites to the Major:

Required courses in major field:

PHSC 120. Current Development in Physical Science, 2 units
PHYS 225, 226. General Physics I-II, 8 units
PHYS 235, 236. General Physics Laboratory I-II, 2 units
CHEM 110, 111. Principles of Chemistry I-II, 10 units

Two of the following courses (and laboratory where available) as approved by adviser:
ASTR 210. Descriptive Astronomy, 3 units and
ASTR 211. Astronomy Laboratory, 1 unit
GEOL 210. Principles of Geology, 3 units and
GEOL 211. Geology Laboratory, 1 unit
PHSC 130. Environmental Pollution, 2 units

Required courses in supporting field:

MATH 141, 142. Calculus I-II, 8 units

Recommended courses:

MATH 200. Introduction to Computers, 3 units
MATH 365. Probability and Statistics I, 4 units

THE MAJOR: Units

PHYS 410. Advanced Physics Laboratory .................... 2
PHYS 420. Electronics Instrumentation Laboratory ........ 2
Three of the following:......................................... 9
GEOL 300. Physical & Environmental Geology, 3 units
ASTR 300. Contemporary Astronomy, 3 units
PHSC 300. Physical Science of the Environment, 3 units
PHYS 352. Modern Physics, 3 units

Complete one of the following groups of courses:.......... 11

TOTAL.................................................................. 24

1. Environment (not less than 11 upper division units required)
   PHSC 300. Physical Science of the Environment, 3 units
   CHEM 201. Quantitative Analysis, 4 units
   PHSC 498. Senior Environment Project, 6 units
   BIOL 265. Environmental Biology, or
   BIOL 363. Ecology, 2-4 units
   Additional upper division electives in Mathematics,
   Chemistry, or Biology as necessary to complete the unit requirement. Recommended electives are MATH 201,

2. Chemistry - not less than 11 upper division units in chemistry to be selected by advisement.

3. Mathematics - not less than 11 upper division units in mathematics to be selected by advisement.

4. Physical Oceanography - not less than 11 units of marine science courses taken at the Moss Landing Marine Laboratories and selected by advisement.

DEGREE MINOR IN PHYSICAL SCIENCES

Consists of 14 units in physical sciences as approved by the minor adviser to include 8 units in the upper division.
PHYSICS

Lower Division

PHYS 105, 106, 107. See Natural Sciences 105.

PHYS 150. Energy and Matter (3)

A descriptive survey of the basic physical concepts of mass and energy. Topics will range from classical Newtonian mechanics to modern theories of the atom. (Lecture, 2 hours; laboratory, 3 hours) No prerequisite.

PHYS 110. Basic Physics I (5)

Principles of physics concerned with mechanical motion, energy, heat, electricity and magnetism, waves, light, optics, atoms, the nucleus. Recommended for general students and for students preparing for biology or medicine. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) (Formerly 101, 102, 103) Prerequisites: Algebra, plane geometry, and trigonometry at the high school level or consent of instructor.

PHYS 111. Basic Physics II (5)

Continuation of PHYS 110. (Formerly PHYS 101, 102, 103) Prerequisite: PHYS 110.

PHYS 225. General Physics I (4)

General physics using the calculus, for science students. Mechanics, momentum and energy. Electricity, magnetism, heat, wave motion, light. (Lecture, 3 hours; discussion, 1 hour) (Formerly 221, 222, 223, 224) Prerequisite: Concurrent enrollment in MATH 142.

PHYS 226. General Physics II (4)

Continuation of PHYS 225. (Formerly 221, 222, 223, 224) Prerequisite: PHYS 225.

PHYS 235. General Physics Laboratory I (1)

Laboratory to accompany PHYS 225. (Formerly 231, 232, 233, 234) Prerequisite: PHYS 225 or concurrent enrollment in PHYS 225.

PHYS 236. General Physics Laboratory II (1)

Laboratory to accompany PHYS 226. (Formerly 231, 232, 233, 234) Prerequisite: PHYS 226 or concurrent enrollment in PHYS 226.
PHYS 295. 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. This course may be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

PHYS 301. Introduction to Theoretical Physics I (3)

Study of various physical problems and their solution. Topics may include electromagnetic and gravitational fields, systems with symmetry, heat and fluid flow, wave motion, and quantum mechanics. Additional topics of current interest may be added. (Formerly 471) Prerequisite: PHYS 226.

PHYS 302. Introduction to Theoretical Physics II (3)

Continuation of PHYS 301. (Formerly PHYS 472) Prerequisite: PHYS 301.

PHYS 314. Analytical Mechanics I (3)

Fundamental concepts of mechanics, including dynamics of particles and rigid bodies, gravitation, Lagrangian and Hamiltonian dynamics, theory of oscillations, and the wave equation. (Formerly 311) Prerequisites: PHYS 301, MATH 142 or consent of instructor.

PHYS 315. Analytical Mechanics II (2)

Continuation of PHYS 314. (Formerly 312) Prerequisite: PHYS 314.

PHYS 332. Electricity and Magnetism I (2)

Electrostatics, magnetostatics, theory of the electromagnetic field, including Maxwell's equations and electromagnetic waves, electric and magnetic properties of materials. (Formerly 322) Prerequisite: PHYS 301 or consent of instructor.

PHYS 333. Electricity and Magnetism II (3)

Continuation of PHYS 332. (Formerly 323) Prerequisite: PHYS 332.

PHYS 337. Theory of Relativity (2)

Elements of the Special and General Theories of Relativity, including the Michelson-Morley experiment, the Lorentz transformation, and experimental tests of general relativity. (Formerly 325) Prerequisites: PHYS 333 and MATH 142.
PHYS 352. Modern Physics (3)

Origin of quantum theory, atomic structure, X-rays, the nucleus, particles. (Formerly 372) Prerequisite: PHYS 226 or consent of instructor.

PHYS 353. 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 373) Prerequisite: PHYS 352 or consent of instructor.

PHYS 354. Quantum Mechanics II (3)

Continuation of PHYS 353. (Formerly 374) Prerequisite: PHYS 353.

PHYS 410. Advanced Physics Laboratory (1)

Fundamental experiments in mechanics, heat, electricity, and magnetism, optics, atomic physics, nuclear physics, etc. (Formerly 400) Prerequisite: Upper division standing or consent of instructor. This course may be repeated for a maximum of 6 units.

PHYS 420. Electronics Instrumentation Laboratory (2)

Introduction to fundamental electronic instruments used in scientific measurements, with a view to understanding their use and operation rather than their construction. In addition, the student will study the experimental setup in an actual system used in his field of interest, chosen from the current literature. (Lecture, 1 hour; laboratory, 3 hours) Prerequisite: Upper division standing or consent of instructor.

PHYS 445. Nuclear Physics (2)

Elements of nuclear structure, radioactivity, interaction of nuclear radiations with matter, detection of nuclear radiation, fission and fusion, nuclear models. (Formerly 435) Prerequisite: PHYS 352 or consent of instructor.

PHYS 453. Thermal and Statistical Physics I (3)

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. (Formerly 451) Prerequisite: PHYS 226 or consent of instructor.
PHYS 454. Thermal and Statistical Physics II (2)

Continuation of PHYS 453. (Formerly 452) Prerequisite: PHYS 453 or consent of instructor.

PHYS 456. Solid State Physics (2)

Crystal structure, metal crystals, molecular crystals. Thermal, electrical, magnetic properties of crystals. Free electron model of metals, band theory of solids. (Formerly 455) Prerequisite: PHYS 352 or PHYS 453.

PHYS 492. Optics and Waves (2)

Principles of geometrical optics; reflection, refraction, polarization, coherence and interference, Kirchhoff's diffraction theory, Fourier methods in optics, optics of solids, lasers and holography. (Formerly 491) Prerequisite: PHYS 226 or consent of instructor.

PHYS 495. Selected Topics in Physics (Topics to be specified in the Class Schedule) (1-5)

Development of a selected branch of physics. Topics may vary each term. This course may be repeated for credit. Prerequisite: Consent of instructor.

PHYS 498. Individual Study (1-5)

For students capable of independent work in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

Graduate

PHYS 598. Individual Study (1-5)

For qualified students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

PHYSICAL SCIENCES

Lower Division

PHSC 120. Current Developments in Physical Science (2)

Seminar involving students and faculty members in discussions of exciting new developments in physics and physical science. Designed to acquaint the student with the various branches of physical science. No prerequisite.
PHSC 130. Environmental Pollution (2)

Survey of the pollution of the air, water, and land environment. The physical and chemical aspects of pollution by chemicals, pesticides, wastes, radio-activity, heat, and noise. (Lecture, 2 hours) (Formerly PHSC 101) No prerequisite.

PHSC 295. Selected Topics in Physical Sciences (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of Physical Sciences. Topics may vary each term. The course may be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

PHSC 300. Physical Science of the Environment (3)

Fundamental aspects of environmental science with consideration of the various sources of energy and their affect on the environment. Topics include air pollution and associated atmospheric science, nuclear energy and radioactive pollution, thermal pollution, and other environmental subjects. Prerequisite: Upper division standing or consent of instructor.

PHSC 495. 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. The course may be repeated for credit. Prerequisite: Consent of instructor.

PHSC 498. Individual Study (1-5)

For students capable of independent work in need of advanced and specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

ASTRONOMY

Lower Division

ASTR 210. 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) (Formerly 200) No Prerequisite.
ASTR 211. Astronomy Laboratory (1)

Telescope observations of the moon, planets, their satellites, and sunspots. Optical experiments related to astronomy. (Laboratory, 3 hours) (Formerly 201) Prerequisite: ASTR 210 or concurrent enrollment in ASTR 210.

Upper Division

ASTR 300. Contemporary Astronomy (3)

Study of stars, galaxies and the physical processes taking place in the universe. (Lecture, 3 hours) Prerequisite: ASTR 210.

GEOLOGY

Lower Division

GEOL 210. Principles of Geology (3)

Survey of the structure and the materials of the outer portion of the earth and the geologic processes responsible for sculpturing the earth of today. (Lecture, 3 hours) (Formerly 200) No prerequisite.

GEOL 211. Geology Laboratory (1)

Laboratory to accompany GEOL 210; one or more field trips. (Laboratory, 3 hours) (Formerly 201) Prerequisite: GEOL 210 or concurrent enrollment in GEOL 210.

Upper Division

GEOL 300. 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 210.
POLITICAL SCIENCE

Paul F. Magnelia, Ph.D., Associate Professor, Chairman
Gary C. Shaw, Ph.D., Associate Professor
Kenneth Entin, Ph.D., Assistant Professor
Barbara Greene, Ph.D., Assistant Professor
Steven Hughes, Ph.D., Assistant Professor
Richard Mendes, Ph.D., Assistant Professor
John T. Wold, Ph.D., Assistant Professor

The Department of Political Science 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 the student to assume and execute his responsibilities intelligently as a citizen in a consciously self-governing community. The major program also provides appropriate pre-professional training for the student who intends to enter graduate school, study for a teaching credential, or pursue one of the careers listed below.

Careers in Law:

While all pre-law students should have a strong background in the liberal arts, many can benefit in particular from courses offered by the Department of Political Science. Especially recommended are courses dealing with the judiciary and other aspects of American politics. The department also participates in the Administration of Justice Program. Pre-law students interested in advising should contact the department.

Careers in Government:

The Department of Political Science offers courses in the field of public administration specifically designed for those who wish to pursue a career in government. A Public Service Intern Project, an integral aspect of the program, enables students to gain practical experience in local, county, and state governments.

Careers in Foreign Affairs:

The Department of Political Science offers a number of courses which will help prepare students interested in entering foreign service on the various international organizations. These courses are combined with courses in related disciplines.

REQUIREMENTS FOR THE BACHELOR OF ARTS, POLITICAL SCIENCE

Political Science majors are to:

255
1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 26 upper division units.
4. Completion of a minor is not required.

**DEGREE MAJOR IN POLITICAL SCIENCE**

Prerequisites to the Major

Required courses in the major field:

- PSCI 120. American Government, 3 units
- PSCI 200. Introduction to Political Science, 3 units (Recommended for Majors)
  or
- PSCI 201. Modern Political Ideologies, 3 units

Required courses in supporting fields: two of the following.

- ANTH 206. Introduction to Cultural Anthropology
- ECON 250. Principles of Economics
- GEOG 240 or 241. World Regional Geography
- SOCL 101. Introduction to Sociology

The Major

Two courses required in supporting fields as approved by major adviser. MATH 160, Statistics, is strongly recommended.

<table>
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<th>Course</th>
<th>Units</th>
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<tr>
<td>PSCI 300. Classics of Political Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>PSCI 310. Scope and Methods of Political Science</td>
<td>4</td>
</tr>
</tbody>
</table>

One 300 level course from each of the following fields:

- American Politics; Comparative Politics; International Relations
- Courses in Political Science as approved by major adviser

Total: 26 units

**DEGREE MINOR IN POLITICAL SCIENCE**

Sixteen units approved by the minor adviser are required, including at least 10 units in upper division courses.

**TEACHING CREDENTIALS**

Majors in political science for elementary and secondary credentials must fulfill the following requirements:
1. Degree major in political science.
2. Secondary credential candidates must complete 6 units in courses in political science as postbaccalaureate work and receive approval of the Department of Political Science as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTIONS

PSCI 120. 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 202)

PSCI 200. Introduction to Political Science (3)

To examine 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. (Formerly 220)

PSCI 201. Modern Political Ideologies (3)

Survey of the theory and practical application of modern political ideologies. Included in the survey will be communism, fascism, democracy, and technology. (Formerly 222)

PSCI 260. Issues in International Politics (3)

Study of contemporary issues in international relations. Such topical items as East-West relations, emerging role of small nations, and population and technological factors affecting the international system are included in the course.

PSCI 295. 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. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

POLITICAL THEORY AND METHODOLOGY

PSCI 300. Classics of Political Philosophy (4)

A critical review of the major works in political philosophy. (Formerly 300, 301) Prerequisite: PSCI 120.
PSCI 303. American Political Thought (2)

Main trends of American political thinking from colonial times to the present. (Formerly 400) PSCI 300 recommended.

PSCI 305. Marxist Political Thought (2)

Examination of the foundations and philosophical assumptions of Marxist theory. PSCI 300 recommended.

PSCI 306. Contemporary Political Thought (2)

Readings in political philosophy focusing on the technological society. Included in the readings will be Marxist revisionism, existentialism, behavioralism, and selected utopian reactions to technology. PSCI 300 recommended.

PSCI 310. Scope and Methods of Political Science (4)

This course is designed to introduce students to the basic assumptions and techniques of empirical political science. Topics to be discussed include the philosophy of the scientific method, the structure of theory and models, the measurement of political science data, the analysis of political data, the proper techniques for reporting analyses, and the use of data processing equipment to handle large amounts of information. Prerequisite: PSCI 120; MATH 160 recommended.

PSCI 311. Research Design Seminar in Political Science (3)

This course will focus upon the construction and implementation of political science experiments, and surveys. It will include a discussion of the sources of bias and error in political science research. Prerequisite: PSCI 310.

PSCI 402. Selected Topics in Political Theory (1-3)

Analysis and discussion of selected issues and/or systems in political theory. (Formerly 401) PSCI 300 recommended. (May be repeated up to 6 units.)

AMERICAN POLITICS

PSCI 320. 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 120.
PSCI 321. 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. (Formerly 354) Prerequisite: PSCI 120.

PSCI 322. 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 commerce, due process (substantive and procedural), equal protection, and First Amendment freedoms. Prerequisite: PSCI 120.

PSCI 323. 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. (Formerly 351) Prerequisite: PSCI 120.

PSCI 325. 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. (Formerly 362) Prerequisite: PSCI 120.

PSCI 330. 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 120.

PSCI 331. 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. Field work. (Formerly 455) Prerequisite: PSCI 120.

PSCI 420. Problems in 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 and advanced students. Prerequisite: PSCI 120. PSCI 322 recommended.

PSCI 421. The Judicial Process (3)

A study of judicial decision-making and of the organization of the American judiciary. Emphasis is placed on the federal courts. (Formerly 457) Prerequisite: PSCI 120. PSCI 322 strongly recommended.

PSCI 430. 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 120. PSCI 330 recommended.

PSCI 431. Public Policy Analysis (4)

Public Policy Analysis will deal with various approaches, emphasizing systems theory and economic theory as they are applied to specific policy areas. Research projects required. Prerequisite: PSCI 120. PSCI 330 recommended.

PSCI 432. Minority Politics (3)

Study of strategies and styles of minority groups in the American political system with emphasis on White ethnic groups, Blacks, Mexican-Americans, Japanese and Indians. Critical analysis of recent innovative attempts to deal with minority problems. (Formerly 494) Prerequisite: PSCI 120. PSCI 331 recommended.

PSCI 434. Public Administration Internship (3)

The Public Administration Intern program is designed to provide experience working with local, county and state governments. Readings and papers will be assigned on the basis of individual projects. Prerequisites: PSCI 120, 330.

COMPARATIVE POLITICS

PSCI 340. Comparative Politics: Europe (3)

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. (Formerly 311) Prerequisite: PSCI 120.
PSCI 341. 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 120.

PSCI 342. Comparative Politics: East Asia (4)

An examination of the dynamics of the major governments of East Asia, especially China and Japan. Prerequisite: PSCI 120.

PSCI 345. Comparative Politics: USSR and 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. (Formerly 317) Prerequisite: PSCI 120.

PSCI 346. Politics of the Developing Areas (4)

Analysis of the process of political change in the areas of Asia, Africa, Latin America and the Middle East. Course will focus on such issues as nation-building, political dependence, and revolution. Prerequisite: PSCI 120.

PSCI 442. 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 120. PSCI 330 recommended.

PSCI 444. Elites and Public Policy in Latin America (3)

An analysis of the political behavior of Latin American elites and their impact on public policy. Emphasis is placed on the relationship between elite recruitment and public policy in Chile, Cuba, and Mexico. Prerequisite: PSCI 120.

PSCI 360. International Relations (4)

Introduction to the elements of international relations. Work in lab simulation will be an integral part of the course. Prerequisite: PSCI 120.

PSCI 362. Soviet Foreign Policy (3)

Analytical and historical examination of Soviet policy. Emphasis on the role of communist ideology, Russian tradition, and politics of the Soviet Union. (Formerly 434) Prerequisite: PSCI 120.
PSCI 461. National Security I (3)

Study of national security decision-making with emphasis on the roles played by civilian executive officials, the military, Congress and industry. Survey and critical analysis of American defense policy. Prerequisite: PSCI 120. PSCI 360 recommended.

PSCI 462. National Security II (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 120. PSCI 360 recommended.

PSCI 463. 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 120.

PSCI 495. Selected Topics in Political Science (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch of political science. Topics vary each term. May be repeated for credit.

PSCI 496. Senior Seminar (3)

Topic to be selected from one of the four major areas: Political Theory, Comparative Systems, International Relations, American Politics. May be repeated for a maximum of 6 units. Prerequisite: Consent of instructor.

PSCI 497. Seminar in Criminal Justice (3)

A seminar in the development of and current trends in the administration of criminal justice. Emphasis will be placed upon relevant constitutional, statutory, and procedural problems. Specific focus will be on the functions of the police and the judiciary. Prerequisites: PSCI 120 and consent of instructor.

PSCI 498. Individual Study (1-5)

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.
PSYCHOLOGY

Lewis E. Holt, Ph.D., Associate Professor, Chairman
V. Kenneth Shrable, Ph.D., Professor
W. Mack Goldsmith, Ph.D., Associate Professor
Stanley E. Sherman, Ph.D., Associate Professor
Douglas A. Spanier, Ph.D., Associate Professor
Thomas K. Dempsey, Ph.D., Assistant Professor
Lee A. Elliott, Ph.D., Assistant Professor

The Department of Psychology offers the Bachelor of Arts and Master of Science, Psychology. 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 School of Behavioral and Social Sciences 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.)

A Bachelor of Arts, Liberal Studies, is also offered with psychology as an area of concentration. (For further information, see Liberal Studies.)

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 26 upper division units, as approved by the major adviser.
4. Completion of a minor is not required.

DEGREE MAJOR IN PSYCHOLOGY

Prerequisites to the Major

PSYC 201. Introduction to Psychology, 3 units or equivalent
PSYC 202. Introduction to Psychological Methods, 3 units or equivalent

Required Courses in supporting fields:

1. ANTH 206. Introduction to Cultural Anthropology, 3 units or
   SOCL 101. Introduction to Sociology, 3 units
2. BIOL 101. Principles of Biology, 3 units
   BIOL 103. Principles of Biology, Laboratory, 1 unit
   or
   ZOOL 105. Introduction to Zoology, 4 units

3. MATH 160* Statistics, 4 units

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 400. Experimental Methods and Design</td>
<td>4</td>
</tr>
</tbody>
</table>

At least 2 laboratory courses from the following:
PSYC 312. Human Development Laboratory, 1 unit
PSYC 330. Social Psychology Laboratory, 1 unit
PSYC 369. Learning and Motivation Laboratory, 1 unit
PSYC 434. Abnormal Behavior Laboratory, 1 unit

Upper division courses in psychology as approved by major adviser

Total

Majors are normally expected to take a broad basic program consisting of at least 2 courses from Group I and 1 course from Groups II and III.

Group I
PSYC 313. Human Development, 3 units
PSYC 316. Introduction to Psychological Testing, 3 units
PSYC 330. Social Psychology Laboratory, 1 unit
PSYC 434. Abnormal Behavior Laboratory, 1 unit

Group II
PSYC 309. Comparative Animal Behavior, 3 units
PSYC 350. Introduction to Perception and Cognition, 3 units
PSYC 370. Introduction to Learning and Motivation, 3 units

Group III
PSYC 331. Introduction to Social Psychology, 3 units
PSYC 332. Introduction to Personality, 3 units

DEGREE MINOR IN PSYCHOLOGY

(18 units, to include at least 12 units in upper division)

*Under certain circumstances MATH 110 or MATH 150 will be accepted in lieu of MATH 160 with prior approval of the major adviser.
Lower Division

PSYC 201. Introduction to Psychology, 3 units
PSYC 202. Introduction to Psychological Methods, 3 units

Upper Division

Courses as approved by minor adviser, 12 units.

TEACHING CREDENTIALS*

Majors in psychology for elementary and secondary credentials must fulfill the following requirements:

1. Degree major in psychology.
2. Secondary credential candidates must complete 6 units in courses in psychology as postgraduate work and receive approval of psychology as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

Minors in psychology seeking elementary and secondary credentials must fulfill the following requirements:

1. Degree minor in psychology; plus additional courses in psychology to total a minimum of 20 units as recommended by the minor adviser and approved by the credential adviser.
2. Secondary credential candidate must receive approval of the minor adviser as to the subject matter competence.

MASTER OF SCIENCE IN PSYCHOLOGY

The Department of Psychology offers graduate study leading to a Master of Science degree which is interdisciplinary in nature. The primary purpose of the M.S. in Psychology is to develop mastery of a substantial body of knowledge and skills for students planning careers in clinical, correctional and school psychology. By selecting an emphasis in school psychology, a student can plan a program to complete requirements for the State Credentials of Psychometry and School Psychology. The student, in consultation with a faculty adviser designated by the Department of Psychology, develops a program of study appropriate to his career interests.

* Before electing to pursue this major or minor the student seeking a secondary credential should consult with a credential adviser as to possibilities of student teaching and professional placement.
Prerequisites for Admission to the Master of Science Degree Program:

1. A bachelor's degree with 16 approved semester units of psychology. 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 G.P.A.)

3. Completion of a set of examinations administered by the department to determine those areas in which further preparation is required.

4. Approval by the department.

5. Satisfactory performance on the Miller Analogies Test.

Continuation in the Degree Program:

1. Maintenance of a 3.0 G.P.A. in all courses attempted.

2. Maintenance of satisfactory progress toward the degree.

Requirements for the Degree

1. All students are required to complete the appropriate 50 semester units, or equivalent competency examinations where specified as an alternative.

2. All students complete the 34 core semester units listed in sections A, B and C.

3. All students complete an additional 16 semester units which are normally chosen from psychology courses, but may be selected (through approval of the Graduate Committee) from sections D or E, School and Correctional Principles, respectively. A student interested in interdisciplinary study involving the Psychology and Speech Departments should consult the Graduate Committee in planning his program.

4. Students interested in the School Psychology Credential complete all of the courses listed in Section D, School Principles.

A. Basic Requirements (10 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 599</td>
<td>Master's Thesis, 6 units</td>
</tr>
<tr>
<td>PSYC 592</td>
<td>Field Work, 4 units</td>
</tr>
</tbody>
</table>

B. General Principles (14 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 472</td>
<td>Experimental Analysis of Behavior, 3 units</td>
</tr>
<tr>
<td>PSYC 482</td>
<td>Group Dynamics Seminar, 3 units</td>
</tr>
<tr>
<td>PSYC 500</td>
<td>Proseminar I (Applied Research Methods), 4 units</td>
</tr>
<tr>
<td>PSYC 501</td>
<td>Proseminar II (Advanced Learning), 4 units</td>
</tr>
</tbody>
</table>
C. Clinical Principles (10 units)
PSYC 436. Seminar in Clinical and Abnormal Psychology, 3 units
PSYC 503. Psychodiagnosics I, 3 units
PSYC 504. Psychodiagnosics I Laboratory, 1 unit
PSYC 577. Introduction to Counseling Techniques, 3 units

D. School Psychology Principles (25 units)
EDUC 504. Philosophy of Education, 2 units
EDUC 576. Pupil Personnel Services Seminar, 2 units
EDUC 550. Organization of Public Education, 2 units
EDUC 554. Exceptional Children and Youth, 3 units
EDUC 552. Legal and Financial Aspects of Education, 3 units
PSYC 505. Psychodiagnosics II, 3 units
PSYC 506. Psychodiagnosics II Laboratory, 1 unit
PSYC 513. Advanced Human Development, 3 units
PSYC 572. Behavioral Consultation, 2 units
PSYC 578. Advanced Counseling, 3 units
PSYC 592. Field Work, 4 units

E. Correctional Principles (23 units)
SOCL 412. Sociology of Crime and Delinquency, 3 units
SOCL 413. Sociology of Correction, 4 units
SOCL 414. Sociology of Law, 3 units
SOCL 425. Criminal Justice II, 3 units
SOCL 500. Seminar in Criminology, 3 units
PSCI 497. Seminar in Criminal Justice, 3 units

COURSE DESCRIPTIONS

Lower Division

PSYC 201. Introduction to Psychology (3)

Scientific study of human behavior. This course or its equivalent is a prerequisite to all other 200 level courses in psychology.

PSYC 202. 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 201 or equivalent.

PSYC 203. Psychology of Marriage (3)

Psychological and ethical aspects of courtship, marriage, and family life. (Formerly 300) Prerequisite: PSYC 201 or equivalent.
PSYC 204. Psychology of Sex Roles (3)

Psychological analysis of the sex roles in American society. Attention will be focused on the development of sex differences and concomitant psychological manifestations in societal roles and individual personality development. Prerequisite: PSYC 201.

PSYC 221. Psychology of Adjustment (3)

The principles of personal adjustment, maintenance and enhancement of mental health. Prerequisite: PSYC 201.

PSYC 295. 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. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

PSYC 309. Comparative Animal Behavior (3)

A comparative study of behavior systems in animals and man. Stress is upon the social and developmental aspects of behavior. Includes training in observing and recording behaviors in the field. Prerequisite: PSYC 202. BIOL 101 is recommended.

PSYC 310. Introduction to Physiological Psychology (3)

Relationship between behavior and physiological processes, particularly neurophysiological processes. Prerequisite: PSYC 202. Recommended: ZOOL 223.

PSYC 312. Human Development Laboratory (1)

Systematic observation of human behavior at various stages of development. Prerequisite: Concurrent enrollment in PSYC 313 or permission of instructor.

PSYC 313. Human Development (3)

The psychology of development: infancy, childhood, adolescence, and maturity. Prerequisite: PSYC 202.

PSYC 316. Introduction to Psychological Testing (3)

Basic, widely applicable principles of psychological testing, presented in a non-technical way, plus descriptions of representative types of psychology tests in common use. Prerequisite: PSYC 202.
PSYC 330. Social Psychology Laboratory (1)

Laboratory of field studies to demonstrate the variety of methods and content areas in social psychology. Prerequisite: Concurrent enrollment in PSYC 331, or permission of instructor.

PSYC 331. Introduction to Social Psychology (3)

Interpersonal relations including social attitudes, opinions; social structure and group dynamics. (Formerly 431) Prerequisite: PSYC 202.

PSYC 332. 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. (Formerly 321) Prerequisite: PSYC 202.

PSYC 350. 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 202.

PSYC 369. Learning and Motivation Laboratory (1)

Laboratory experiments to demonstrate the variety of methods and procedures for studying learning and motivation. Prerequisite: Concurrent enrollment in PSYC 370 or permission of instructor.

PSYC 370. Introduction to Learning and Motivation (3)

Basic phenomena of learning and motivation such as: instrumental and classical conditioning, stimulus generalization, verbal learning, transfer and retention, drives, rewards, and punishment. Prerequisite: PSYC 202.

PSYC 379. Introduction to Counseling Theory (3)

Introduction to major theories of counseling. Demonstrations and review of current literature. (Formerly 477) Prerequisite: PSYC 331 or 332.

PSYC 400. Experimental Methods and Design (4)

Integrate techniques of experimental measurements and statistical inferences. Randomization, measurement and control of
experimental variables in a variety of psychological problems. Intermediate statistics stressing analysis of variance techniques. (This course is similar to the former PSYC 305.) Prerequisites: PSYC 202, MATH 160; at least two labs from PSYC 312, PSYC 330, PSYC 369, PSYC 434. (Lecture 3 hours, Lab. 3 hours.)

PSYC 402. History of Psychology (3)

Trends of thought, development of psychology as a discipline with leaders, schools, and issues. Prerequisites: PSYC 202 and two upper division courses in psychology or consent of instructor.

PSYC 413. 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 313 or consent of instructor.

PSYC 414. Mental Deficiency (3)

The etiology, diagnosis and remediation of mental deficiency. (Formerly 314) Prerequisite: PSYC 313.

PSYC 434. Abnormal Behavior Laboratory (1)

Supervised experience working with hospitalized psychiatric patients in recreational and therapeutic activities and participation in ongoing research programs. Prerequisites: Concurrent enrollment in PSYC 435 and permission of instructor.

PSYC 435. Introduction to the Study of Abnormal Behavior (3)

Abnormal behavior in man, stressing symptoms and dynamics of neuroses and psychoses. (Formerly 335) Prerequisites: PSYC 202 plus 2 additional courses in psychology. PSYC 313 and PSYC 332 are recommended.

PSYC 436. 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 313 or 332 and 435.

PSYC 472. Experimental Analysis of Behavior (3)

Study of advanced application and methods in operant research. Prerequisites: PSYC 370, satisfactory score on exam, and consent of instructor.
PSYC 482. 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. Experience will be provided through intra-group activities. Prerequisite: PSYC 331, or consent of instructor. (Seminar, 2 hours, Lab, 3 hours.)

PSYC 494. 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 202 and consent of instructor.

PSYC 495. 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. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

PSYC 497. 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: PSYC 400 and senior standing.

PSYC 498. Individual Study (1-5)

For students capable of independent work and desirous of undertaking specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

PSYC 500. Proseminar I (4)

Study of advanced principles of learning and motivation with special reference to human learning. (Lecture 3 hours, Lab 1 hour) Prerequisites: Graduate standing and consent of instructor.

PSYC 501. Proseminar II (4)

Study of advanced principles of learning and motivation with special reference to human learning. (Lecture 3 hours, Lab 1 hour) Prerequisites: Graduate standing and consent of instructor.

PSYC 503. Psychodiagnostics I (3)

Strategies of diagnostic evaluation with emphasis upon inter-
viewing techniques, instruments for evaluation of intellectual
capacities, achievement capacities, and personality structures.
Prerequisites: PSYC 316, graduate standing, and consent of in­
structor.

PSYC 504. Psychodiagnostics I Laboratory (1)

Supervised work with the application of diagnostic strategies
to representative cases. Prerequisite: Concurrent enrollment in
PSYC 503.

PSYC 505. Psychodiagnostics II (3)

Advanced concepts of diagnostic appraisal with emphasis upon
strategies appropriate to the evaluation of personality disorders.
Prerequisites: PSYC 503 and 504, or the satisfactory performance
on competency examination corresponding to these courses.

PSYC 506. Psychodiagnostics II Laboratory (1)

Supervised work with the application of diagnostic principles
to the evaluation of representative personality disorders. Pre­
requisite: Concurrent enrollment in PSYC 505.

PSYC 513. Advanced Human Development (3)

Empirical research on theoretical constructs of human develop­
ment. Prerequisites: PSYC 313 or equivalent and four upper
division courses in psychology.

PSYC 572. Behavioral Consultation (2)

Supervised work for consultation with classroom teachers.
Prerequisites: Graduate standing and consent of instructor.

PSYC 577. Introduction to Counseling Techniques (3)

Training in basic counseling skills. Prerequisites: PSYC 379
and permission of instructor.

PSYC 578. Advanced Counseling (3)

Counseling practices including commonly used methods of psy­
chotherapy practice in techniques of counseling. Prerequisites:
PSYC 379, 577, and graduate standing.

PSYC 592. 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. Prerequisites: Approval of instructor and graduate
standing.
PSYC 598. Individual Study (1-5)

For qualified graduate students in need of advanced and specialized study. May be repeated for a total of 6 units. Exception to the 6-unit limit may be granted by the Graduate Committee. Prerequisite: Consent of instructor.

PSYC 599. Master's Thesis (1-6)

Preparation of a thesis in area of specialty for partial fulfillment of requirements. Prerequisite: Admission to classified graduate standing.
SOCIAL SCIENCES

John E. Caswell, Ph.D., Coordinator

The student seeking a Bachelor of Arts, Social Sciences, may elect any one of the following concentrations:

B. A. Social Sciences
B. A. Social Sciences (Criminal Justice)
B. A. Social Sciences (Elementary Education)
B. A. Social Sciences (Secondary Education)

The student may also elect the following:

B. A. Liberal Studies (Social Science)

REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIAL SCIENCES

Social Sciences interdepartmental majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the general prerequisite: 1 lower division research methods course in the field of his major interest. These include PSYC 202, SOCL 203, PSCI 200, and for history the combination of HIST 290 and 299. Students in other fields will take PSYC 202 or SOCL 203.
3. Complete the major of not less than 32 upper division units, as approved by the adviser, and distributed as follows:
   4 courses in the field of the student's major interest
   3 courses in a second field
   3 courses in a third field
   1 interdisciplinary seminar
   11 courses of not less than 32 upper division units

Departmental rules for selection of courses:

1. Anthropology. Prerequisite: ANTH 206, Introduction to Cultural Anthropology. Note additional prerequisites to certain courses.

   Any upper division course may be selected, with the adviser's consent.

2. Economics. Prerequisite: ECON 250, Principles of Economics I, or equivalent.
Upper Division Courses: Select courses, one to a field:

(1) Economic Theory and Doctrines  
(2) Money and Banking  
(3) Public Finance and Fiscal Policy  
(4) Labor Economics  
(5) International Economics  
(6) Economic History

3. Geography. Prerequisite: One of the following:

GEOG 201 Principles of Physical Geography  
GEOG 202 Principles of Cultural Geography  
GEOG 24d World Regional Geography I  
GEOG 241 World Regional Geography II

Upper Division Courses: At least one selected from Group I, Systematic Geography and Methodology; at least one selected from Group II, Regional Geography.

4. History. Prerequisite: One year of lower division history, which may be satisfied by HIST 290 and 299. United States History or Western Civilization likewise fulfill the prerequisite.

Courses must 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 (HIST 290 and 299 are not "field" courses):

(1) European History  
(2) United States History  
(3) Non-Western History

5. Political Science. Prerequisite: PSCI 120 American Government

(1) American Politics. Select 2 courses at the 300 level  

(2) Select additional course(s) from:

(a) Political Theory and Methodology  
(b) Comparative Politics  
(c) International Relations

6. Psychology. Prerequisites: PSYC 201 Introduction to Psychology  

AND PSYC 202 Introduction to Psychological Methods  

OR SOCL 203 Research Methods
Upper Division Courses:

Four courses from the following:

- PSYC 313 Human Development
- PSYC 331 Introduction to Social Psychology
- PSYC 332 Introduction to Personality
- PSYC 350 Introduction to Perception and Cognition
- PSYC 370 Introduction to Learning and Motivation
- PSYC 413 Early Cognitive Development
- PSYC 435 Introduction to the Study of Abnormal Behavior

7. Sociology. Prerequisite: SOCL 101, Introduction to Sociology

Any upper division course may be selected with the adviser's consent.

NOTE: A student on entering the social science major should work out with his adviser a tentative program for the remainder of his undergraduate course. Thenceforth, he 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.

REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIAL SCIENCES (ADMINISTRATION OF JUSTICE)

Social Science interdepartmental majors (Administration of Justice) are to:

1. Complete the requirements for the Bachelor of Arts degree
2. Complete the major of not less than 32 upper division units from the list below as approved by the major adviser:

- 3 courses in Sociology: Criminology
- 1 Sociology course related to specific client groups
- 3 courses in Psychology
- 3 courses in Political Science
- 1 Interdisciplinary Social Science Seminar (Administration of Justice section)

11 courses of not less than 32 upper division units
Required and Recommended Courses:

**General Prerequisite:** 1 lower division research methods course: PSYC 202 or SOCL 203

1. Sociology. Prerequisites: SOCL 101, Introduction to Sociology

**Criminology** (Select 3)

SOCL 320. Social Change (3)
SOCL 321. Urban Sociology (3)
SOCL 325. Criminal Justice I (3)
SOCL 422. Sociology of Crime and Delinquency (3)
SOCL 413. Sociology of Correction (4)
SOCL 414. Sociology of Law (3)
SOCL 425. Criminal Justice II (3)

Courses related to specific client groups (Select 1)

SOCL 301. Race and Ethnic Relations (3)
SOCL 315. The Family (3)
SOCL 372. Social Welfare Services (4)

2. Psychology. (Select 3) Prerequisite: PSYC 201, Introduction to Psychology.

PSYC 313. Human Development (3)
PSYC 316. Introduction to Psychological Testing (3)
PSYC 331. Introduction to Social Psychology (3)
PSYC 332. Introduction to Personality (3)
PSYC 379. Introduction to Counseling Theory (3)
PSYC 435. Introduction to the Study of Abnormal Behavior (3)

3. Political Science. (Select 3) Prerequisites: PSCI 120, American Government (3); PSCI 200, Introduction to Political Science (3)

PSCI 330. Introduction to Public Administration (3)
PSCI 331. Urban Politics (4)
PSCI 420. Problems in Civil Liberties (2-3)
PSCI 421. The Judicial Process (3)
PSCI 430. Organization Theory (4)
PSCI 431. Public Policy Analysis (4)
PSCI 432. Minority Politics (3)
PSCI 497. Seminar in Criminal Justice (3)
REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIAL SCIENCES
(Elementary Education)

Social Sciences interdepartmental majors applying for the above degree are to:

1. Complete the Liberal Studies requirements
2. Complete all other requirements for the Bachelor of Arts degree
3. Complete one of the following programs:

   a. Not less than 32 upper division units in social sciences distributed as in Column A, selected from any courses not double-starred (**) in the list of social science courses below.

   b. Alternatively, complete the requirements for the Self-contained Classroom Credential within the B.A. program, and select from those courses single-starred (*) 20 upper division units, distributed as in Column B.

<table>
<thead>
<tr>
<th>Upper Division Courses</th>
<th>A</th>
<th>B</th>
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</thead>
<tbody>
<tr>
<td>(1) History or</td>
<td>4 courses</td>
<td>2 courses</td>
</tr>
<tr>
<td>Political Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Anthropology or</td>
<td>3 courses</td>
<td>2 courses</td>
</tr>
<tr>
<td>Geography</td>
<td></td>
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<tr>
<td>(3) Psychology or</td>
<td>3 courses</td>
<td>2 courses</td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Social Science</td>
<td>1 course</td>
<td>1 course</td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td></td>
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<tr>
<td>Seminar</td>
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</tbody>
</table>

11 courses 6-7 courses
32 units 20 units
minimum minimum
REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIAL SCIENCES
(Secondary Education)

Social Sciences interdepartmental majors are to:

1. Complete the General Education and all other collegewide requirements for the degree
2. Complete the general prerequisite: One of the following research methods courses: HIST 290 and 299; PSCI 200; PSYC 202; or SOCL 203
3. Complete the major of not less than 32 upper division units, as approved by the adviser, and distributed as follows:

   Upper Division Minimum

   a. History or Political Science 4 courses
   b. The other of the above fields 2 courses
   c. Anthropology, Economics, Geography, Psychology or Sociology (one field) 2 courses
   d. SSCI 496, Social Sciences Interdisciplinary Seminar 1 course
   e. Electives within the School 1-2 courses

   10-12 courses

   32 units minimum

COURSE DESCRIPTION

SSCI 496. Social Sciences Interdisciplinary Seminar (3)

Discussions and papers based on concepts, theories, information and techniques from several social science disciplines. Prerequisite: Completion of seven upper-division courses in the major.
The Department of Sociology offers the Bachelor of Arts, Sociology. The major is offered to those who desire a comprehensive and meaningful academic experience. By its nature, the study of sociology provides significant insights into the nature of human behavior and human societies. In contemporary society, problems of human relationships are not only the most crucial, but the most challenging.

For the interested student, the programs in sociology offer preparation for careers in the most exciting and challenging problems of the future. Students arrange programs which lead to careers in many areas of community, public, and social services, corrections and rehabilitation, criminal justice, teaching, industrial and organizational activities, research, and continued academic work for advanced degrees.

The college also offers the degree of Bachelor of Arts, Social Sciences. Those interested in this degree select an interdepartmental major in sociology and any two areas within the social sciences. (For additional information, see Social Sciences.)

REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIOLOGY

Sociology majors are required to meet all college requirements for the B.A. degree (see page 68 of catalog). In addition, prerequisites to the major and a minimum of 30 semester hours in upper division courses, including required courses, must be completed. A grade of C or better must be received in all courses included in both the prerequisites and 30 hours of upper division courses.

DEGREE MAJOR IN SOCIOLOGY

Lower Division Requirements:

SOCL 101, Introduction to Sociology; SOCL 203, Research Methods; totaling six hours.

(MATH 160, Statistics, is recommended)
Upper Division Requirements

A minimum of 30 upper division hours, including
Theory and Methodology (303, 341, 441, 496) ............... 14
Electives from sociology ....................................... 16

DEGREE MINOR IN SOCIOLOGY

Eighteen semester hours approved by the adviser, including
SOCL 101, 203, 341, and nine hours of upper division electives.

TEACHING CREDENTIALS*

Majors in sociology for elementary and secondary credentials
must fulfill the following requirements:
1. Degree major in sociology.
2. Secondary credential candidates must complete 6 units in
courses in sociology as postgraduate work and receive
approval of Sociology as to subject matter competence.
3. Complete requirements for credential as presented by the
   Education Department.

GRADUATE WORK IN SOCIOLOGY

The Department works closely with the Department of Psychol-
ogy in offering graduate courses which are included in the Master
of Science in Psychology program. Those graduate students who
select the Criminal Psychology Program are offered twenty hours of
graduate work in the areas of crime and corrections.

COURSE DESCRIPTIONS

Lower Division

SOCL 101. Introduction to Sociology (3)
Basic concepts and perspectives in sociological analysis.
Prerequisite to other sociology courses.

SOCL 203. Research Methods (4)
Introduction to research design and methodology in sociology:
theory, implications of theoretical framework, hypothesis forma-
tion, conceptualization and measurement of sociological variables,
research process, research designs, methods of data collection,
sampling procedures, and written report. Prerequisite: SOCL 101
or equivalent.

*Before electing to pursue this major or minor the student seeking
a secondary credential should consult a credential adviser as to
possibilities of student teaching and professional placement.
SOCL 224. Social Problems (3)

Study of selected social problems. Prerequisite: SOCL 101 or consent of instructor.

SOCL 295. Selected Topics in Sociology (Topics to be specified in Class Schedule) (1-5)

Development of a selected area of Sociology. Topics vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

SOCL 301. Race and Ethnic Relations (3)

Sociological analysis of minority group relations; attention to specific racial, ethnic and religious minorities. Prerequisite: SOCL 101 or consent of instructor.

SOCL 303. Research Techniques and Analytic Procedures (4)

Social measurement, data analysis and interpretation, formulation of research designs and application of research techniques. Includes understanding and performing basic research. Prerequisite: SOCL 203.

SOCL 315. 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 101 or consent of instructor.

SOCL 320. 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 101 or consent of instructor.

SOCL 321. 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 101 or consent of instructor.

SOCL 325. Criminal Justice I (3)

A survey of basic institutions and processes of criminal justice in the United States. Prerequisite: Junior standing.
SOCL 331. Social Stratification (3)

Origins, characteristics, and functions of social castes and classes; emphasis on recent research and theoretical developments. Prerequisite: SOCL 101 or consent of instructor.

SOCL 341. Modern Sociological Theory I (3)

Development of sociological theory: analysis of basic concepts and theories in sociology contributed by Comte, Pareto, Weber, Durkheim, Mannheim and other classical sociologists. Prerequisite: Consent of instructor.

SOCL 342. Population and Demography (4)

World population and demographic theory and empirical studies from Malthus to the present, natality and mortality trends, basic sources of data and their research uses. Prerequisite: SOCL 101 or consent of instructor.

SOCL 361. Small Groups (2)

Structure and processes of small human groups, theory, research methods and empirical findings. Prerequisite: SOCL 101 or consent of instructor.

SOCL 372. Social Welfare Services (4)

Historical development of welfare services; analysis of the structure, policies, and issues of public and private welfare services. Field experience required. Prerequisite: SOCL 101.

SOCL 403. Research Design (4)

Theory construction and research application, development of research designs and application in the operating context of research projects. Prerequisite: SOCL 303 or equivalent.

SOCL 412. 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. (Formerly 442 and 423) Prerequisite: SOCL 101 or consent of instructor.

SOCL 413. 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. (Formerly 421) Prerequisite: SOCL 101 or consent of instructor.
SOCL 414. Sociology of Law (3)

Sociological analysis of legal principles and rules, law and culture, social organization, social change, administration of justice. Prerequisite: SOCL 101 or consent of instructor.

SOCL 424. 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 101 or consent of instructor.

SOCL 425. Criminal Justice II (3)

Analysis of public policy issues in administration of criminal justice; ideology of crime control and criminal justice reform. Prerequisite: SOCL 325.

SOCL 432. Sociology of Religion (3)

Sociological analysis of religious belief, behavior, and organization; classical and current theory and research. Prerequisite: Consent of instructor.

SOCL 440. Political Sociology (3)

Sociological bases of political attitudes and behavior. Theory and research dealing with political socialization, voting behavior, legitimacy and authority. Prerequisite: SOCL 101 or consent of instructor.

SOCL 441. Modern Sociological Theory II (4)

Major contributions to systematic sociological theory. Critical analysis of selected works from contemporary sociologists. Prerequisite: SOCL 341.

SOCL 451. Personality Culture and Social Structure (3)

Relations between personality, social structure and culture. Primary emphasis on roles, socialization, aggression, affiliation, leadership, and norms. Prerequisite: SOCL 101 or consent of instructor.

SOCL 460. Industrial Sociology (2)

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 101 or consent of instructor.
SOCL 480. Formal Organizations (4)
Analysis of modern bureaucratic organizations like hospitals, prisons, welfare, schools and so forth. Examination of organizational effects on members, clients, other organizations and so forth will be stressed. Prerequisite: Consent of instructor.

SOCL 484. Community Organization and Process (4)
Critical examination of recent research and theory dealing with organization of and ongoing processes in existing communities. Lecture and field experience. Prerequisites: SOCL 101, 203, or consent of instructor.

SOCL 494. Seminar in the Sociology of Sociology (4)
Sociological analysis of sociology, its relationships to other behavioral and social sciences; consideration of problems and techniques of teaching sociology. Recommended for future graduate students or teachers. Prerequisite: Senior standing.

SOCL 495. Selected Topics in Sociology (Topics to be specified in Class Schedule) (1-5)
Topics specified in class schedule. Topics vary each term, thus may be repeated for credit. Prerequisite: Consent of instructor.

SOCL 496. Senior Seminar (3)
Review and discussion of the contemporary issues facing sociology. Each student prepares an individual report. Prerequisite: Consent of instructor.

SOCL 498. Individual Study (1-5)
For students capable of independent work at an advanced level. May be repeated up to 6 units. Prerequisite: Consent of instructor.

SOCL 500. Seminar in Criminology (3)
Advanced study of crime causation and criminal classification; specialized group and individual treatment approaches. Prerequisite: Graduate standing.
SPEECH COMMUNICATION

Randall C. Ruechelle, Ph.D., Professor, Chairman
Max C. Norton, Ph.D., Professor
James H. Platt, Ph.D., Professor
James R. McDearmon, Ph.D., Associate Professor
Lewis G. Polidoro, Ed.D., Associate Professor
Susan E. Kellogg, M.S., Assistant Professor
Richard S. Lucas, M.A., Assistant Professor
Jerry L. Weedon, Ph.D., Assistant Professor
Sam Wellbaum, Ph.D., Assistant Professor

The Department of Speech Communication offers the Bachelor of Arts and Master of Arts, Speech Communication. In addition, it provides a curriculum designed to develop a substantial background in theory and function of oral communication and the art of oral expression to serve the following academic and professional needs:

1. To provide the general student in liberal arts with an opportunity to increase his understanding of the theories and processes of oral communication and of the skills in the art of oral expression.
2. To provide opportunities through speech for creative and cultural expression.
3. To provide specialized knowledge in communication arts and sciences for students who plan to enter various professional programs such as elementary and secondary education, clinical speech pathology and audiology, mass communications, social welfare, law, and business.

REQUIREMENTS FOR THE BACHELOR OF ARTS, SPEECH

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 28 upper division units.
4. Completion of a minor is not required.

DEGREE MAJOR IN SPEECH

Prerequisite to the Major

SPCH 201. Oral Communication Processes, 4 units
One lower division course in speech as approved by major advisor, 3 units

The Major

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>SPCH 300</td>
<td>3</td>
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<td>SPCH 301</td>
<td>3</td>
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</tbody>
</table>
SPCH 305. General Semantics .......... 3
SPCH 312. Rhetorical Communication .......... 3
SPCH 400. Advanced Communication Theory .......... 4
Upper division courses in speech as approved by major adviser .......... 12
Total .......... 28

DEGREE MINOR IN SPEECH

(18 units, to include at least 12 units in upper division)

Lower Division

SPCH 200. Speech Communication, 3 units or
SPCH 201. Oral Communication Processes, 4 units
One of the following as approved by minor adviser, 3 units:
   SPCH 210. Discussion and Debate
   SPCH 240. Oral Interpretation

Upper Division

SPCH 300. Phonetics, 3 units
SPCH 305. General Semantics, 3 units
SPCH 312. Rhetorical Communication, 3 units
Three units as approved by minor adviser.

CREDENTIALS

STANDARD TEACHING CREDENTIAL

Standard Teaching Credential Specialization in Elementary or Secondary Education with academic major in speech (administered by the Department of Education):

1. Degree major in speech.
2. Complete requirements for credential as presented by the Education Department.

RESTRICTED CREDENTIAL: SPEECH AND HEARING HANDICAPPED

Students planning careers as speech and hearing specialists should consult with the credential adviser in the Department of Speech Communication regarding program requirements for the Restricted Credential, Specialization in Speech and Hearing Handicapped, California State Department of Education. The program as administered by the Department of Speech Communication is coordinated with the Master of Arts program in Speech.

1. General Requirements

a. A baccalaureate degree. A speech major is recommended, but not required. Students majoring in
speech for the baccalaureate shall complete require-
ments for area specialization in communication sci-
ence.
b. Completion of provisions and principles of the
United States Constitution as stated in Education
Code Section 13132.
c. A fifth year, or equivalent, of postgraduate educa-
tion in Communication Science and Pathology and
related areas to include either:
(1) 30 semester units of upper division and/or
graduate course work, or
(2) A master's degree in speech.
d. Admission to credentials program.

2. Specialized Preparation

a. 60 semester units shall include undergraduate and
graduate preparation in the development and dis-
orders of speech, hearing and language, cognate
fields and the clinical management of disorders of
communication. Courses to be selected from SPCH 300,
301, 305, 361, 364, 370, 381, 382, 401, 460, 461,
462, 465, 470, 471, 481, 561, 563, 565, 566, 570,
571, 580, 581, 641; PSYC 313, 316, 379, 435;
EDUC 554;

MASTER OF ARTS IN SPEECH

The department offers the Master of Arts Degree in Speech
Communication with concentration in Communication Pathology.

Prerequisites for admission to the graduate program:

To be admitted to the program the following prerequisites
must be met:
1. Completion of a bachelor's degree program from an
accredited college or university.
2. Satisfactory completion of college entrance require-
ments to graduate studies.
3. Superior performance in the undergraduate major (3.0
G.P.A.). Exceptions to be granted only upon petition
to the department.
4. A minimum of 27 undergraduate semester units in speech
including core course requirements for completion of
the B.A. degree with concentration in communication
science and cognate fields, selected from the follow-
ing: SPCH 300, 301, 305, 361, 364, 361, 382, 400, 401,
460, 461, 462, 481; PSYC 435; or their equivalent.

Continuation in the Program

The student is formally admitted to the program after com-
pletion of one semester of course work and completion of the
specific prerequisites listed above. Continuation in the program is based on the maintenance of the following academic standards:

1. In accordance with college graduate policy, a 3.0 G.P.A. must be maintained. Academic deficiency will result in withdrawal of candidacy. Departmental review of candidate's eligibility is mandatory.

2. Students are expected to maintain continuous registration. Exceptions will be granted only on petition to the department.

REQUIREMENTS FOR THE DEGREE

The degree Master of Arts in Speech Communication with concentration in Communication Pathology is awarded after completion of the following requirements:

1. 30 semester units in graduate courses selected on advisement and to include research methodology (SPCH 597) and thesis preparation (SPCH 599). Graduate level courses in speech within the 500 series are applicable to the degree. Additional graduate level courses in supportive fields (not to exceed 10 units) may be applicable upon advisement. These are to be completed within a seven year period preceding the granting of the degree.

2. A grade point average of 3.0 or better earned in graduate level course work.


4. Satisfactory completion of a comprehensive examination of course work. (The American Speech and Hearing Association examination for Clinical Competence in Speech Pathology may be substituted.)

5. Oral examination on thesis conducted by thesis committee.

SPEECH

BASIC SYSTEMS AND PROCESSES: LANGUAGE AND COMMUNICATION

SPCH 201. Oral Communication Processes (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.

SPCH 300. Phonetics (3)

Analysis of general American speech with emphasis on synthesis in connected discourse. Practice and drill with international phonetic alphabet. Application of sciences of phonetics to fields of general linguistics, dialects, pronunciation in foreign languages, speech correction, and language arts.
SPCH 301. Language and Speech Development (3)

Development of normal speech and language in children considered from neurological psychological and semantic standpoints; factors underlying normal speech and language development. (Formerly 360)

SPCH 305. General Semantics (3)

Language and thought; practical analysis of verbal habits in human affairs. Emphasis on the formulations of General Semantics, which deal with such communication problems as conflict, confusion, prejudice, accuracy and precision in use of verbal symbols.

SPCH 400. 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. Prerequisite: Senior standing or consent of instructor.

SPCH 401. Structural and Psycholinguistics (5)

Analysis of structure of the language systems; construction of grammatical models based upon structural and transformational approaches to linguistic analysis. Survey of research in psycholinguistic theory including learning and transformational approaches to language behavior; information transmission, developmental transformations, bilingualism and language change. (Formerly 467)

SPCH 495. Selected Topics in Speech (Topics to be specified in the Class Schedule) (1-5)

Development of a selected branch of oral communication. Topics may vary each term, thus may be repeated for credit. Prerequisites: Upper division standing and consent of instructor.

SPCH 496. Introduction to Research Methods in Communication (3)

Synthesis of philosophies of oral communication represented by analysis of research. Prerequisites: Senior standing and consent of instructor.

SPCH 498. Individual Study (1-5)

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.
INTERPERSONAL COMMUNICATION

SPCH 200. Speech Communication (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.

SPCH 210. Discussion and Debate (3)

Study of theory and practice of speech communication in discussion and debate contexts. Emphasis on gathering and presenting information, problem solving and decision making in both contexts.

SPCH 291. Speech Activities (2)

Workshop serving as a base for student involvement in a variety of speech communication activities. Options include projects in intercollegiate competition and on-campus, community, and high school settings. (Formerly 292) Prerequisite: One lower division speech course or consent of instructor. May be repeated for a total of 8 units.

SPCH 295. 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. May be repeated for credit. Prerequisite: Consent of instructor.

SPCH 312. Rhetorical Communication (3)

Advanced study of the fundamental theory and practice of oral communication as applied to the multipersonal system. Attention is given to perception, feedback, formal and informal reasoning, message structure and language variables for the purpose of developing strategies of clarification and attitude change. Prerequisite: SPCH 201.

SPCH 391. Speech Activities (2)

Workshop serving as a base for student involvement in a variety of speech communication activities. Options include projects in intercollegiate competition and on-campus, community and high school settings. (Formerly 392) Prerequisite: One lower division speech course or consent of instructor. May be repeated for a total of 8 units.
SPCH 393. Intercollegiate Forensics (1)

Participation in intercollegiate speech competition. Competition offered in debate, reader's theatre, oral interpretation, and individual speaking events. Prerequisites: SPCH 291, 391, or consent of instructor. Concurrent enrollment in SPCH 291 or 391 recommended but not required. A total of 10 units may be earned in any combination of SPCH 291, 391 and 393.

SPCH 410. 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: Senior standing or consent of instructor.

SPCH 412. Theory of Persuasion (3)

Theory of argument: evidence, reasoning and processes of motivation. Systematic evaluation of issues, the constituents of messages intended to influence group opinion and action. Prerequisite: Senior standing or consent of instructor.

SPCH 414. 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: Senior standing or consent of instructor.

ORAL INTERPRETATION

SPCH 240. Oral Interpretation (3)

Fundamentals of theory; techniques and practices in communicating from the printed page.

SPCH 340. 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, story telling as well as reading. Prerequisite: SPCH 240 or consent of instructor.

SPCH 341. Oral Interpretation of Literature (3)

Application of principles of oral interpretation to literary modes and genres with a special emphasis on verse. Prerequisite: SPCH 240 or consent of instructor.
SPCH 440. Special Forms of Oral Interpretation (4)

Special forms of oral interpretation including theatrical presentations of prose and verse literature. Prerequisite: SPCH 240 or consent of instructor.

COMMUNICATION DISORDERS

SPCH 361. Introduction to Communication Disorders (3)

Specific methods used by speech and hearing clinicians in dealing with problems of oral communication. Systems of therapy, their theoretical rationale and evaluatory results of these therapies. Organization and administering of speech and hearing programs, including clinical, private practice, hospital and school programs. Specific applications of methods including direct contact with cases in clinical and school setting. Guided observations. Student is required to register for 1 unit of SPCH 370. Prerequisite: Concurrent enrollment in SPCH 300 or consent of instructor.

SPCH 364. Anatomy of Speech and Hearing Mechanisms (3)

Anatomical and physiological characteristics of the normal speech and hearing mechanisms and their relationship to speech production.

SPCH 370. Proseminar in Clinical Observation (1)

Clinical observation of diagnostic and therapeutic practice in on-campus, public school, and hospital settings. Twenty hours of direct observation is required for each unit of credit earned. Not applicable for clinical practice credit. Open to all students. May be repeated for a total of 3 units.

SPCH 381. Theory and Practice of Hearing Measurement I (4)

Psychoacoustic theories and practice measurement of hearing emphasizing puretone audiometric techniques; evaluation of audiometric results; development and administration of hearing conservation programs. Prerequisite: SPCH 364 or equivalent. Students are required to register concurrently in SPCH 471 for 1 unit.

SPCH 382. Theory and Practice of Hearing Measurement II (4)

Continuation of SPCH 381. The history and use of speech audiometry and other special tests in audiological assessment. Prerequisite: SPCH 364, 381 or equivalent. Students are required to register concurrently in SPCH 471 for 1 unit.
SPCH 460. Proseminar in Diagnostic Methods in Communication Disorders (3)


SPCH 461. Proseminar in Communication Disorders I (Language and Symbolization Disabilities) (3)

Aphasia in children and adults; delayed language not related to cerebral dysfunction; the language of the psychotic child; deprivation effects on language. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 470 or 570 for 1 unit is required.

SPCH 462. Proseminar in Communication Disorders II (Articulation) (3)

Continuation of SPCH 461. Disorders of articulation, voice and fluency, cerebral palsy and oro-facial abnormalities including cleft palate. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 470 or 570 for 1 unit is required.

SPCH 465. Proseminar in Behavioral Modification in Speech and Language Therapeutics (3)

Study and experience in speech and language therapeutic programming utilizing behavioral modification techniques based on operant conditioning and systematic desensitization procedures. Review of current literature pertaining to operant articulatory and language therapeutic principles. Prerequisites: SPCH 300, 301, 364. Concurrent enrollment in SPCH 470 or 570 is required.

SPCH 470. Clinical Practice: Speech and Language Disorders (1-2)

Supervised work with representative cases in articulation, stuttering, aphasia, voice disorders, delayed speech and language, cleft palate, cerebral palsy. Diagnostic and therapy assignments. May be repeated for a total of 6 units. One hour of staffing per week is required. Prerequisites: SPCH 300, 301, 361, 364.

SPCH 471. Clinical Practice: Hearing Disorders (1-2)

Supervised work with representative cases in disorders of hearing. Administering of tests for assessment of specific pathologies of the hearing mechanism. Procedures for development
of speech and language for children and adults with hearing disorders. Internship in both on-campus and off-campus settings: 20 clinical contact hours required for each unit of credit earned. One hour of staffing per week is required. May be repeated for a total of 6 units. Prerequisite: SPCH 381.

SPCH 481. Proseminar in Speech Reading and Aural Rehabilitation (3)

The study and analysis of various methods for 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. Students are required to register concurrently in SPCH 471 for 1 unit. Prerequisites: SPCH 364 and 381.

GRADUATE

SPCH 561. Seminar in Dysfluency (5)

Stuttering, cluttering, other disorders of fluency. Theory, diagnosis and treatment. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 570 for 1 unit is required.

SPCH 563. Seminar in Articulation Disorders (5)

Articulation disorders of functional, structural, and neurological etiology; dysarthria and apraxia; cleft palate articulation, theory, diagnosis, and treatment. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 570 for 1 unit is required.

SPCH 565. Seminar in Voice Disorders (5)

Voice disorders of functional, structural, and neurological etiology; cleft palate voice. Theory, diagnosis, and treatment. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 570 for 1 unit is required.

SPCH 566. Seminar in Disorders of Language Learning (5)

Studies of the nature, diagnosis, and treatment of language and language learning disabilities. Developmental disorders of language; aphasia in children and adults; autistic and schizophrenic language; language of the mentally handicapped. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 570 for 1 unit is required.

SPCH 570. Advanced Clinical Practice: Speech and Language Disorders (1-2)

Supervised work with representative advanced cases in
stuttering, aphasia and voice disorders. Twenty contact hours are required for each unit of credit earned. May be repeated for a total of 6 units. One hour of staffing per week is required. Prerequisite: Consent of instructor.

SPCH 571. Advanced Clinical Practice: Hearing Disorders (1-2)

Supervised work with representative cases of hearing disorders. Includes auditory training, lipreading, language development for the hard of hearing. Twenty 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.

SPCH 580. Seminar: Audiological Research (5)

Research findings in measurement of hearing loss; diagnosis of hearing disorders; theory and practice of hearing aid design and fitting. Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 571 for 1 unit is required.

SPCH 581. Seminar in Education of the Hearing Impaired (5)

Acoustic psychological, educational and linguistic procedures in rehabilitation of hearing impaired children and adults; examination of current research. (Formerly 564) Prerequisite: Consent of instructor. Concurrent enrollment in SPCH 571 for 1 unit is required.

SPCH 595. 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 may be repeated for credit. Prerequisite: Graduate standing.

SPCH 597. Research Methods in Speech (4)

The purpose and methods of research in the field of speech; trends and developments with emphasis upon the development of methods of studying existing problems and discovering new ones in the field of speech. Prerequisite: Consent of instructor.

SPCH 598. Individual Study (1-5)

For qualified graduate students in need of advanced or specialized study. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

SPCH 599. Thesis (3-5)

Thesis research. Prerequisite: Special permission.
SPCH 641. Clinical Practice in Communication Disorders in Public Schools I (2)

Supervised screening and identification of communication disorders in the public school setting, preparation of case studies so identified, keeping of records and observation of public school therapy in process. Prerequisites: Completion of or concurrent enrollment in SPCH 597 and completion of 120 clock hours in SPCH 470, 471, 570, 571.

SPCH 642. Clinical Practice in Communication Disorders in Public Schools II (4)

Continuation of SPCH 641. Supervised therapy of communication disorders in the public school setting. Twenty contact hours required for each unit of credit earned. Prerequisites: Acceptance in credential program in speech, completion of or concurrent enrollment in SPCH 597 and 90 clock hours in SPCH 470, 471, 570, 571.
THE GENERAL FACULTY

Gatlin, Carl (1969) . . . . . . . . . . . . . . President
   Professor of Applied Sciences
   B.S., 1950, University of Southern California; M.S., 1955,
   University of Tulsa; Ph.D., 1959, Pennsylvania State University

Aamot, Melvin H. (1970) . . . Associate Professor of Anthropology
   and Geography
   B.A., 1958, Brigham Young University; M.A., 1960, University of
   Wisconsin; Ph.D., 1968, Indiana University

Ahanotu, Austin Metumara (1970) . . Assistant Professor of History
   of California, Los Angeles

Almy, John (1971) . . . . . . . Assistant Professor of Chemistry
   B.A., 1964, Johns Hopkins University; Ph.D., 1969, University of
   California, Los Angeles

Anderson, Robert K. (1971) . . . . Assistant Professor of Spanish
   B.A., 1966, Brigham Young University; Ph.D., 1973, Saint Louis
   University

Armstrong, Corinne P. (1972) . . Assistant Professor of Anthropology
   B.A., 1964, M.A., 1965, University of California, Los Angeles

Aubert, Edward J. (1961) . . . . Director of Admissions and Relations
   with Schools
   B.S., 1956, University of San Francisco; M.B.A., 1961, University
   of California, Berkeley

Balbo, Frank C. (1964) . . . . . . . Business Manager
   B.S., 1937, University of California, Berkeley

Barrett, Thomas P. (1961) . . . . Associate Professor of Business
   Administration
   B.A., 1954, Northeastern University; M.A., 1958, Michigan State
   University

Beamish, Jerome J. (1964) . . . . . . . Director of Testing
   B.A., 1957, Sir George Williams University; M.A., 1958, Ph.D.,
   1962, Columbia University

Bennett, Agnes L. (1961) . . . . . . . Head Catalog Librarian
   A.B., 1951, Luther College; A.M., 1952, University of Michi-
   gan

Berg, Michael J. (1970) . . . . Assistant Professor of Mathematics
   A.B., 1965, Brandeis University; A.M., 1968, Ph.D., 1970, Dart-
   mouth College

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Berkoben, Lawrence D. (1963). Associate Professor of English
B.A., 1957, Pennsylvania State University; M.A., 1958, Ohio University; Ph.D., 1963, University of Washington

Bowen, James C. (1970). Assistant Professor of Physical Education
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