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STANISLAUS STATE COLLEGE
THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

CATALOGUE

1972-73



800 Monte Vista Avenue
Turlock, California
95380
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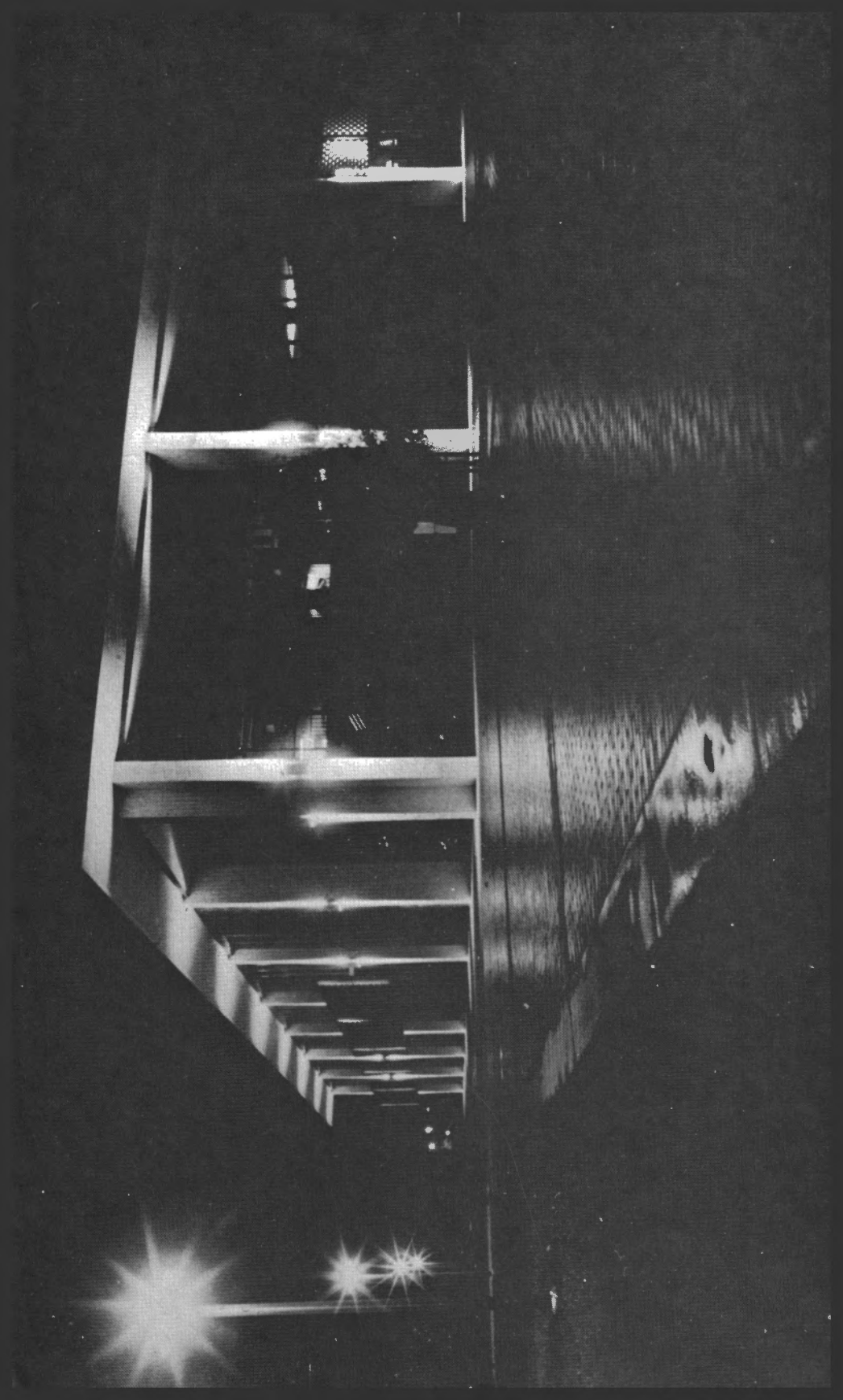






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ACADEMIC CALENDAR, 1972-1973

SUMMER SESSIONS 1972

FIRST SESSION—June 19–July 25

April 1–May 12, Saturday through Friday	Regular filing period for registration applications
May 13, Saturday	Late filing period for registration applications begins
April 3–June 5, Monday through Monday	Regular registration period
June 12–June 23, Monday through Friday	Late registration period (\$5.00 late fee)
June 19, Monday	Instruction begins
June 23, Friday	Last day for late registration
June 23, Friday	Last day to add a course
June 29, Thursday	Last day to withdraw or drop a course without a grade
June 30, Friday	Last day to file Application for Partial Refund of Fees
July 3, Monday	College holiday
July 4, Tuesday	Legal holiday (Independence Day)
July 20, Thursday	Last day to drop a course
July 25, Tuesday	First session ends

SECOND SESSION—July 31–September 1

April 1–June 23, Saturday through Friday	Regular filing period for registration applications
June 24, Saturday	Late filing period for registration applications begins
April 3–July 17, Monday through Monday	Regular registration period
July 24–August 4, Monday through Friday	Late registration period (\$5.00 late fee)
July 31, Monday	Instruction begins
August 4, Friday	Last day for late registration
August 4, Friday	Last day to add a course
August 10, Thursday	Last day to withdraw or drop a course without a grade
August 11, Friday	Last day to file Application for Partial Refund of Fees
August 29, Tuesday	Last day to drop a course
September 1, Friday	Second session ends

FALL QUARTER 1972

November 1–30, 1971, Monday through Tuesday	Initial period for accepting admission applications for fall quarter 1972
December 1, 1971, Wednesday	Late filing period begins for fall 1972 admission applications
April 3, Monday	Last day to file applications for financial aid in the 1972–73 academic year
April 17, Monday	Beginning of regular academic advising period for fall quarter 1972

Academic Calendar

May 26, Friday	End of regular advising period for fall quarter 1972
June 5, Monday	Registration for fall quarter
September 1, Friday	Late filing period begins for spring 1973 admission applications.
September 4, Monday	Legal holiday (Labor Day)
September 11, Monday	Beginning of late academic advising period for fall quarter 1972
September 13-14, Wednesday through Thursday.....	Student Orientation Program
September 15, Friday	Completion of regular registration
September 15, Friday	Last day to register without late registration fee
September 18, Monday	First day of late registration
September 18, Monday	Instruction begins
September 18, Monday	First day to add or drop a course
September 22, Friday	End of late academic advising period for fall quarter 1972
September 22, Friday	Last day of late registration
September 29, Friday	Last day to apply for fall 1972 graduation
October 2, Monday	Last day to add a course
October 2, Monday	Last day to file application for partial refund of fees after withdrawing from the College
October 6, Friday.....	Last day to drop a course
October 6, Friday.....	Applications due for spring 1973 and summer 1973 graduation
October 9, Monday	Legal holiday (Columbus Day)
October 16, Monday	Beginning of regular academic advising period for winter quarter 1973
October 23, Monday	Legal holiday (Veterans Day)
November 1-30, Wednesday through Thursday.....	Filing period for fall 1973 admission applications
November 7, Tuesday.....	Last day to submit approved master's degree thesis for fall 1972 graduation
November 17, Friday	End of regular academic advising period for winter quarter 1973
November 23-26, Thursday through Sunday.....	Thanksgiving holiday
November 28, Tuesday.....	Classes meet on Monday schedule
November 29, Wednesday	Classes meet on Friday schedule
November 30, Thursday	Last day of classes for fall quarter 1972
December 1, Friday.....	Late filing period begins for fall 1973 admission applications
December 1, Friday.....	Registration for winter quarter
December 1, Friday.....	Last day to register for winter quarter 1973 without late registration fee
December 4, Monday	Reading Day *
December 5-8, Tuesday through Friday	Final examinations for fall quarter 1972
December 8, Friday.....	Fall quarter 1972 ends
December 23-25, Saturday through Monday	Christmas holiday

WINTER QUARTER 1973

June 1-30, 1972, Thursday through Friday	Initial period for accepting admission applications for winter quarter 1973
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* Classes are not scheduled to meet during Reading Day. This is a time provided for students to pursue additional reading assignments and for faculty to be available for consultation with students. In certain art and science classes, instructors may assign additional studio and laboratory work rather than additional readings. Examinations should not be scheduled during Reading Day.

Academic Calendar

July 3, 1972, Monday.....	Late filing period begins for winter 1973 admission applications
October 16, 1972, Monday	Beginning of regular academic advising period for winter quarter 1973
November 15, 1972, Wednesday	Last day to file applications for financial aid in winter quarter 1973
November 17, 1972, Friday	End of regular academic advising period for winter quarter 1973
December 1, 1972, Friday.....	Registration for winter quarter
December 1, 1972, Friday.....	Last day to register without late registration fee
December 29, 1972, Friday.....	First day of late registration
January 1, Monday.....	Legal holiday (New Year's Day)
January 2, Tuesday	Beginning of late academic advising period for winter quarter 1973
January 2, Tuesday	Instruction begins
January 2, Tuesday	First day to add or drop a course
January 8, Monday.....	End of late academic advising period for winter quarter 1973
January 8, Monday.....	Last day of late registration
January 12, Friday.....	Last day to apply for winter 1973 graduation
January 16, Tuesday	Last day to add a course
January 16, Tuesday	Last day to file application for partial refund of fees after withdrawing from the College
January 19, Friday	Applications due for fall 1973 graduation
January 22, Monday.....	Last day to drop a course
January 22, Monday.....	Beginning of regular academic advising period for spring quarter 1973
February 12, Monday	Legal holiday (Lincoln's Birthday)
February 19, Monday	Legal holiday (Washington's Birthday)
February 20, Tuesday	Last day to submit approved master's degree thesis for winter 1973 graduation
February 23, Friday	End of regular academic advising period for spring quarter 1973
March 5, Monday	Registration for spring quarter
March 5, Monday.....	Last day to register for spring quarter 1973 without late registration fee
March 6, Tuesday	Classes meet on Monday schedule
March 7, Wednesday	Classes meet on Monday schedule
March 12, Monday.....	Last day of classes for winter quarter 1973
March 13-16, Tuesday through Friday	Final examinations for winter quarter 1973
March 16, Friday	Winter quarter 1973 ends

SPRING QUARTER 1973

August 1-31, 1972, Tuesday through Thursday.....	Initial period for accepting admission applications for spring quarter 1973
September 1, 1972, Friday	Late filing period begins for spring 1973 admission applications
January 22, Monday.....	Beginning of regular academic advising period for spring quarter 1973
February 15, Thursday	Last day to file applications for financial aid in spring quarter 1973
February 23, Friday.....	End of regular academic advising period for spring quarter 1973
March 5, Monday.....	Registration for spring quarter
March 5, Monday.....	Last day to register without late registration fee
March 23, Friday	First day of late registration

Academic Calendar

March 26, Monday	Beginning of late academic advising period for spring quarter 1973
March 26, Monday	Instruction begins
March 26, Monday	First day to add or drop a course
March 30, Friday	End of late academic advising period for spring quarter 1973
March 30, Friday	Last day of late registration
April 6, Friday	Last day to apply for spring 1973 and summer 1973 graduation
April 9, Monday	Last day to add a course
April 9, Monday	Last day to file application for partial refund of fees after withdrawing from the College
April 13, Friday	Last day to drop a course
April 13, Friday	Applications due for winter 1974 graduation
April 16, Monday	Beginning of regular academic advising period for fall quarter 1973
May 11, Friday	Last day to submit approved master's degree thesis for spring 1973 graduation
May 25, Friday	End of regular academic advising period for fall quarter 1973
May 28, Monday	Legal holiday (Memorial Day)
May 31, Thursday	Classes meet on Monday schedule
May 31, Thursday	Last day of classes for spring quarter 1973
June 1, Friday	Reading Day *
June 4, Monday	Registration for fall quarter 1973
June 5-8, Tuesday through Friday ...	Final examinations for spring quarter 1973
June 9, Saturday	Commencement
June 9, Saturday	Spring quarter 1973 ends

SUMMER SESSIONS 1973 (TENTATIVE)

FIRST SESSION—June 18—July 23

April 2-May 11, Monday through Friday	Regular filing period for registration applications
May 12, Saturday	Late filing period for registration applications begins
April 2-June 4, Monday through Monday	Regular registration period
June 11-June 22, Monday through Friday	Late registration period (\$5.00 late fee)
June 18, Monday	Instruction begins
July 4, Wednesday	Legal holiday (Independence Day)
July 23, Monday	First session ends

SECOND SESSION—July 30—August 31

April 2-June 22, Monday through Friday	Regular filing period for registration applications
June 23, Saturday	Late filing period for registration applications begins
April 2-July 16, Monday through Monday	Regular registration period
July 23-August 3, Monday through Friday	Late registration period (\$5.00 late fee)
July 30, Monday	Instruction begins
August 31, Friday	Second session ends

* Classes are not scheduled to meet during Reading Day. This is a time provided for students to pursue additional reading assignments and for faculty to be available for consultation with students. In certain art and science classes, instructors may assign additional studio and laboratory work rather than additional readings. Examinations should not be scheduled during Reading Day.

TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY AND COLLEGES: 1971-72

EX OFFICIO TRUSTEES

- Hon. Ronald Reagan State Capitol, Sacramento 95814
Governor of California and
President of the Trustees
- Hon. Ed Reinecke..... State Capitol, Sacramento 95814
Lieutenant Governor of California
- Hon. Bob Moretti State Capitol, Sacramento 95814
Speaker of the Assembly
- Hon. Wilson C. Riles 721 Capitol Mall, Sacramento 95814
State Superintendent of Public
Instruction
- Dr. Glenn S. Dumke5670 Wilshire Blvd., Los Angeles 90036
Chancellor of The California State University and Colleges

APPOINTED TRUSTEES

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

- Charles Luckman (1974)
9200 Sunset Blvd., Los Angeles 90069
- Daniel H. Ridder (1975)
604 Pine Ave., Long Beach 90801
- George D. Hart (1975)
111 Sutter St., San Francisco 94104
- Alec L. Cory (1973)
530 B. St., Suite 1900, San Diego 92101
- Edward O. Lee (1974)
P.O. Box 23361, Oakland 94623
- Karl L. Wentz (1976)
5565 Tesla Road, Livermore 94550
- W. O. Weissich (1977)
1299 4th St., San Rafael 94901
- Robert A. Hornby (1978)
P.O. Box 60043, Terminal Annex
Los Angeles 90060
- Dr. William F. McColl (1979)
1433 West Merced Ave., West Covina
91790

- Wendell W. Witter (1979)
45 Montgomery St., San Francisco
94106
- Mrs. Winifred H. Lancaster (1977)
P.O. Drawer JJ, Santa Barbara 93102
- Gene M. Benedetti (1978)
8990 Poplar Ave., Cotati 94952
- Mrs. C. Stewart Ritchie (1980)
1064 Creek Drive
Menlo Park 94025
- Roy T. Brophy (1980)
2160 Royale Road
Suite 20, Sacramento 95815
- Robert F. Beaver (1976)
254 E. 27th St.
Los Angeles 90011
- Frank P. Adams (1973)
235 Montgomery St.
San Francisco 94104

OFFICERS OF THE TRUSTEES

Governor Ronald Reagan
President
George D. Hart
Chairman

Karl L. Wente
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	Assistant 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
Bakersfield, California 93309
Paul F. Romberg, President
(805) 833-2011

California State College, Dominguez Hills
1000 E. Victoria Street
Dominguez Hills, California 90246
Leo F. Cain, President
(213) 532-4300

California State College, Fullerton
800 N. State College Boulevard
Fullerton, California 92631
L. Donald Shields, President
(714) 870-2011

California State College, Hayward
25800 Hillary Street
Hayward, California 94542
Ellis E. McCune, President
(415) 538-8000

California State College, Long Beach
6101 East Seventh Street
Long Beach, California 90804

Stephen Horn, President
(213) 498-4111

California State College, Los Angeles
5151 State College Drive
Los Angeles, California 90032
John A. Greenlee, President
(213) 224-0111

California State College, San Bernardino
5500 State College Parkway
San Bernardino, California 92407
John M. Pfau, President
(714) 887-6311

California State Polytechnic College, Kellogg-Voorhis, Pomona
3801 West Temple Avenue
Pomona, California 91768
Robert C. Kramer, President
(213) 964-6424
(714) 595-1241

California State Polytechnic College, San Luis Obispo
San Luis Obispo, California 93401
Robert E. Kennedy, President
(805) 546-0111

- Chico State College
Chico, California 95926
Stanford Cazier, President
(916) 345-5011
- Fresno State College
Shaw and Cedar Avenues
Fresno, California 93710
Norman A. Baxter, President
(209) 487-9011
- Humboldt State College
Arcata, California 95521
Cornelius H. Siemens, President
(707) 826-3011
- Sacramento State College
6000 J Street
Sacramento, California 95819
Bernard L. Hyink, President
(916) 454-6011
- San Diego State College
5402 College Avenue
San Diego, California 92115
Donald E. Walker, Acting President
(714) 286-5000
- San Fernando Valley State College
18111 Nordhoff Street
Northridge, California 91324
James W. Cleary, President
(213) 885-1200
- San Francisco State College
1600 Holloway Avenue
San Francisco, California 94132
S. I. Hayakawa, President
(415) 469-9123
- San Jose State College
125 South Seventh Street
San Jose, California 95114
John H. Bunzel, President
(408) 294-6414
- Sonoma State College
1801 East Cotati Avenue
Rohnert Park, California 94928
Thomas H. McGrath, President
(707) 795-2011
- Stanislaus State College
800 Monte Vista Avenue
Turlock, California 95380
Carl Gatlin, President
(209) 634-9101

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

On November 29, 1971, the Governor signed into law Assembly Bill 123 which created The California State University and Colleges, thereby redesignating the system previously known as the California State Colleges. This legislation provided legal recognition that the California State Colleges have achieved the status of universities in their first decade as a unified system of higher education.

First brought together as a system under an independent Board of Trustees by the Donohoe Higher Education Act in the early 1960's, the California State University and Colleges now consists of nineteen campuses, covering the state from Humboldt in the north to San Diego in the south. Current enrollment exceeds 263,000 full- and part-time students, with a faculty of approximately 14,500.

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.

Each campus in the system has its own unique geographic and curricular character, but all emphasize the liberal arts and sciences. Programs leading to the bachelor's and master's degrees are master-planned to anticipate and accommodate student interest and the educational and professional needs of the State of California. A limited number of joint doctoral programs are also offered. Although there is increasing recognition of the importance of research to the maintenance of quality teaching, the primary responsibility of the faculty continues to be the instructional process.

While San Jose State College, the oldest, was founded over a century ago, prior to World War II only seven State Colleges were in existence, with a total enrollment of 13,000. Since 1947, twelve new campuses have been established, and sites have been selected for additional ones in Ventura, San Mateo and Contra Costa counties. California State College, Bakersfield, the newest, was opened to students in 1970. Enrollment in the system is expected to pass 300,000 by 1980.

STANISLAUS STATE COLLEGE

Advisory Board

Each of the California State Universities 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:

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

Honorary Life Members

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

ADMINISTRATION

Executive

President.....	Carl Gatlin, Ph.D.
Vice President for Academic Affairs	William J. Mason, 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.
Director of College Relations	Wilford R. Keener, B.A.

ACADEMIC ADMINISTRATION

- Vice President for Academic Affairs William J. Mason, Ph.D.
Assistant Vice President for Academic Affairs Joseph W. Corbin, Ed.D.
Director of Continuing Education Richard B. Farnsworth, M.A.
Director of Special Programs Norbert M. Gonzales, M.A.
Director of Ethnic Studies Algin C. Hurst, M.A.
Director of Advising William F. McClintock, Ph.D.
Director of Institutional Research 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.

SCHOOL AND DEPARTMENT ADMINISTRATION

- Dean, School of Arts and Humanities..... William H. Hayes, Ph.D.
Chairman (Acting), Department of Art.. Martin L. Camarata, M.A.
Chairman, Department of Drama..... Bruce D. Hood, M.A.
Chairman, Department of English & Foreign Languages Douglas H. Taylor, Ph.D.
Chairman, Department of Music R. Scott Coulter, M.M.
(Area-Coordinator, Philosophy Catherine D. Rau, Ph.D.)
Dean, School of Behavioral & Social Sciences V. Kenneth Shrable, Ph.D.
Chairman, Department of Anthropology, Geography, and Sociology Joel S. Canby, Ph.D.
Chairman, Department of Economics Frederick E. Kottke, Ph.D.
Chairman, Department of History Curtis R. Grant, Ph.D.
Chairman, Department of Political Science Paul F. Magnelia, Ph.D.
Chairman, Department of Psychology..... Douglas A. Spanier, Ph.D.
Chairman, Department of Speech Communication Randall C. Ruechelle, Ph.D.
Dean, School of Natural Sciences..... Evan M. Thompson, Ph.D.
Chairman (Acting), Department of Biological Sciences Glenn A. Hackwell, Ph.D.
Chairman, Department of Chemistry Jimmy W. Hinkson, Ph.D.
Chairman, Department of Mathematics Narendra L. Maria, Ph.D.
Chairman, Department of Physics Walter John, Jr., Ph.D.
Dean, School of Professional Studies..... William W. Day, Ed.D.
Chairman, Department of Business Administration Thomas P. Barrett, M.A.
Chairman, Department of Education..... Richard V. Jones, Ed.D.
Chairman, Department of Physical Education and Health Richard D. Conant, Ph.D.

STUDENT SERVICES

Dean of Student Services	Louis J. Leo, J.D.
Associate Dean of Student Services	Richard Sebok, M.Ed.
Assistant Dean of Students	Cary R. Peyton, B.S.
Director of Testing	Jerome J. Beamish, Ph.D.
Director of Career Placement	Thomas C. Watling, Ph.D.
Financial Aid Officer.....	Richard L. Luevano, M.A.
Test Coordinator.....	Betty D. McManus, M.Ed.
Counselor and Activities Adviser	Dominie A. Sovay, M.S.
Counselor and Draft Information.....	James H. Edmondson, Jr., M.A.
Registered Nurse	June M. Meyer, R.N.

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

College Librarian	R. Dean Galloway, M.S.
Bibliographer	Jo P. Bell, M.A.
Public Services Librarian	J. Carlyle Parker, M.L.S.
Reference Librarian	Laura H. Henning, M.S.L.S.
Technical Services Librarian	John C. Caldwell, M.S.L.S.
Head Catalog Librarian.....	Agnes L. Bennett, A.M.L.S.
Catalog Librarian	Robert L. Santos, M.A.



The following are the 17 colleges and universities in the California State University and Colleges system arranged alphabetically according to locale. The names of 16 campuses marked with an asterisk (*) were changed, effective June 1, 1972, as a result of actions by the Board of Trustees and, in instances which include university designation, by the California Coordinating Council for Higher Education.

California State College, Bakersfield	*California State University, Sacramento
*California State University, Chico	California State College, San Bernardino
California State College, Dominguez Hills	*California State University, San Diego
*California State University, Fresno	*California State University, San Francisco
*California State University, Fullerton	*California State University, San Jose
*California State University, Hayward	*California Polytechnic State University, San Luis Obispo
*California State University, Humboldt	*California State College, Sonoma
*California State University, Long Beach	*California State College, Stanislaus
*California State University, Los Angeles	
*California State University, Northridge	
*California State Polytechnic University, Pomona	

1972. Individuals who have payroll deduction for parking should obtain new annual permits from the College Cashier. Annual permits are also available for purchase.

STAFF COUNCIL ELECTION

Ballots for the Staff Council Election are due to Lou Graham, Admissions and Records, by 5 p.m. Friday, June 9, 1972.

SOCIETY NEEDS MONEY

The Society for the Prevention of Cruelty to Animals are in need of contributions. See Vicki Eden in Room C-109.

CAMPUS DIGEST SUMMER PUBLICATION SCHEDULE

During the Summer Sessions the Campus Digest will be published every other week according to the following schedule:

First Session (June 19-July 25)

Second Session (July 31-Sept. 1)

GENERAL INFORMATION

The College and Community

Stanislaus State College 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 SSC's 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 SSC's 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 Stanislaus State's reputation as a fine liberal arts school is spread.

Dr. Carl Gatlin is SSC's 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.

Stanislaus State awards bachelor degrees in 22 subject areas and master's degrees in five: 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.

General Information

THE ACADEMIC PROGRAM

Being a small liberal arts college, SSC 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 21 areas in the Schools of Arts and Humanities, Behavioral and Social Sciences, Natural Sciences, or Professional Studies (Business Administration, Education, Physical Education and Health). The 22 major areas are

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

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.

THE FACILITIES

Stanislaus State College 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

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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.

Present construction centers on a Science Building which is expected to be ready for occupancy in the fall of 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.

QUARTER SYSTEM

In September 1965, the College converted from the 16-week semester system to the quarter system, each quarter being approximately 11 weeks in length.

Semester units can be converted to quarter units by multiplying by $1\frac{1}{2}$ (4 semester units $\times 1\frac{1}{2} = 6$ quarter units). Quarter units are converted to semester units by multiplying by $\frac{2}{3}$ (9 quarter units $\times \frac{2}{3} = 6$ 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 130,000 volumes and about 2,000 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 Curriculum Library and Children's Collection occupy a separate room in the Library. About 5,000 volumes of courses of study, curriculum guides, and units of work are available. More than 3,000 supplementary textbooks are in the Curriculum Library in addition to complete sets of all California state texts. Other aids for teachers, such as maps, charts,

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reading laboratory kits, are a part of the Curriculum Library. The College Library is one of the twenty 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 1,800 of the best children's books comprises the Children's Collection.

Since the Library has a staff of seven 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 teachers an 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 & Records office toward a degree only if requested by a student.

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

INTERNATIONAL PROGRAMS

A study abroad program of global scope is offered by the California State University and Colleges International Programs. Year-long study opportunities for students from all nineteen campuses are available at distinguished institutions of higher learning throughout the world.

Cooperating universities abroad include the University of Provence, France; the Free University of Berlin and the University of Heidelberg, Germany; the University of Florence, Italy; the University of Stockholm and the University of Upsala, Sweden; the University of Madrid and the University of Granada, Spain; Tel Aviv University and the Hebrew University of Jerusalem, Israel; Waseda University, Japan. In the United Kingdom, cooperating universities, which may vary from year to year, have included Dundee, Leicester, Liverpool, London, Oxford, Sheffield, Southampton and Wales.

Selected students remain enrolled and continue to earn residence credit at their California State College campus. Full credit is earned for academic work successfully completed at the cooperating institutions abroad. Application of credit earned toward the degree requirements of the home campus is in accordance with college regulations. Students are selected from each campus on the basis of academic, linguistic and per-

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sonal qualifications, as well as career objectives. Requirements include:

Upper division or graduate standing by the beginning of the academic year abroad.

Grades of B or better in at least 30 semester or 45 quarter units.

Proficiency in the language of instruction, as specified below.

Faculty recommendations.

Proficiency in the language of the host country is a requirement for the Programs in France, Germany, Italy (except for students applying for the area studies program), and Spain. Even where language proficiency is not required, however, competence in the language of the host country will assure broader curricular opportunities.

Average expenses for the entire year—including round-trip transportation between California and the study centers, room and board, health and accident insurance, home campus fees, moderate vacation traveling, textbooks, and personal expenses—range from \$2,600 to \$3,050. Students ordinarily remain eligible for any financial aids for which they otherwise would qualify on their home campus.

Application for the 1973–74 academic year must be submitted before March 1, 1973 (except for United Kingdom applicants who must submit applications by January 5, 1973). Applicants are notified of acceptance by April 1, 1973. 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 the baccalaureate degree, 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 FRESHMAN

An applicant who has had no college work attempted *since* high school graduation will be considered for admission 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.

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
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.

Admission to 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.

Mathematics: Foreign language (French or German preferred), 2 years; chemistry, 1 year; physics, 1 year; mathematics, 4 years (through trigonometry).

Music: Foreign language, 2 years French or 2 years German preferred; music, as much private study as possible, as much participation in both vocal and instrumental music as possible, and at least 1 year of music theory if offered.

Physical Education: Biology; English, 4 years; social sciences, 4 years.

Physical Sciences: Physics, 1 year; chemistry, 1 year; mathematics, 4 years (including 1 year of geometry and 2 years of algebra).

Physics: Physics, 1 year; chemistry, 1 year; mathematics, 4 years (including 1 year of geometry and 2 years of algebra).

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

Psychology: Biology; mathematics, 4 years; English, 4 years.

Social Sciences Interdepartmental Major: Social sciences, 4 years preferred.

Admission to the College

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

Spanish: Foreign language, 2 years Latin and 2 to 4 years Spanish preferred.

Speech: Courses in speech and activity in forensics; English, 4 years; social sciences, 4 years.

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 below provides the test scores needed with a given grade point average to be eligible for admission.

Admission Eligibility Table for California High School Graduates

G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score
3.21	Eligible and above score	with any score	2.96	15	704	2.71	20	904	2.47	25	1096	2.22	30	1296
3.20	11	512	2.95	16	712	2.70	21	912	2.46	25	1104	2.21	30	1304
3.19	11	520	2.94	16	720	2.69	21	920	2.45	26	1112	2.20	31	1312
3.18	11	528	2.93	16	728	2.68	21	928	2.44	26	1120	2.19	31	1320
3.17	11	536	2.92	16	736	2.67	21	936	2.43	26	1128	2.18	31	1328
3.16	11	544	2.91	16	744	2.66	21	944	2.42	26	1136	2.17	31	1336
3.15	12	552	2.90	17	752	2.65	22	952	2.41	26	1144	2.16	31	1344
3.14	12	560	2.89	17	760	2.64	22	960	2.40	27	1152	2.15	32	1352
3.13	12	568	2.88	17	768	2.63	22	968	2.39	27	1160	2.14	32	1360
3.12	12	576	2.87	17	776	2.62	22	976	2.38	27	1168	2.13	32	1368
3.11	12	584	2.86	17	784	2.61	22	984	2.37	27	1176	2.12	32	1376
3.10	13	592	2.85	18	792	2.60	23	992	2.36	27	1184	2.11	32	1384
3.09	13	600	2.84	18	800	2.59	23	1000	2.35	28	1192	2.10	33	1392
3.08	13	608	2.83	18	808	2.58	23	1008	2.34	28	1200	2.09	33	1400
3.07	13	616	2.82	18	816	2.57	23	1016	2.33	28	1208	2.08	33	1408
3.06	13	624	2.81	18	824	2.56	23	1024	2.32	28	1216	2.07	33	1416
3.05	14	632	2.80	19	832	2.55	24	1032	2.31	28	1224	2.06	33	1424
3.04	14	640	2.79	19	840	2.54	24	1040	2.30	29	1232	2.05	34	1432
3.03	14	648	2.78	19	848	2.53	24	1048	2.29	29	1240	2.04	34	1440
3.02	15	656	2.77	19	856	2.52	24	1056	2.28	29	1248	2.03	34	1448
3.01	14	664	2.76	19	864	2.51	24	1064	2.27	29	1256	2.02	34	1456
3.00	15	672	2.75	20	872	2.50	25	1072	2.26	29	1264	2.01	34	1464
2.99	15	680	2.74	20	880	2.49	25	1080	2.25	30	1272	2.00	35	1472
2.98	15	688	2.73	20	888	2.48	25	1088	2.24	30	1280	1.99	Not	
2.97	15	696	2.72	20	896				2.23	30	1288	and	eligible	
												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.

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 directed to the Director of Admissions.

Other 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 to the College

ADMISSION AS AN UNDERGRADUATE TRANSFER

An applicant who has attempted college work after high school graduation will be considered for admission under one of the following provisions. Undergraduate transfer applicants who would be entering the College with fewer than ninety quarter units (sixty semester units) completed are required to submit the results of the American College Test or Scholastic Aptitude Test.

Applicants with 90 or More Quarter Units. An applicant who has completed 90 or more quarter units (60 semester units) will be admitted if he has achieved a grade point average of 2.0 (C) on *all* college work attempted and he was in good standing at the last college attended. The minimum grade point average requirement for non-California residents is 2.4 (C+). Effective for Fall 1974 transfer admission eligibility will be based only on *transferable* college units attempted.

Applicants with Fewer Than 90 Quarter Units. An applicant who has completed fewer than 90 quarter units (60 semester units) may be admitted if he meets the above requirements and he meets requirements currently in effect for first-time freshmen or, if he has been in full-time continuous enrollment at a college since his graduation from high school, he meets the requirements in effect for first-time freshmen at the time of his high school graduation.

Other applicants. Only under the most unusual circumstances will an applicant not meeting either of the above provisions be considered for admission. Permission is granted by special college action.

GRADUATE STUDENTS

Unclassified Graduate Standing. For admission with a 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 the appropriate college authorities; and must satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as the appropriate college authorities may prescribe. Admission with graduate standing does not constitute admission to graduate curricula.

Classified Graduate Standing. A student who is eligible for admission to a State 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 examination, as the appropriate college authorities may prescribe. Classified status in a graduate program at the College is obtained *only* through formal application to the appropriate academic department for master's degree programs or to the School of Professional Studies for school service credential programs. Students whose perform-

ance in a graduate curriculum is judged to be unsatisfactory by College authorities may be required to withdraw from all graduate curricula offered by the College.

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 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 are found in Education Code Sections 23753.2–23762, Government Code Sections 243–244, and Civil Code Section 25. The determination of whether a student qualifies as a “resident” for admission and tuition purposes is made by the College after review of a “Residence Questionnaire” completed by each student upon entering the College. The residence questionnaire is designed to provide to the College 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 admission and 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 his or her father. If the father is not living, the student’s residence is that of the mother while she remains unmarried. A minor cannot change his residence by either his own act or that of his guardian.

Upon attaining majority, the student may acquire a residence apart from his or her 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.

The residence of a married woman is that of her husband unless she is separated, in which case she can establish her own residence. An alien is not eligible to acquire residence until admitted into the United States for permanent residence under an immigrant visa.

Since the general rules of residence determination, summarized above, work hardships in some cases, the Legislature has provided a number of exceptions which, in effect, waive nonresident tuition. These rules are

Admission to the College

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 College. Exceptions are provided for:

1. Minors living under the direct care and control of a California resident for periods of time which are specified in the law.
2. Minors whose parents were California residents but who have left the state. (Depending on the length of the parents' residence in California, the minor is given a "grace period" during which he is considered a California resident even though his or her parents have become residents of another state.)
3. Minors who have a parent in active military service and stationed in California on the residence determination date; California resident minors who have a parent in active military service but stationed outside the United States on the residence determination date, and California resident spouses of such servicemen.
4. Persons who have attained their majority by the residence determination date, and who were entirely self-supporting and present in California for the entire preceding year.
5. Women who are California residents and who marry nonresidents provided residence is not established in any other state.
6. 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.
7. Full-time State College employees and their children and spouses.
8. Certain credentialed, full-time employees of school districts.
9. Certain exchange students.

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made by the Legislature 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.

REDIRECTION OF APPLICANTS

It may not always be possible for the College to accommodate all qualified applicants. If an application is filed and it later becomes evident that processing will not be possible, it and any supporting documents may, at the applicant's request, be forwarded for the same term to any State College where space is still available. No additional application fee is required.

INTRA-SYSTEM TRANSFER

A student at a California State College eligible to continue at that college is eligible for admission at any other State College *provided* he is in good standing and has a C average at the first institution. A student

on probation at the first State College may apply for intra-system transfer; however, admission to the second State College will be subject to the policies and procedures governing probationary admission at the second State College. Transfer to another State College, of course, is subject to space and program availability. Intra-system transfer application forms are available from the Admissions and Records Office. Intra-system transfers are subject to the regular admission application filing dates and application fee.

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 PROCEDURE

STATEWIDE SYSTEM APPLICATION PROCEDURE

To obtain admission consideration by the California State Colleges all prospective students must file an application for admission within the appropriate filing period. A valid application consists of properly completed application forms and a non-refundable application fee of \$20.00. Each applicant may file only one application for any one term within the California State University and College System. The application should be filed with the college of first choice; alternate choice California State Colleges may be listed on the application.

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 quarter and who either was not enrolled for residence credit or audit courses, or who withdrew from the College, during the regular term preceding the quarter 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 quarter 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.)

Admission to the College

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.

WHEN TO APPLY

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:

TERM	INITIAL FILING PERIOD	EXTENDED FILING PERIOD BEGINS
Summer Quarter	January 1-31	February 1 *
Fall Quarter/Semester	November 1-30	December 1 *
Winter Quarter	June 1-30	July 1 *
Spring Quarter/Semester	August 1-31	September 1 *

SEMESTER TERM STATE COLLEGES

Chico	San Diego
Fresno	San Fernando
Fullerton	San Francisco
Long Beach	San Jose
Sacramento	Sonoma

QUARTER TERM STATE COLLEGES

Bakersfield	Cal Poly,
Dominguez Hills	Kellogg-Voorhis
Hayward	San Bernardino
Humboldt	Cal Poly,
Los Angeles	San Luis Obispo
	Stanislaus

SPACE RESERVATIONS

All applications received during the initial filing period will receive equal consideration within the colleges' established enrollment 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 college, it is a commitment on the part of the college 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 state college where space has been reserved. The college 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 college where space has been reserved.*

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

* The extended filing periods will continue until admission quotas are filled

third choice, etc.

Each college 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 college regarding specific policies governing hardship admission.

EXTENDED FILING PERIOD

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

APPLICATION FEE

A fee of twenty dollars (\$20) is charged for processing of applications for admission to the college. This fee is non-transferable, non-refundable and applies to (1) all persons not regularly enrolled at the college during any of the three quarters 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 quarter, October 1 for the winter quarter, and January 1 for the spring quarter.

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.

Academic Standards

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.
7. The psychological aptitude examination (available through college testing officer).

Following grade point verification by the credential evaluation technician, and action by the screening committee, candidates will be notified by the Dean of Professional Studies.

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 program. The student's file and all required records receive a final review prior to qualifying for credential recommendation by the College.

ACADEMIC STANDARDS

HONOR LIST OF STUDENTS

Each quarter the Vice President for Academic Affairs publishes a list of undergraduate honor students. To qualify for the list a student, during the quarter under consideration, must (1) register for and earn a minimum of 12 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

A—Excellent	4 grade points per unit
B—Very Good	3 grade points per unit
C—Satisfactory	2 grade points per unit
D—Unsatisfactory	1 grade point per unit
F—Failing	0 grade points
P—Passing	No effect on grade point average
CR—Ungraded Credit	No effect on grade point average
IP—In Progress	No effect on grade point average
IS—Incomplete, Satisfactory	No effect on grade point average; reverts to F if not removed by the last day of the third following quarter, except when an extension of time has been granted
IU—Incomplete, Unsatisfactory	0 grade points; reverts to F if not removed by the last day of the third following quarter, except when an extension of time has been granted
H—Audit	No effect on units earned or grade point average
NC—No Credit	No effect on units earned or grade point average
NR—No Report	No grade reported by instructor
W—Withdrawal, Ungraded	No effect on units earned or grade point average

Prior to fall quarter 1972, the following grades were also used:

WS—Withdrew, Satisfactory..... No effect on units earned or grade point average
WU—Withdrew, Unsatisfactory..... 0 grade points (equivalent to grade of F)

“Pass” (P) or “Fail” (F) grades may be awarded in courses for which standard letter grades are inappropriate, such as workshop, public performance, practicum, or activity courses. A grade of P indicates the achievement of a sufficient portion of the course objectives to justify the awarding of unit credit. The grade of P or F will be used for all sections of a course and given to all students in each section. Courses in which P and F grades are awarded will be designated in the *Class Schedule* or in this catalog.

Credit/No Credit Grading. Any student not on probation 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 as judged by the instructor concerned. “Credit” and “No Credit” (NC) grades will have no effect on grade point average. Courses taken under the credit grading system will not apply to major or minor requirements. A maximum of 32 quarter units, including no more than 20 upper division units, with “Credit” (CR) grades may be applied toward a baccalaureate degree.

SCHOLARSHIP STANDARDS *

Good Standing: “Good Standing” means that an undergraduate student must have at least a 2.0 (C being 2.0) in each of the following: (1) cumulative grade point average based on total acceptable units attempted at all colleges, and (2) total units attempted at Stanislaus State College. A student on probation or disqualification is not in “Good Standing.”

Probation: An undergraduate student will be placed on probation if either his grade point average based on total acceptable units attempted at all colleges is below 2.0 (C being 2.0) or his grade point average based on all units attempted at Stanislaus State College is below 2.0. A student will be continued on probation until both his overall and his Stanislaus State College grade point average are 2.0 or better or until he is disqualified under one or more of the provisions of the disqualification standards.

Disqualification: An undergraduate student becomes disqualified under one or more of the following provisions:

1. Is admitted or readmitted on probation and fails to meet the conditions established at the time of admission.
2. Has a cumulative deficiency on either the overall GPA or Stanislaus State College record equal to or greater than that indicated below:

* The student may also be subject to expulsion, suspension and/or probation for other causes. See page 54 in Student Services section of this catalog.

Policies and Procedures

Freshman-Sophomore (less than 90 quarter units completed) 23 grade point deficiency.

Junior (90–134½ quarter units completed) 14 grade point deficiency.

Senior (135 or more quarter units completed) 9 grade point deficiency.

3. Fails to earn at least a 2.0 (C being 2.0) grade point average in a quarter while on probation.
4. Does not earn at least a 1.0 grade point average during any quarter.
5. Fails to remove any grade point deficiency within two consecutive quarters of admission on probation or of the quarter in which the grade point deficiency was incurred.

Reinstatement After Disqualification. A student who is disqualified will not normally be considered for reinstatement and readmission until after two quarters of nonattendance at Stanislaus State College. The summer session does not count as a quarter.

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 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* objective evidence in writing 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. A student's Stanislaus State College cumulative grade point average must be raised to 2.0 ("C") before a student will be placed on "Good Standing."

POLICIES AND PROCEDURES

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

GENERAL EDUCATION CREDIT

The *Class Schedule* and this catalog indicate the courses offered at the College which are applicable to General Education requirements. Since 1967–68 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), and the General Education "Arts and Sciences Electives requirement" (1965–67). 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, religious holidays, and college activities which the student is obligated to attend. In such cases the instructor may give the student opportunity to make up the work missed.

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

AUDITORS

Admitted students may register in courses as auditors without credit with permission of the instructor provided there is room. 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 is not permitted to take examinations in the course. 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 from the Admissions and Records Office.

OFFICIAL PROGRAM LIMITS

A student who wishes to register during a fall, winter, or spring quarter for a program in excess of 18 units 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.

Policies and Procedures

CREDIT BY EXAMINATION

Any student in resident study who can offer convincing evidence of having achieved the objectives of a course offered at the College for which credit has not otherwise been allowed may petition through the instructor to the department head concerned for a special course challenge examination in order to fulfill the course requirement and/or earn unit credit toward a degree. Forms for this purpose are available at the Admissions and Records Office. Special course sections for credit by examination may be offered in the *Class Schedule* by a department. The letter grade earned on a unit credit examination will be recorded on the student's permanent academic record and appropriate grade points will be assigned. Credit received by examination will not count toward the residence requirement of the College. In individual cases a maximum of credit by examination may be imposed.

Credit by examination may also be secured through College Entrance Examination Board Advanced Placement Examinations and College Level Examination Program (CLEP) general and subject 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 nine units of individual study credit 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 quarter.

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.

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. 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. If a student is merely noting an interest in declaring or changing a credential or advanced degree type, no signatures are necessary.

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.

A student may drop a course during the quarter, 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.

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 (ie: 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 from 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 quarter. A student who takes unauthorized leave may receive a final grade of F in each course for which he was

Policies and Procedures

registered. Students may not withdraw after the last day of instruction.

INCOMPLETE WORK

Incomplete grades of IS and IU are given for illness or other reasons beyond the control of the student. An IS is awarded if the student is doing C work or better at the time the incomplete grade is awarded as judged by the instructor; a student doing D or F work at the time the incomplete grade is awarded shall receive the grade of IU. Incomplete grades revert to F if not removed by the last day of the third following quarter, except when an extension of time is granted. If missing the final examination is the cause of the incomplete grade it should be made up during the next regular quarter on a date determined by the instructor concerned. A student is not to reregister in a course in which he has an incomplete grade. An IS grade shall have no effect on a student's grade point average. An IU grade is equivalent to an F. Responsibility for removing an incomplete grade rests with the student. In cases of prolonged illness or any emergency which necessitates an extension of time to remove the grade, the student may petition through his instructor. Students may not be permitted to graduate until all incomplete grades are removed.

STUDENT CLASSIFICATIONS

Class level:

Freshman	0-44½ acceptable completed quarter units
Sophomore	45-89½ acceptable completed quarter units
Junior	90-134½ acceptable completed quarter units
Senior	135 or more acceptable completed quarter 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 quarter
Former	Returning student who registered in a previous term but not the last quarter
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 12 quarter units or its equivalent in a quarter. 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 12 quarter units in a quarter.

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 quarter 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 \$1.00 for each transcript issued must be received before the record can be forwarded. Transcripts from other institutions which have been presented for admission or evaluation become a part of the student's permanent academic file and are not returned or copied for distribution. Students desiring transcripts covering work attempted elsewhere should request them from the institutions concerned.

PETITIONS

Students may petition for waiver of certain college-wide academic requirements or for review of decisions affecting their academic status. Petition forms and information concerning regulations may be secured from the Admissions and Records Office. 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 AND REFUNDS

Fees are established in accordance with State laws and the regulations of the Trustees of the California State 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 is approximately \$54.00 per quarter or \$162.00 per academic year. Total registration fees and tuition for nonresidents is approximately \$422.00 per quarter or \$1,266.00 per academic year.

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 3.9 Units	\$26.50
4.0 to 7.9 Units	30.00
8.0 to 11.9 Units	33.00
12.0 or more units.....	39.00

Associated Student's Fees:

Regular Students (8.0 Units or more)

Regular Students—First Quarter	8.00
Second Quarter	6.00
Third Quarter	6.00

Limited Students—First Quarter	4.00
Second Quarter	3.00
Third Quarter	3.00

Summer Session (effective June, 1966) .. 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 Quarter	6.00
Limited Students—Each Quarter	3.00
Summer Session	3.00
Postsession50
Health Facility Fee—Each Quarter (non-refundable) ..	2.00

OTHER FEES AND CHARGES (in addition to registration fees)

Nonresident tuition including foreign nonresident—(maximum \$370.00 per quarter) subject to change

For the first 14 units (per quarter)	\$25.00
For the 15th unit and over (maximum) ..	370.00
Application Fee (nontransferable and nonrefundable)	20.00
Late Registration Fee (nonrefundable)	5.00
Graduation Fee	10.00
Check returned from bank for any cause	2.00
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

Fees and Refunds

Summer Session—per unit	\$16.00
Extension Courses—per unit:	
Lecture and Discussion Courses	12.75
Activity Courses	16.25
Science Laboratory Courses	25.25
Parking Fees:	
Non-reserved spaces, Autos:	
Regular students, per quarter.....	9.00
Six-week session or period	5.00
Three-week session or period.....	3.00
Reserved spaces, per month or major fraction thereof.....	5.00
Two-wheeled, self-propelled vehicles licensed by State Department of Motor Vehicles per quarter	25% of above
Alternate vehicle (auto) in addition to fee for first vehicle, per quarter	1.00
Alternate, two-wheeled vehicle, per quarter.....	1.00

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 day 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 student who is the child or spouse of an academic or administrative employee of the California State College.

Questions regarding residency classification for admission eligibility and tuition purposes should be directed to the Residency 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 Colleges or who is the child or spouse of an employee of the California State 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 adviser 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 quarter; thereafter 75% will be refunded the 2nd week, 50% the 3rd week, 25% the 4th week. There will be no refund after the 5th week.

Student Services

Refunds for parking will be given upon application if the parking decal is returned. For the first 25 days of each quarter, 66% of the fees charged will be refunded. Between 26 days and 50 days, 33% will be refunded and no refunds will be given after 51 days.

No refunds can be made if the application is received after the stated deadlines.

STUDENT SERVICES

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. Stop by L-102 anytime you need assistance of any type. If we can't help you, we know who can.

ORIENTATION AND GENERAL INFORMATION

Orientation to the SSC campus community is a valuable experience for incoming students. A new students camp is held usually on the weekend prior to classes in the fall. Also, all new students are encouraged to attend the one day on-campus fall orientation program. Students have an opportunity to learn about services, personnel and activities that are available as well as detailed academic information.

COUNSELING

Personal counseling is available from a staff of trained counselors. The staff is available to work with individual students or groups. Counselors are there to help with *any* student concerns.

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. None of these off-campus facilities are approved or supervised by the College.

Students who wish help in finding housing accommodations are encouraged to visit the Housing Office prior to enrollment for maximum assistance.

CAREER PLANNING AND PLACEMENT

Qualified 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 résumés and letters of application; listing of open positions;

arranging interviews by employers seeking personnel; and maintaining a career library.

Teacher candidates are eligible for placement assistance after acceptance into a credential program. Business and professional placement assistance is provided any student who has attained senior standing. 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 ASSSC, 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

Part-time employment is available in the Turlock and Modesto area during the school year as well as summers. A current listing of job opportunities is maintained in the Student Services Office. Since these jobs are constantly changing, it is necessary that interested students personally contact the Student Services Office for the latest job listings.

FINANCIAL AIDS

The Financial Aid Office administers and coordinates the majority of financial assistance programs available to students to meet their educational expenses. The types of assistance available come from Federal, State, and private sources.

Scholarships. A limited number of scholarships and awards are offered each year to enrolled students demonstrating a financial need and scholastic attainment. Some of these scholarships are limited to particular fields of study. Scholarships are normally awarded in the spring for the following academic year to continuing and first-time students. Inquiries regarding scholarships and the procedure for applying should be made to the Financial Aid Office.

Federal Programs. Students interested in applying for the Federal programs described below should inquire at the Financial Aid Office for application materials.

National Defense Student Loan. Provides long-term, low-interest loans to qualified students. Undergraduates and graduate students may qualify for a maximum loan of \$1,000 per academic year. Repayment is made after a student completes his education or is no longer enrolled in college.

Student Services

College Work-Study. Students from low-income families may qualify for part-time employment on or off campus to assist in defraying their educational expenses. A student may work a maximum of fifteen hours a week.

Educational Opportunity Grant. Grants are made to students of exceptional financial need, who, for lack of financial means of their own or of their families, would be unable to enter or remain in institutions of higher education without such assistance.

Federal Insured Student Loan. Loans are made available through lending institutions to students whose family's adjusted income is less than \$15,000 per year. A student may borrow up to \$1,500 per year. Applications for the Federal Insured Loan are available at the Financial Aid Office.

Law-Enforcement Education Grant Loan Program. The Law-Enforcement Education Grant Program makes available payments for tuition and fees not to exceed \$200 per quarter to full-time employees of publicly-funded law enforcement agencies. Loans may be obtained by students intending to make law-enforcement a career upon graduation. Loans also are available to employees of law enforcement agencies who are enrolled as students.

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.

Emergency Loan Fund. Emergency loans to meet educational expenses are available to students. A maximum of \$100 may be borrowed with repayment due within forty-five days.

More detailed information on work opportunities, loans, and scholarships may be obtained at the Financial Aid Office, Stanislaus State College, 800 Monte Vista, Turlock, California 95380.

HEALTH SERVICES

A complete physical examination by the student's private physician is required for the following categories of admitted students: 1) new students enrolling for 8 or more units; 2) former students of the College enrolling for 8 or more units who were not enrolled for 8 or more units at the College during any of the 3 preceding quarters. This physical examination form *must* be sent to the College Health Center by the physician *before registration*. All other admitted students must submit a health history statement. Appropriate forms will be provided all admitted students.

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.

COLLEGE MEDICAL SERVICES

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. The Health Center is open Monday through Friday between 8:30 A.M.—12 noon and 12:30 P.M.—5:00 P.M. In some cases referral may also be made to local community doctors or hospitals. These services are provided as part of the student health fees and include emergency, out-patient care for injury and acute illness; transportation; some medications; necessary lab tests, X-rays, consultation; immunizations; and health counseling.

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

The Associated Students (ASSSC) is the elected government of the students of SSC 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.

STUDENT ACTIVITIES AND CLUBS

Student activities are primarily financed and organized by the Associated Students. There is also an active group of clubs organized for special purposes and activities. The Student Services Office assists and advises the ASSSC and club organizations. These groups must be chartered to be able to use campus facilities.

The following are presently the chartered organizations on campus: Arts Anonymous and Otherwise, Asian Students Alliance, Biology Club, Black Students Union, Campus Christian Fellowship, Committee for Responsible Government, Creative Arts Society, Economics Unlimited, French Club, History Department Association, Help Our Polluted Earth, Literary Society, Los Companeros, MECHA, Music Educators National Conference, Native American Indian Council, Newman Club, Pi Kappa Delta, Political Science Association, Psychology Club, Ski Club, Sons of Liberty, Student California Teachers Association, Theater Society, World Students Alliance and Young Americans for Freedom.

Students interested in student government or club activities are encouraged to contact the ASSSC or Student Services Office. ASSSC activities include sponsoring or cosponsoring cultural programs (speakers,

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special events, art, drama, band), the school newspaper and yearbook, intramural athletics, intercollegiate athletics (baseball, basketball, track, cross country, golf, tennis, volleyball), forensics, etc.

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.

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 violation of Title 5 of the California Administrative code, regulations of the California State Colleges, Stanislaus State 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.

ALUMNI

The Alumni Association is dedicated to furthering the goals of Stanislaus State College. The association works to promote the interests of SSC and to establish mutually beneficial relations between the College and its alumni.

SELECTIVE SERVICE

Students seeking deferment from service in the Armed Forces must file written requests for deferment with their local draft boards. Undergraduate students may use SSS Form 104, Request for Undergraduate Student Deferment, available from any Selective Service Office. Graduate students should consult their local boards.

Undergraduate students seeking deferments are also responsible for requesting the Admissions and Records Office to send SSS Form 109,

Student Certificate, to their draft boards. Graduate students in an approved master's degree or credential program may request to have SSS Form 103 sent to their draft boards. These forms need only be requested once each academic year and are used to certify admission to the College, satisfactory progress, and completion or termination of a degree or credential program. Satisfactory progress is normally considered as the earning of 45 quarter units each year while enrolled for a minimum of 12 units each quarter.

New regulations permit both undergraduate and graduate students who receive induction orders to have their induction postponed until the end of their current academic term except for those in their last academic year whose induction may be postponed until the end of the academic year.

Further information about selective service may be obtained from any Selective Service Office, from the Student Service Office, or from the Admissions and Records Office.

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.

Enrollments and payments for those in training or eligible for training under the War Orphans Educational Assistance Act, Public Law 634, and educational assistance for the children of veterans permanently and totally disabled from wartime service-connected disability under Public Law 361 will continue.

The California Educational Assistance to Veterans terminated June 30, 1965. The California State Educational Assistance to dependents of deceased or disabled servicemen is expected to continue indefinitely.

The Veterans Readjustment Benefits Act of 1966, Public Law 89-358, became effective June 1, 1966, and provides assistance for education and training for veterans who have served on active duty with the Armed Forces after January 31, 1955.

To qualify for *full* benefits from veteran's programs an eligible student must enroll for at least 12 units during a fall, winter, or spring quarter. Further information about veterans programs may be obtained from the Veterans Clerk in the Admissions and Records Office. A veteran who plans to enroll under one of the federal or state plans of educational benefits is urged to contact the Veterans Clerk as far in advance of registration as possible.

GENERAL REQUIREMENTS FOR DEGREES

The College grants the Bachelor of Arts, Bachelor of Science, Master of Arts, and Master of Science degrees.

Election of Regulations. A matriculated student who has been in continuous enrollment pursuing the same objective may elect to meet the graduation requirements in effect either at the time of his first entering a degree program at a California community or state college, 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 full quarters remain to complete requirements for his degree. In any case a student should not apply later than the date indicated in the Academic Calendar.

An evaluation for graduation eligibility will be completed for a graduation candidate no later than the final registration date of the quarter in which he plans to graduate.

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 State College 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 186 quarter units is required. At least 60 units must be in courses recognized for upper division credit.

RESIDENCE

A student must complete a minimum of 36 quarter units at the College. At least 18 of these 36 units must be completed among the last 30 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.

General Requirements for Degrees

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 another accredited institution according to regulations of the *California Administrative Code*. The College certifies completion of General Education-Breadth requirements to another institution according to regulations of the *California Administrative Code* only when all above requirements have been filled or when all requirements in one of the categories of Natural Sciences, Social Sciences, Humanities or Basic Subjects has been fulfilled.

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 Biology, Chemistry, or Physics 105, 106, and 107, *Science—What It's All About*, sequence satisfies this requirement.

1. BIOL 101 Principles of Biology, 5 units (lab)
BIOL 231 Human Genetics, 3 units
BIOL 253 Introductory Microbiology, 5 units (lab)
BIOL 263 Conservation of Natural Resources, 3 units
ENTO 300 Principles of Entomology, 5 units (lab)
BIOL 381 Evolution, 3 units
2. CHEM 100 Fundamentals of Chemistry, 4 units
CHEM 101–102 Principles of Chemistry I, II, 5 units each (lab)
PHYS 100 Introduction to Physical Concepts, 5 units (lab)
PHYS 101 Mechanics and Heat, 5 units (lab)
PHYS 102 Electricity and Optics, 5 units (lab)
ASTR 200 Descriptive Astronomy, 4 units (5 units with lab)
GEO 200–201 Principles of Geology I, II, 4 units each (lab)
PHSC 101 Environmental Pollution, 3 units

SOCIAL SCIENCES

1. One of the following courses covering United States history:^b
HIST 103 Western Civilization III, 4 units
HIST 362 Ante-Bellum America, 4 units
HIST 363 America After Civil War, 4 units
HIST 364 Contemporary America, 4 units
2. One course covering United States Constitution and California State and Local Government:^{b,c}
PSCI 120 American Government, 4 units
3. Two courses from one of the following groups:^d
 - a. ANTH 205 Introduction to Anthropology, 4 units
ANTH 206 Introduction to Cultural Anthropology, 4 units
ANTH 207 Primitive Social Systems, 4 units
ANTH 208 Introduction to Physical Anthropology, 4 units
 - b. ECON 250–251 Principles of Economics I, II, 4 units each
ECON 311 Economic History of the United States, 4 units
 - c. GEOG 201 Principles of Physical Geography, 4 units
GEOG 202 Principles of Cultural Geography, 4 units

General Requirements for Degrees

- GEOG 240–241 World Regional Geography I, II, 4 units each
- d. HIST 101–102 Western Civilization I, II, 4 units each
- HIST 361 Colonial America, 4 units
- e. PSCI 201 Modern Isms, 4 units
- PSCI 260 Issues in International Politics, 4 units
- f. SOCL 101 Introduction to Sociology, 4 units
- SOCL 102 Contemporary Sociology, 4 units
- SOCL 224 Social Problems in the United States, 4 units
- 4. One course in general psychology:
 - PSYC 201 Introduction to Psychology, 4 units

HUMANITIES

One course from each of the following groups:^e

1. ENGL 201–202 Introduction to Literature I, II, 4 units each
- ENGL 215 Perspective in Literature, 4 units
- PHIL 101–102–103 Classics of Philosophy I, II, III, 4 units each
2. ART 100 Drawing I, 4 units
- ART 101 Drawing II, 4 units
- ART 102 Drawing III, 4 units
- ART 140 Visual Experience, 4 units
- DRAM 200 Expression for the Performing Artist, 4 units
- DRAM 200 Introduction to Theatre, 4 units
- DRAM 230 Theatre Workshop I, 2 units
- DRAM 421–422 History of the Theatre I, II, 4 units each
- MUS 100 Introduction to Music, 4 units
- MUS 241 Chorus, 1 unit^g
- MUS 242 Choral Ensemble, 1 unit^f
- MUS 243 Instrumental Ensemble, 1 unit^f
- MUS 244 Concert Band, 1 unit^f

BASIC SUBJECTS

1. The following sequence in English composition courses:^g
 - ENGL 100 Freshman Composition, 4 units
 - ENGL 200 Sophomore Composition, 4 units
2. One basic course in oral expression:^b
 - SPCH 201 Speech Communication, 4 units
3. One logic, mathematics or statistics course from the following:^h
 - PHIL 110 Deductive Logic, 4 units
 - PHIL 111 Inductive Logic, 4 units
 - MATH 100 Math for Liberal Arts Students, 5 units
 - MATH 102 Mathematics in Human Affairs, 4 units
 - MATH 105 Intermediate Algebra, 4 units
 - MATH 110 College Algebra and Trigonometry, 4 units
 - MATH 150 Finite Mathematics, 4 units
 - MATH 160 Statistics, 4 units
 - MATH 200 Introduction to Computers, 4 units

ADDITIONAL COURSES

1. One health courseⁱ
 - HLTH 101 Healthful Living, 2 units
2. Three quarters (two semesters) of physical education activity courses:ⁱ
 - PHED 101 Fitness, ½ unit
 - PHED 102 Lifetime Activities, ½ unit
 - PHED 103 Team Activities, ½ unit
3. Additional courses are required to total a minimum of 70 quarter (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.

General Requirements for Degrees

- ^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, 4 units, will fulfill the U.S. Constitution portion of this requirement
- ^d Requirement may be partially 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 3 consecutive quarters for credit to be applicable.
- ^g Requirement may be satisfied by acceptable score on CLEP English Composition General 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 requirements 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 36 upper division quarter units in that discipline.

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

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

Note: Students seeking teaching credentials are advised to select an academic matter major. (See Department 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

The purpose of the Special Major is to provide—for *exceptional cases of individual students only*—an opportunity for a specially designed course of study leading to a degree when legitimate academic and professional aims are not adequately accommodated by standard degree majors. Such a provision is not intended to bypass normal graduation requirements or substitute for standard degrees normally found among existing programs in the California State Colleges.

Permission by the Vice President for Academic Affairs to pursue a Special Major is required in all cases. The student must have at least 45 quarter units remaining to complete minimum degree requirements for a baccalaureate degree at Stanislaus State College before permission may be granted. A student interested in a Special Major degree should contact his adviser for additional information.

General Requirements for Degrees

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 12 upper division quarter units and a minimum of 22 quarter 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:

Anthropology	English	Physical Sciences
Art	French	Physics
Biological Sciences	History	Political Science
Business Administration	Mathematics	Psychology
Chemistry	Music	Sociology
Drama	Philosophy	Spanish
Economics	Physical Education	Speech

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 36 quarter units in residence at the College after requirements for his last degree have been fulfilled; at least 18 of these units must be in the subject field of the student's current major.
- (2) Comply with all graduation requirements of the College including the General Education requirement 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 State College 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

General Requirements for Degrees

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, and a Master of Science program in Psychology. Specific requirements will be found in the catalog sections in 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 15 quarter units (including transfer credit) completed before achieving classified standing at Stanislaus State College may be applied to the master's degree program. Work taken during the quarter 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 12 units must be completed after advancement; work taken in the quarter 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*)

General Requirements for Degrees

4. A minimum grade point average of 3.0 (both over-all and at Stanislaus State 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 requirement for those programs having such a requirement. (See *Foreign Language Requirement*)
6. Completion at Stanislaus State College of at least 12 units of the proposed program with a 3.0 average on all completed work appearing on the program. Usually a minimum total of 20 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 45 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 on 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 36 units of the program must be Stanislaus State College residence credit, 9 units of which must have been taken on the Stanislaus State College campus prior to enrolling for the thesis or project or for a seminar alternative to the thesis.

General Requirements for Degrees

2. Of the 45 units for the degree, not more than 9 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 5 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 45 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, postbaccalaureate credit allowed for work taken in the quarter 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 18 units must be in courses designed primarily for master's degrees (numbered in the 500 series). Most programs require more than 18 units of 500 series course work.
5. At least 12 units must be completed after advancement to candidacy. Work taken during the quarter 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 Stanislaus State 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*.

General Requirements for Degrees

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.

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 (599), a student must have:

- a. been advanced to candidacy for the master's degree

General Requirements for Degrees

- b. maintained a B (3.0) average on his contract program
- c. completed at least 9 units of his contract program on the Stanislaus State College campus.
- 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 quarter after the requirements listed in (a) through (g) above have been met. If, however, a student fails to enroll within one quarter (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 session attendance must be readmitted to the college.

3. A student whose thesis is planned to extend over more than the quarter in which he first enrolls in 599 may receive an In Progress (IP) grade. If at the end of one full year after the recording of the IP 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 quarter 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 IP 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 quarter to accommodate the student; late manuscripts will not be accepted until the following quarter or summer session, and the student must refile for the degree at the beginning of each quarter until completion.

General Requirements for Degrees

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

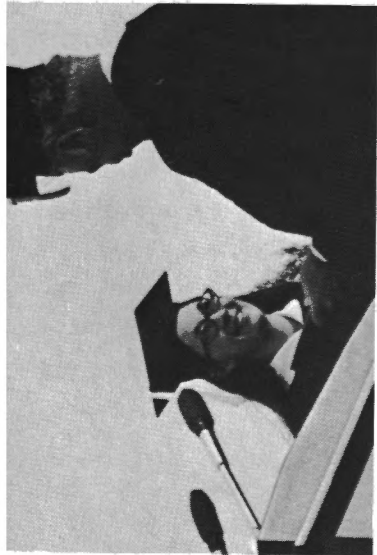
A request that the master's degree be granted must be filed (including verification of payment of the graduation fee) at the Admissions and Records Office in the first two weeks of a quarter or first week of a summer session in which the work is to be completed. Dates for filing applications are listed in the calendar and in the schedule of courses. 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 quarter of the application necessitates the filing of a new application for the quarter of actual completion.

General Requirements for Degrees



General Requirements for Degrees





ANNOUNCEMENT OF COURSES

COURSE NUMBERING SYSTEM

DEPARTMENTAL REQUIREMENTS

COURSE DESCRIPTIONS

COURSE NUMBERING SYSTEM

COURSE LEVEL IDENTIFICATION

- 1- 99 Subcollegiate
- 100-299 Lower division courses designed primarily for freshmen and sophomores.
- 300-499 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.
- 500-599 Graduate courses for degrees. These courses are open *only* to qualified graduate students.
- 600-699 Professional postbaccalaureate courses.
- 800-899 Courses not applicable to baccalaureate or advanced degrees. These courses are often unique in format, experimental in content and provide opportunities to pursue intellectual, civic, and cultural interests. Includes non-credit courses.

During spring 1963 to spring 1967 appearance of the letter "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 quarter 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.
3. Courses graded "Pass" or "Fail" are so indicated in the course description.

Anthropology

Joel Canby, Ph.D., Professor, Chairman
 Lewis Napton, Ph.D., Associate Professor
 Thomas E. Durbin, Ph.D., Assistant Professor
 Corinne Armstrong, M.A., Visiting Lecturer

The Department of Anthropology-Geography-Sociology 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 area and national specializations.

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 40 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, 4 units
- ANTH 208. Introduction to Physical Anthropology, 4 units
- ANTH 299. Introduction to Prehistoric Archaeology, 4 units

The Major

A minimum of 40 upper division units distributed as follows:		<i>Units</i>
History of Anthropology		4
Ethnography and Ethnology		8
Advanced Ethnology		8
Advanced Physical Anthropology		4
Advanced Prehistoric Archaeology		4
Additional upper division units in Anthropology		12
		40

DEGREE MINOR IN ANTHROPOLOGY

Twenty-eight units, including at least 16 units in upper division courses in anthropology distributed as follows:

The prerequisites to the major in anthropology	12
History of Anthropology	4
Ethnography and Ethnology	4
Advanced Physical Anthropology	4
Advanced Prehistoric Archaeology	4
	28

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:

Anthropology

1. Complete requirements for degree minor in anthropology; plus additional courses in the field of the minor to total a minimum of 30 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.

COURSE DESCRIPTIONS

Lower Division

ANTH 205 Introduction to Anthropology (4)

General introduction to anthropology for the non-major. An introduction to both the study of physical and cultural anthropology, prehistoric archaeology and anthropological linguistics for the non-major.

ANTH 206 Introduction to Cultural Anthropology (4)

Meaning of culture, its diversity and degrees of elaboration among different peoples; organization and functioning of cultures. This course or its equivalent is a prerequisite to 300 and 400 level courses. (Formerly 201).

ANTH 208 Introduction to Physical Anthropology (4)

Survey of human biology and physical anthropology; man in an evolutionary perspective; fossil man, human osteology and genetic variation, contemporary micro-evolutionary phenomena.

ANTH 209 Introduction to Prehistoric Archaeology (4)

Introduction to prehistory and culture growth; the basic theories, methods and goals of archaeology; cultural and historical reconstruction based on interpretation of data recovered from worldwide archaeological 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 (4)

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, 208 and 209.

ETHNOGRAPHY AND ETHNOLOGY

Upper Division

ANTH 305 Eurasia (4)

Investigates the historical and cultural background of the various contemporary societies of North Africa, Southwest Asia and Soviet Asia. The effects of Western culture on the indigenous populations of these areas is emphasized. Prerequisite: ANTH 206 or equivalent.

ANTH. 306 Australia and Oceania (4)

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 (4)

Historical and cultural backgrounds of traditional and contemporary societies of Africa south of the Sahara, Western and Asian influences, problems of social, economic and political development. Prerequisite: ANTH 206 or equivalent.

ANTH 310. East and South Asia (4)

Investigation of the rise of civilizations of East and South Asia and review of the contemporary cultural groups of those areas. Prerequisite: ANTH 206 or the equivalent.

ANTH 335. The North American Indian (4)

A general survey course designed to acquaint students with the prehistoric and historic cultures of the Indians of North America and South America. 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. (Formerly 330)

ANTH 336. Indians of California and Western North America (4)

Special emphasis is given to the Indians of California and adjacent areas with special reference to their historical and cultural backgrounds. (Formerly 331) Prerequisite: ANTH 335.

ADVANCED ETHNOLOGY

Upper Division

ANTH 401. Culture and Personality (4)

Individual personality in relation to cultural background. Socialization in non-literate and other non-European societies. National character studies, basic personality structure, and cross-cultural studies of abnormality. (Formerly 332) Prerequisite: Two upper division anthropology courses.

ANTH 404. African Political and Social Systems (4)

Study of traditional African political and social organization and changes during the colonial period. A study in general political and social anthropology employing African cultures as examples. (Formerly 308) Prerequisite: Minimally one 300 level course in Ethnography and Ethnology . . . ANTH 307 recommended.

ANTH 411. Peasant Societies (4)

Theory and methods in the study of primitive and contemporary peasant societies in their cultural context. A study of the small, typically agricultural, community in world ethnography. Prerequisite: Minimally one 300 level course in Ethnography and Ethnology.

ANTH 421. Cultural Dynamics (4)

Cultural stability and dynamics; with reference to geographical base, innovation, invention and technology. Prerequisite: Minimally one 300 level course in Ethnography and Ethnology series.

ANTH 422. Folklore (4)

A survey of the oral literature of non-literate peoples. The content, style and aesthetics of the literature and the social functions of the literature will be discussed. Prerequisites: ANTH 206 and one upper division course in cultural anthropology or consent of instructor.

ADVANCED PREHISTORIC ARCHAEOLOGY

Upper Division

ANTH 325. Methods and Theories in Archaeology (4)

Field techniques and procedures in archeology. Dating and classification of archeological materials. Investigations into the theories of human prehistory. (Formerly 323) Prerequisite: ANTH 205.

Anthropology

ANTH 326. Old World Archaeology, Paleolithic-Mesolithic (4)

Survey of the major developments in Old World prehistory, methods of archaeological analysis, and geological and biological backgrounds of paleolithic and mesolithic men. Prerequisite: ANTH 209 or equivalent.

ANTH 327. New World Archaeology, North America

Early man in North America and the development of prehistoric cultures in the New World of the Mesoamerican high culture area. Prerequisite: ANTH 209 or equivalent.

ANTH 328. Old World Archaeology, Neolithic-Classical

Survey of major developments in Old World archaeology/prehistory, methods of archaeological analysis, and biological and cultural backgrounds of Bronze and Iron Age men. Prerequisite: ANTH 209 or equivalent.

ANTH 329. New World Archaeology, Mesoamerica-South America (4)

Early man in Mesoamerica and South America and development of prehistoric cultures in the New World Mesoamerican and Andean areas. Prerequisite: ANTH 209 or equivalent.

ANTH 432. Field Research in Archaeology (4)

Techniques of site survey and excavation with special emphasis on application of systematic field procedures, problem design, excavation and recording of archaeological evidence under controlled field conditions. Prerequisite: ANTH 325 and consent of instructor. (Formerly 355)

ADVANCED PHYSICAL ANTHROPOLOGY

Upper Division

ANTH 345. Human Evolution and Fossil Man (4)

Survey of the evolutionary processes in the development of man; origin and phylogeny of extinct hominids; study of fossil man and the extinct primates, the fossil evidence for human evolution in paleoenvironmental, cultural and behavioral contexts. Prerequisite: ANTH 208.

ANTH 346. Primate Evolution and Behavior (4)

Emphasis on the evolution of the primates and studies of their behavior with special reference to the application of primate studies to the understanding of human biology and culture. Prerequisite: ANTH 208.

ANTH 347. Adaptations in Human Populations (4)

The processes of adaptive differentiation in man, and the criteria of significant differences among human stocks; influence of culture in microevolutionary phenomena, analysis of blood groups, admixture, constitution, growth and nutrition. Prerequisite: ANTH 208.

SPECIAL STUDIES

Upper Division

ANTH 495. Selected Topics in Anthropology (Topic 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 (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 9 units. Prerequisite: Consent of instructor.

Art

Martin L. Camarata, M.A., Associate Professor, Chairman
Robert H. Colescott, M.A., Professor
Edward Levine, M.A., Associate Professor
Ralf Parton, M.A., Associate Professor
James Piskoti, M.F.A., Assistant Professor
James M. Steven, M.F.A., Assistant Professor
Garner H. Tullis, M.A., Assistant Professor

The Department of Art offers the degree, Bachelor of Arts. Studio courses are offered in Drawing, Painting, Sculpture, and Printmaking. History and Criticism courses as well as General Offerings are available.

The art curriculum prepares students for various professions, for creative potential in order to prepare and encourage him to make independent critical judgments.

The art curriculum prepares students for various professions, for study at the graduate level, and for teaching; and provides for the aesthetic and cultural development of the general student in the liberal arts.

REQUIREMENTS FOR BACHELOR OF ARTS

Art 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 36 upper division units, which includes a program of study in fields of specialization as developed in consultation with the major adviser.
4. Completion of a minor is not required.

GENERAL REQUIREMENTS FOR ART MAJOR

1. No particular pattern of high school art courses is required for admission to the art program, but candidates for a major in art are expected to have special interest and ability in art as revealed by superior grades in art courses.
2. A freshman or lower division transfer will be evaluated for acceptance as a major in art during the final quarter of the sophomore year by submitting a portfolio for faculty approval. The same applies to continuing sophomores who entered the department as freshmen.
3. Students entering as transfers at the upper division level will be evaluated, via portfolio, prior to admittance as a major of art. The department expects that the work of transfer students be of such quality to meet the standards of the Department of Art, and may require students to make up deficiencies in lower division course work. He will then be required to resubmit a portfolio for faculty approval upon completion of such deficiencies. When the department is notified by the Admissions and Records Office of a student being accepted for admission with intent to become an art major, he

will be contacted prior to advisement regarding the submittance of a portfolio.

The portfolio should include examples from all classes attended at previously attended institutions, and work done on the student's own initiative; it should show no less than 20 nor more than 35, examples. If work is of a scale, weight, or material which is not easily transported, slides may be submitted; however, at least one-third of the portfolio should be actual work. All actual work should be suitably prepared for presentation, this includes identification, matting and when necessary any protective covering necessary to insure the safety of the work. Slides should be appropriately labeled and should include dimensions.

The College assumes no responsibility for any damage ensued in transfer or handling, although every reasonable precaution will be exercised for its safekeeping.

4. The Department of Art reserves the right to retain any student art works.
5. All seniors will submit a minimum of ten slides for the department's file.
6. All students (major or minor) engaged in studio courses are required to work six hours per course per week outside of the scheduled studio time.
7. All art majors are required during their senior year to submit a representative portfolio of their art work to a faculty jury. Seniors must exhibit in their work an exploration of all media offered in the program. Personal, conceptual, aesthetic concerns as evidenced in the work will be judged on a qualitative basis by a faculty committee of the Department of Art. Successful participation in an exhibition and faculty approval of 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.

DEGREE MAJOR IN ART

Foundation Program

Units

All majors must take all foundation art courses in sequence.

ART 100. Drawing I.....	4
ART 101. Drawing II.....	4
ART 102. Drawing III.....	4
ART 110. Foundations of Two-Dimensional Composition.....	4
ART 120. Foundations of Color.....	4
ART 130. Foundations of Three-Dimensional Composition.....	4
ART 210. Relief Printing.....	4
ART 220. Painting I.....	4
ART 230. Sculpture I.....	4

Art

Upper Division Requirements

ART 300	Drawing IV	4
ART 301	Drawing V	4
ART 302	Drawing VI	4
ART 311	Intaglio	4
ART 312	Lithography	4
ART 321	Painting II	4
ART 323	Painting III	4
ART 331	Sculpture II	4
ART 332	Sculpture III	4
Total		72

All majors must take their required art courses in an order which does not violate the prerequisite.

DEGREE MINOR IN ART

(48 units as listed below, to include 12 units in Art History)

- ART 100. Drawing I,
- ART 101. Drawing II
- ART 102. Drawing III
- ART 110. Foundations of Two-Dimensional Composition,
- ART 120. Foundations of Color
- ART 130. Foundations of Three-Dimensional Composition,
- ART 210. Relief Printing,
- ART 220. Painting I,
- ART 230. Sculpture I,
- Art History, 12 units

TEACHING CREDENTIALS

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

1. Degree major in art.
2. ART 452, Curriculum and Instruction in Art. (Substitute for EDUC 449, for secondary credential only.)
3. Secondary credential candidates must complete a minimum of 9 units in studio courses in Art as postbaccalaureate work and receive approval of the Department of Art as to subject matter competence.
4. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTION

DRAWING AND FOUNDATIONS

Lower Division

ART 100. Drawing I (4)

Emphasis on introduction to drawing media and process as visual language. Prerequisite: Consent of instructor.

ART 101. Drawing II (4)

Emphasis is on structure and proportion as interdependent elements of the visual image. Prerequisite: ART 100

ART 102. Drawing III (4)

Emphasis on space and scale as interdependent qualities of visual composition. Prerequisite: ART 101

ART 110. Foundations of Two-Dimensional Composition (4)

Studio exploration of plastic elements as a basis for building visual language for two-dimensional composition. Prerequisite: Consent of instructor.

ART 120. Foundations of Color (4)

Studio investigation of color interaction. Prerequisite: ART 110

ART 130. Foundations of Three-Dimensional Composition (4)

Studio exploration of fundamental elements of form as basis for building visual language for three-dimensional composition. Prerequisite: ART 110

ART 300. Drawing IV (4)

Emphasis on objects as compositional elements. Prerequisite: ART 102

ART 301. Drawing V (4)

Emphasis on figure as a compositional element. Prerequisite: ART 300

ART 302. Drawing VI (4)

Elaboration of problems explored in Pictorial Systems. Prerequisite: All required drawing courses.

Upper Division**ART 405. Advanced Drawing (4)**

Advanced problems in drawing with emphasis upon expression. Prerequisite: All required drawing courses, or signature of adviser. May be repeated for a total of 12 units.

PRINTMAKING**Lower Division****ART 210. Relief Printing (4)**

Fundamental theories and practices involved in the process of relief printmaking. Emphasis on materials, techniques, tools, and craftsmanship. (Formerly 362) Prerequisite: Completion of all freshman foundations courses, or consent of instructor.

Upper Division**ART 311. Intaglio Printing (4)**

Techniques of intaglio printmaking; emphasis on techniques and their relation to the graphic image. Prerequisite: Completion of all foundations courses, or consent of instructor.

ART 312. Lithography (4)

Lithographic printmaking; emphasis on techniques and their relationship to the graphic image. Utilization of the techniques of stone and metal printing. Prerequisite: Completion of all foundations courses or consent of instructor.

ART 415. Advanced Printmaking (4)

Advanced problems and new techniques in printmaking. Students may concentrate or work in a variety of printing processes. May be repeated for a total of 16 units. Prerequisites: All required printmaking courses, or consent of instructor

PAINTING**Lower Division****ART 220. Painting I (4)**

Emphasis on media and process with a concentration in watercolor and acrylic. Prerequisite: Completion of all freshman foundations courses.

Art

Upper Division

ART 321. Painting II (4)

Emphasis on objective painting. Concentration in oils. Prerequisite: Completion of all foundations courses, or consent of instructor.

ART 323. Painting III (4)

Emphasis on form in space with a variety of paint media. Prerequisite: ART 321

ART 425. Advanced Painting (4)

Advanced problems and new techniques in painting. Students may concentrate or work in a variety of painting media. May be repeated for a total of 16 units. Prerequisite: All required painting courses, or consent of instructor.

SCULPTURE Lower Division

ART 230. Sculpture I (4)

Fundamental theories and practices involved in modeling, emphasis on materials, techniques, tools, and craftsmanship.

Prerequisite: Completion of all freshman foundations courses, or consent of instructor.

Upper Division

ART 331. Sculpture II (4)

The additive process as a sculptural discipline with emphasis on the direct use of metals as medium for personal expression. Introduction to various methods of welding. May be repeated for a total of 8 units. Prerequisite: Completion of all foundations courses or consent of instructor.

ART 332. Sculpture III (4)

The subtractive process as a sculptural discipline; emphasis on the human form in stone and wood. Further development in the use of wood carving and stone cutting tools. Prerequisite: Completion of all foundations courses or consent of instructor.

ART 435. Advanced Sculpture (4)

Advanced problems and new techniques in sculpture. Students may concentrate or work in a variety of materials. May be repeated for a total of 16 units. Prerequisites: All required sculpture courses, or consent of instructor.

HISTORY OF CREATIVE VISUAL EXPRESSION Lower Division

ART 140. The Visual Experience: An Introduction to the Visual Arts (4)

An introduction to the works of art through an analysis of the form and content of the works and the context in which they are created. (Formerly 346)

ART 241. Art and Science (4)

A study of the relationship between the creative experience in the arts and sciences. An exploration into the concepts of art and science and the interrelationships between the disciplines.

ART 242. Expressionism and the Fantastic Tradition in Art (4)

A study of the aesthetic manifestations of the expressionism and fantasy in art history.

Upper Division

ART 345. Contemporary Art (4)

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

ART 347. Post Impressionism (4)

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 348. Modern Art; 1900-1945 (4)

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 and their relationship to the other arts and to the cultural milieu to the present.

ART 349. The Romantic Tradition (4)

A study of the nature and development of Romanticism in the 19th century and its relationship to the art of the 20th century. The course will explore the various manifestations of Romanticism in the arts and their underlying aesthetic and intellectual premises.

ART 450. Art Criticism (4)

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

ART 451. Gallery Management (2)

Preparation for gallery management. Prerequisite: Consent of instructor.

General Offerings

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

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

ART 452. Curriculum and Instruction in Art (4)

Contemporary trends in art education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. Prerequisite: Admission to student teaching and consent of credential adviser.

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

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

ART 496. Senior Seminar (4)

Intensified study of the nature and problems confronting the contemporary American artist. Preparation of senior portfolio and exhibition. Prerequisite: Senior art major, or consent of instructor.

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.

Graduate

ART 598. Individual Study (1-5)

For 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.

Biological Sciences

Steve J. Grillos, Ph.D., Professor
Glenn A. Hackwell, Ph.D., Professor
James C. Hanson, Ph.D., Associate Professor
Judith A. Brown, M.S., Assistant Professor
Jay P. Christofferson, Ph.D., Assistant Professor
David M. Gotelli, Ph.D., Assistant Professor
Perpetuo S. Mayol, Ph.D., Assistant Professor
Wayne S. Pierce, Ph.D., Assistant Professor
Pamela Roe, Ph.D., Assistant Professor
Walter Tordoff III, Ph.D., Assistant Professor
Daniel F. Williams, Ph.D., Assistant Professor

The Department of Biological Sciences offers programs of study in the biological sciences for students seeking the Bachelor of Arts, Biological Sciences. These courses provide breadth and background in the natural sciences for the general student. The major programs are designed to prepare students for graduate work, careers in the biological sciences, and teaching. The student majoring in 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.

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 36 upper division units, including course requirements as specified for the major.
4. Completion of a minor is not required.

DEGREE MAJOR IN BIOLOGICAL SCIENCES

Prerequisites to the Major

Required courses in major field:

BOTY 105, 106. Principles of Botany; Plant Diversity, 8 units

ZOOL 105, 106. Animal Diversity; Principles of Zoology, 8 units

Required courses in supporting fields:

CHEM 101, 102, 103. Principles of Chemistry I-III, 15 units

Mathematics (MATH 160 recommended), 4 units

One of the following year sequences:

* PHYS 101, 102, 103. Mechanics and Heat; Electricity and Optics; Modern Physics, 15 units

* CHEM 321, 322, 323, 324, 325, 326. Organic Chemistry, 12 units

The Major

	<i>Units</i>
BIOL 332. Genetics	4
BIOL 351. Cellular and Molecular Biology	3
BIOL 363. Ecology	3
BIOL 364. Field Biology	2

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

Biological Sciences

Course in botany (upper division) as approved by major adviser.....	4
Course in physiology as approved by major adviser	4
Courses in zoology (upper division) as approved by major adviser	4
† Courses as approved by major adviser	24
Total.....	48

DEGREE MINOR IN BIOLOGICAL SCIENCES

(31 units, to include at least 15 units in upper division)

Lower Division

BOTY 105, 106. Principles of Botany; Plant Diversity, 8 units
ZOOL 105, 106. Animal Diversity; Principles of Zoology, 8 units

Upper Division

Courses as approved by minor adviser, 15 units

TEACHING CREDENTIALS

‡ Majors in biological sciences seeking elementary and secondary credentials must fulfill the following requirements:

1. Degree major in biological sciences.
2. Secondary credential candidates must complete 9 units in courses in biological sciences as postbaccalaureate work and receive approval of the Department of Biological Sciences as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

PREPARATION FOR GRADUATE STUDY

It is recommended that the student who intends to seek an advanced degree in graduate study select a minor in the physical sciences and complete at least a college level one-year sequence or equivalent in French or German.

COURSE DESCRIPTIONS

BIOLOGY

Lower Division

BIOL 101. Principles of Biology (5)

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, structure as it relates to function, and reproduction and development from the molecular to gross structural levels. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) No prerequisites.

BIOL 105. Science—What It's All About (4)

A non-mathematical descriptive survey of physics, chemistry and biology, emphasizing the unity of the scientific disciplines. Same as CHEM 105 and PHYS 105. (Lecture, 4 hours) No prerequisites.

BIOL 106. Science—What It's All About (4)

Continuation of Biology 105. Same as CHEM 106 and PHYS 106. (Lecture, 4 hours) Prerequisite: BIOL 105.

BIOL 107. Science—What It's All About (5)

Continuation of Biology 106 with the inclusion of a laboratory. Same as CHEM 107 and PHYS 107. (Lecture, 4 hours; laboratory, 3 hours) Prerequisite: BIOL 106.

† A maximum of 12 units may be satisfied by courses at lower division level as approved by major adviser

‡ Secondary credential candidate with a degree major in biological sciences is advised to complete a degree minor in the physical sciences.

Biological Sciences

BIOL 231. Human Genetics (3)

Basic principles of heredity and evolution particularly as they apply to man. Not applicable for credit in biological science major. (Lecture, 3 hours) Prerequisite: None.

BIOL 253. Introductory Microbiology (5)

Introduction to the biology of the major groups of microorganisms with emphasis on bacteria; their role in nature and their relation to man. Not open to students with BIOL 353. (Lecture, 4 hours; laboratory, 3 hours) Prerequisite: None.

BIOL 263. Conservation of Natural Resources (3)

Broad aspects of natural resources conservation which includes the history of man in relation to land use, human populations in relation to resources, history of the conservation movement and present day conservation problems such as air and water pollution. (Lecture 3 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 may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

BIOL 322. General and Cellular Physiology (5)

Physico-chemical properties of protoplasm, permeability, metabolism and nuclear-cytoplasmic interaction. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: One year college level biology or equivalent; organic chemistry is recommended.

BIOL 332. Genetics (4)

Mechanisms of inheritance and relationships of heredity to fundamental biological problems, as well as application to practical problems including those of human society. (Lecture, 4 hours) Prerequisite: BIOL 351 or equivalent.

BIOL 334. Genetics Laboratory (1)

Laboratory experiments to demonstrate Mendelian principles, sex-linkage, sex determination, gene interaction, and chromosome mapping. (Laboratory, 3 hours) Prerequisite: BIOL 332 or concurrent enrollment.

BIOL 351. Cellular and Molecular Biology (3)

Basic concepts of cellular phenomena dealt with at the molecular level of organization. (Lecture, 3 hours) Prerequisites: One year college level biology and CHEM 101, 102, 103 or equivalent.

BIOL 353. Microbiology (5)

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, 3 hours; laboratory, 6 hours) Prerequisites: One year college biology and chemistry or equivalent.

BIOL 363. Ecology (3)

Basic interrelationships of plants and animals within their physical and biological environments. (Lecture, 3 hours; field trips) Prerequisite: Two quarters college level biology or equivalent.

BIOL 364. Field Biology (2)

Laboratory and field exercises with emphasis on the use of methods and instruments employed in ecological studies. Data on both the physical and biotic aspects of the environment will be gathered and analyzed. Individual and group field problems will be undertaken. (Laboratory, 6 hours; field trips) Prerequisite: BIOL 363 or concurrent enrollment.

BIOL 365. Aquatic Biology (4)

The biota of fresh water, with emphasis upon the ecology, identification, physiology and behavior of aquatic organisms. (Lecture, 2 hours; laboratory 6 hours; field trips) Prerequisite: Two quarters of college level biology or equivalent.

BIOL 381. Evolution (3)

Basic concepts of evolutionary theory, including evidence and mechanisms that underlie and support the evolution of living things. (Lecture, 2 hours; discussion, 1 hour) Prerequisite: One quarter college level biology or equivalent; BIOL 332 is recommended.

BIOL 451. Histological and Cytological Techniques (4)

Principles and practice of preparing tissues for microscopic study. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: Two years of college level biology or equivalent.

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 496. Seminar in Biology (2)

Presentations and discussions of selected biological phenomena through study of biological literature. (Discussion, 2 hours) May be repeated for only a total of 4 required units. 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 9 units. Prerequisite: Consent of instructor.

Graduate

BIOL 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.

BOTANY

Lower Division

BOTY 105. Principles of Botany (4)

Basic principles of plant biology, physiology, morphology, anatomy, reproduction, ecology and evolution. (Lecture, 3 hours; laboratory, 3 hours) (Formerly 103). Prerequisites: Grade of A or B in high school biology, satisfactory score on biology qualifying examination, or BIOL 101.

BOTY 106. Plant Diversity (4)

Introduction to the morphology, life histories and evolutionary interrelationships of the major plant groups. (Lecture, 3 hours, laboratory, 3 hours; field trips). Prerequisites: BOTY 105 or equivalent botany course.

BOTY 295. Selected Topics in Botany (Topics to be specified in Class Schedule) (1-5)

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

Upper Division

BOTY 311. Morphology of Non-Vascular Plants (4)

Comparative study of structure, development, ecology, and evolutionary importance of algae, fungi, lichens, and bryophytes. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisite: BOTY 106 or equivalent.

Biological Sciences

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 106 or equivalent.

BOTY 315. Introductory Mycology (4)

Survey of fungi with emphasis on form, structure, heredity, development and identification. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisites: BOTY 106 and 311, 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 106 or equivalent.

BOTY 410. Plant Anatomy (5)

Microscopic study of structure and development of plant tissues, with emphasis upon tissues of seed plants. (Lecture, 3 hours; laboratory, 6 hours) Prerequisites: BOTY 106 and 312, or equivalent.

BOTY 420. Plant Physiology (5)

Selected topics pertaining to metabolism, nutrition, and growth of plants. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: BOTY 106 or equivalent; organic chemistry is recommended.

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 (5)

Classification, control, life history, structure, ecology, and basic physiology of insects. (Lecture, 3 hours; laboratory, 6 hours; field trips) Prerequisite: BIOL 101 or equivalent.

ENTO 333. Medical Entomology (4)

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, 3 hours; laboratory, 3 hours) Prerequisite: BIOL 101 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.

ENTO 422. Insect Physiology (4)

Consideration of nutrition, digestion, excretion, circulation, respiration, detoxification processes, and the nervous and hormonal systems of insects. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: Consent of instructor. Organic chemistry is recommended.

ENTO 495. Selected Topics in Entomology (Topic to be specified in the 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.

ZOOLOGY
Lower Division

ZOOL 105. Animal Diversity (4)

Introduction to the classification, distinguishing characteristics, life histories, and interrelationships of representatives of the major animal groups. (Lecture, 3 hours; field trips) Prerequisites: Grade of A or B in high school biology, satisfactory score on biology qualifying examination, or BIOL 101.

ZOOL 106. Principles of Zoology (4)

Introduction to basic zoological principles common to the animal kingdom. Emphasis will be on the morphology and physiology of cells, tissues and organ systems. (Lecture, 3 hours; laboratory, 3 hours; field trips) (Formerly 102) Prerequisite: ZOOL 105.

ZOOL 295. Selected Topics in Zoology (Topics to be specified in Class Schedule) (1-5)

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

Upper Division

Zool 312. Anatomy (5)

Gross morphology, anatomy, and histology of organ systems with special reference to human anatomy. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: ZOOL 106 or consent of instructor.

ZOOL 313. Vertebrate Embryology (5)

Comparative study of microanatomy and development of several representative vertebrate forms. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: ZOOL 106 or equivalent.

ZOOL 315. Comparative Anatomy of Vertebrates I (4)

Comparative study of microanatomy and gross morphology of organ systems in representative vertebrates. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: ZOOL 106 or equivalent.

ZOOL 316. Comparative Anatomy of Vertebrate II (4)

Continuation of ZOOL 315. Comparative study of microanatomy and gross morphology of organ systems in representative vertebrates. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: ZOOL 315.

ZOOL 323. Physiology (4)

Principles of functional anatomy and physiology of organ systems with special reference to human physiology. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: ZOOL 106 or consent of instructor; ZOOL 312 recommended.

ZOOL 361. General Vertebrate Zoology (5)

Natural history, behavior, ecology, environmental physiology, and zoogeography of the vertebrates, with the emphasis upon the ecological roles of vertebrates in their natural communities. Laboratory and field studies of local forms. (Lecture, 3 hours; laboratory, 6 hours; field trips) Prerequisite: One year college level zoology.

ZOOL 442. Invertebrate Zoology I (5)

Structure, classification, distribution, and life histories of invertebrates. (Lecture, 3 hours; laboratory, 6 hours; field trips) Prerequisite: Two years of college level biology or equivalent.

ZOOL 443. Invertebrate Zoology II (5)

Continuation of ZOOL 442. Structure, classification, distribution, and life histories of invertebrates. (Lecture, 3 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 442.

Biological Sciences

ZOOL 444. General Parasitology (4)

Parasitism, with emphasis on parasites of man. (Lecture, 2 hours; laboratory, 6 hours)
Prerequisite: Two years of college level biology.

ZOOL 453. Cellular Biology (3)

Theory and studies of cellular phenomena dealing with chromosomes in genetics and evolution, physiology of gene, and mechanisms of development. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: One year of upper division biology; organic chemistry is recommended.

ZOOL 460. Animal Behavior (Ethology) (3)

The interaction of animals in their environment, with special emphasis on individual and social behavioral 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, 3 hours; laboratory, 3 hours or 1 field trip per week) Prerequisite: ZOOL 361. Course 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, 3 hours; laboratory, 3 hours or 1 field trip per week) Prerequisite: ZOOL 361. Course offered alternate years.

ZOOL 464. Mammalogy (4)

Anatomy, behavior, classification, distribution, economic value, evolution, and life histories of mammals. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisite: ZOOL 361. Offered alternate years.

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

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

Business Administration

Thomas P. Barrett, M.A., Associate Professor, Chairman
Wayne R. Chapin, D.B.A., C.P.A., Professor
David O. Jenkins, D.B.A., C.P.A., Professor
Robert W. Lambright, D.B.A., Professor
Kenneth G. Young, M.B.A., C.P.A., Professor
Cherukuri U. Rao, Ph.D., Associate Professor
Kenneth K. Iwahashi, M.B.A., Instructor
Carl J. Schuetze, M.S., Lecturer

The Department of Business Administration has primary responsibility within the College for the preparation and continuing education of business administrators. The department 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.

At present, the department is concentrating its resources on its undergraduate program—leading to the degree Bachelor of Arts, Business Administration. The department 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. In addition, the faculty is now developing a new program leading to the degree Master of Business Administration (MBA). It is expected that the MBA degree program will be phased in over a period of several years beginning in the fall of 1972.

THE BACHELOR OF ARTS, BUSINESS ADMINISTRATION

This program is intended to provide (1) professional preparation for those students planning to seek careers in the business community and (2) a firm educational foundation for those students planning to undertake graduate study in business administration.

DEGREE OBJECTIVES

This program is designed to help each student acquire:

1. A broad, liberal education.
2. A basic understanding of the operation of a business enterprise.
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

Business Administration

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 the 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.

Completion of a minor is not required.

NOTICE

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 department, 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, 8 units
ENGL 205. Technical and Report Writing, 4 units
MATH 150. Finite Mathematics, 4 units
MATH 160. Statistics, 5 units
PSYC 201. Introduction to Psychology, 4 units
SOCL 101. Introduction to Sociology, 4 units
- (b) Additional Requirements:
BUS 200. Introduction to Computers, 4 units
BUS 201. Computer Programming, 3 units
BUS 206. Business Law, 4 units
* BUS 211. Principles of Financial Accounting, 5 units

The Business Administration Core

- BUS 300. Quantitative Analysis for Business Decisions, 4 units
BUS 303. Business and its Environment, 4 units
BUS 313. Managerial Accounting, 5 units (Students concentrating in Accounting will substitute BUS 314. Cost Analysis, 5 units)
BUS 322. Business Finance, 5 units
BUS 330. Administrative Organizations, 4 units
BUS 331. The Administrative Process, 4 units
BUS 341. Basic Marketing, 4 units
BUS 408. Business Policy, 5 units
BUS 418. Managerial Accounting and Information Systems, 4 units
ECON 315. National Income Analysis, 4 units
ECON 331. Managerial Economics, 4 units

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, 4 units
BUS 312. Intermediate Accounting II, 4 units
BUS 411. Advanced Accounting, 5 units

One of the following as approved by the major adviser:

- BUS 412. Auditing, 5 units
BUS 414. Income Tax Accounting, 5 units
BUS 415. Seminar in Accounting Theory, 4 units

Finance

Business finance is the three-fold function of determining funds requirements, evaluating and selecting alternate sources of funds, and managing available funds in order to achieve specified objectives.

* 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 Stanislaus State College.

Business Administration

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:

ECON 332. Monetary Theory and Policy, 4 units

Three of the following as approved by the major adviser:

BUS 422. Portfolio Management, 4 units

BUS 423. Security Analysis, 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, 4 units

BUS 442. Marketing Research, 4 units

BUS 449. Problems in Marketing Strategy, 4 units

One of the following as approved by the major adviser:

BUS 443. Sales Management, 4 units

BUS 444. Industrial Marketing, 4 units

BUS 445. Retailing, 4 units

BUS 446. Promotion Management, 4 units

BUS 448. Business Logistics, 4 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, 4 units

BUS 437. Introduction to Systems Analysis and Design, 4 units

BUS 451. Production and Operations Administration, 4 units

One of the following as approved by the major adviser:

BUS 405. Sample Surveys, 4 units

BUS 448. Business Logistics, 4 units

BUS 452. Program Administration, 4 units

BUS 453. Simulation of Operating Systems, 4 units

BUS 455. Introduction to Management Science, 4 units

Business Administration

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:

BUS 436. Human Problems in Administration, 4 units

BUS 461. Personnel Administration, 4 units

ECON 410. Labor Economics, 4 units

One of the following as approved by the major adviser:

BUS 462. Labor Management Relations, 4 units

BUS 463. Manpower Planning, 4 units

BUS 464. Compensation Administration, 4 units

DEGREE MINOR IN BUSINESS ADMINISTRATION

Prerequisites to the Minor

BUS 211. Principles of Financial Accounting, 5 units

ECON 250, 251. Principles of Economics I-II, 8 units

Required Courses in Minor Field

BUS 303. Business and its Environment, 4 units

Plus 12 upper division units as approved by the minor adviser.

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 department may be used in partial fulfillment of the requirements for the credential in secondary education. Interested students should consult the chairman of the Department of Education for assistance in program planning.

COURSE DESCRIPTIONS

BUS 200. Introduction to Computers (4)

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, 3 hours; laboratory, 2 hours) Prerequisite: 2 years of high school algebra or MATH 105.

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 equivalent.

BUS 206. Business Law (4)

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 (5)

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 (4)

Study of problems involved in the management of personal finances: family financial planning, credit, insurance, home ownership, investments, Social Security, and estate planning. (Not open to students who have completed BUS 422 or 423)

Business Administration

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.

Upper Division

BUS 300. Quantitative Analysis for Business Decisions (4)

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, 160.

BUS 303. Business and Its Environment (4)

Continuing interaction and adaptation of business and its legal, political, and social environment. Prerequisites: ECON 250; SOCL 101; and Junior standing.

BUS 306. Advanced Business Law (4)

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

BUS 311. Intermediate Accounting I (4)

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 (4)

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 (5)

Analysis and use of accounting and financial data by management for planning, control, and decision making. Designed for students who are pursuing a concentration in a field other than accounting; credit not applicable to concentration in accounting. Prerequisite: BUS 211.

BUS 314. Cost Analysis (5)

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. Prerequisites: BUS 211, 300.

BUS 322. Business Finance (5)

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, and 313 or 314.

BUS 330. Administrative Organizations (4)

The functioning of complex human organizations and their subunits. The relationships among environment, technology, design, structure, and performance. Administrative organizations are viewed as indeterminate open systems, constantly striving to cope with uncertainty, and subject to criteria of rationality. Prerequisites: PSYC 201; SOCL 101.

BUS 331. The Administrative Process (4)

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: BUS 330.

BUS 341. Basic Marketing (4)

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. Prerequisites: BUS 303, PSYC 201.

BUS 401. Readings in Business Administration (2)

Directed readings on selected broad issues in business administration. Topics change each quarter. May be repeated for a maximum of 6 units. Prerequisite: Consent of instructor.

BUS 405. Sample Surveys (4)

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. Prerequisite: MATH 160 or equivalent.

BUS 408. Business Policy (5)

Problems of the business enterprise from standpoint of chief executive. Consideration of major company objectives, policies, and programs. Case problems and simulation exercises. Prerequisite: Completion of all other courses in the business administration core.

BUS 409. Business, Society, and the Individual (3)

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 (5)

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 (5)

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 312, and 314.

BUS 414. Income Tax Accounting (5)

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 (4)

History and development of accounting theory, accounting standards, conventions and principles. Current problems, including a survey of current literature. Prerequisite: Completion of or concurrent enrollment in all courses required for the accounting concentration.

BUS 418. Managerial Accounting and Information Systems (4)

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, 322, 330, 341.

BUS 422. Portfolio Management (4)

A basic treatment of the problems of portfolio selection and management with special attention to the portfolio management problems of the individual investor (Field trips) Prerequisite: BUS 322.

Business Administration

BUS 423. Security Analysis (4)

A basic treatment of the problem of security analysis with special attention to determination of security values and investment timing. (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) Prerequisites: BUS 322 or ECON 332.

BUS 425. Financial Management (4)

Analysis of financial problems and policies of non-financial firms. Attention is given to case problems involving financial decisions concerning both long and short term capital problems including capital budgeting. Prerequisite: BUS 322.

BUS. 436. Human Problems in Administration (4)

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 331

BUS. 437. Introduction to Systems Analysis and Design (4)

The methodology of management systems study. Analysis and documentation of existing systems, determination of system requirements, new systems design and implementation. (Field trips) Prerequisites: BUS 418 and 451 or 452.

BUS 440. Consumer Behavior (4)

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 (4)

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 Management (4)

Planning, direction, and control of sales personnel and sales promotion activities. Sales management is approached as an integral element of overall marketing program of a firm. Prerequisite: BUS 341.

BUS 444. Industrial Marketing (4)

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 (4)

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 446. Promotion Management (4)

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. (Field trips) Prerequisites: BUS 341, 440

BUS 448. Business Logistics (4)

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 (4)

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 341, 442, or consent of instructor.

BUS 451. Production and Operations Administration (4)

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 433) Prerequisites: BUS 300, 331.

BUS 452. Program Administration (4)

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 434) Prerequisites: BUS 300, 331.

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, 331.

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, 331.

BUS 461. Personnel Administration (4)

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 431) Prerequisite: BUS 331

BUS 462. Labor Management Relations (4)

Perspectives on the internal relationship between management and unionized employees. (Formerly 432) Prerequisites: BUS 461 and ECON 410.

BUS 463. Manpower Planning (4)

The objectives of manpower management; determination of manpower needs; designing programs to provide the needed manpower; problems and potentials. Prerequisites: BUS 461; ECON 410.

BUS 464. Compensation Administration (4)

The determination and control of compensation from employment; impact of task design and compensation systems on job satisfaction and worker productivity; job pricing and systems of job evaluation; the influence of technology, legislation, unions, and tax policy on wage systems, salary structures, and benefit programs. Prerequisite: BUS 461.

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.

Business Administration

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 department chairman.

Chemistry

Jimmy W. Hinkson, Ph.D., Associate Professor, Chairman
 Hobart G. Hamilton, Ph.D., Associate Professor
 Evan M. Thompson, Ph.D., Associate Professor
 John Almy, Ph.D., Assistant Professor
 James L. Booker, Ph.D., Assistant Professor
 Glen O. Hultgren, Ph.D., Assistant Professor
 Alexander J. Pandell, Ph.D., Assistant Professor

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 who 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 advisor to determine which degree is more suitable for the student's 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 36 upper division units as specified for the Bachelor of Arts Degree or 45 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 101, 102, 103. Principles of Chemistry I-III, 15 units

CHEM 211. Analytical chemistry I, 5 units

Required courses in supporting fields:

MATH 131, 132. Calculus with Analytic Geometry I-II, 8 units

Either of the following sequences:

PHYS 101, 102, 103. Mechanics and Heat; Electricity and Optics; Modern Physics, 15 units

or:

PHYS 221, 222, 223. General Physics I-III, 12 units

PHYS 231, 232, 233. General Physics Laboratory I-III, 3 units

The Major

	<i>Units</i>
CHEM. 321, 322, 323. Organic Chemistry I-III	9
CHEM 324, 325, 326. Organic Chemistry-Lab I-III.....	6
CHEM 412. Analytical Chemistry II	4
CHEM 461, 462. Physical chemistry I-II	6

Chemistry

CHEM 464. Physical Chemistry Laboratory I	1
At least 10 credit hours from the following courses:	
CHEM 427. Advanced Organic Chemistry, 4 units	
CHEM 463. Physical Chemistry III, 3 units	
CHEM 465. Physical Chemistry Laboratory II, 2 units	
CHEM 401. Advanced Inorganic Chemistry, 4 units	
CHEM 495. Selected Topics in chemistry, 1-5 units	
CHEM 498. Individual Study, 1-5 units	10
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Total.....	36

BACHELOR OF SCIENCE DEGREE IN CHEMISTRY

Prerequisites to the Major

Required courses in the major field:

- CHEM 101, 102, 103. Principles of Chemistry I-III, 15 units
- CHEM 211. Analytical Chemistry I, 5 units

Required courses in supporting fields:

- MATH 131, 132, 133. Calculus with Analytic Geometry I-III, 12 units
- MATH 231, 232. Multivariate calculus and Linear algebra I-II, 8 units
- PHYS 221, 222, 223. General Physics I-III, 12 units
- PHYS 231, 232, 233. General Physics Laboratory I-III, 3 units

The Major

	<i>Units</i>
CHEM 321, 322, 323. Organic chemistry I-III	9
CHEM 324, 325, 326. Organic chemistry-Lab I-III	6
CHEM 401. Advanced Inorganic Chemistry.....	4
CHEM 412. Analytical chemistry II	4
CHEM 461, 462, 463. Physical chemistry I-III	9
CHEM 464, 465. Physical Chemistry Laboratory I-II.....	3

At least 10 credit hours from the following courses:

- CHEM 427. Advanced Organic chemistry, 4 units
 - CHEM 480. Introduction to Biochemistry, 4 units
 - CHEM 495. Selected Topics in Chemistry, 1-5 units
 - CHEM 498. Individual Study, 1-5 units
 - MATH 321. Ordinary Differential Equations I, 4 units
 - PHYS 372. Modern Physics, 3 units
 - PHYS 451. Thermal and Statistical Physics I, 4 units
-

Total..... 45

One of the following sequences as approved by the student's major advisor should be taken by those students contemplating entrance into a graduate school specifying a foreign language or substitute as an entrance requirement.

GERM 101, 102, 103. Elementary German I-III, 12 units

or:

MATH 200, 201. Introduction to Computers; Computer Programming, 7 units

DEGREE MINOR IN CHEMISTRY

Consists of 24 units in chemistry as approved by the department, which must include at least 12 upper division units.

TEACHING CREDENTIALS

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

1. Degree major in chemistry.
2. Secondary credential candidates must complete 9 units in courses in chemistry as postbaccalaureate work and receive approval of the department as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

Lower Division

CHEM 100. Fundamentals of Chemistry (4)

Atoms, molecules and physical states of matter. Important classes of chemical compounds and chemical reactions. Experimentation as the approach to solving problems of natural phenomena. Not open to students with previous college chemistry. (Lecture, 3 hours; recitation, 1 hour.)

CHEM 101. Principles of Chemistry I (5)

Fundamental principles and laws underlying chemical action, developed from the laboratory viewpoint. (Lecture, 3 hours; recitation, 1 hour; laboratory, 3 hours) Prerequisite: Two years of high school algebra.

CHEM 102. Principles of Chemistry II (5)

Continuation of CHEM 101. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: CHEM 101.

CHEM 103. Principles of Chemistry III (5)

Continuation of CHEM 102, with emphasis on equilibrium and qualitative analysis. (Lecture, 3 hours; laboratory, 6 hours). Prerequisite: CHEM 102.

CHEM 105. Science—What It's All About (4)

A non-mathematical descriptive survey of physics, chemistry and biology, emphasizing the unity of the scientific disciplines. Same as BIOL 105 and PHYS 105. (Lecture, 4 hours). No prerequisite.

CHEM 106. Science—What It's All About (4)

Continuation of CHEM 105. Same as BIOL 106 and PHYS 106. (Lecture, 4 hours). Prerequisite: CHEM 105.

CHEM 107. Science—What It's All About (5)

Continuation of CHEM 106 with the inclusion of a laboratory. Same as BIOL 107 and PHYS 107 (Lecture, 4 hours; lab, 3 hours). Prerequisite: CHEM 106.

CHEM 211. Analytical Chemistry I (5)

Principles and practice of quantitative analysis. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: CHEM 103.

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

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

Upper Division

CHEM 321. Organic Chemistry I (3)

Principles, basic techniques, and syntheses. Aliphatic and aromatic compounds. (Lecture, 3 hours) Concurrent enrollment in CHEM 324 required. Prerequisite: CHEM 103.

CHEM 322. Organic Chemistry II (3)

Continuation of CHEM 321. (Lecture, 3 hours) Concurrent enrollment in CHEM 325 required. Prerequisite: CHEM 321.

CHEM 323. Organic Chemistry III (3)

Continuation of CHEM 322. (Lecture, 3 hours) Concurrent enrollment in CHEM 326 recommended. Prerequisite: CHEM 322.

Chemistry

CHEM 324. Organic Chemistry Laboratory I (1-2)

Syntheses, identification of unknowns, and laboratory techniques. Concurrent enrollment in CHEM 321 required. (Laboratory, 3 or 6 hours) Prerequisite: CHEM 103.

CHEM 325. Organic Chemistry Laboratory II (1-2)

Continuation of CHEM 324. (laboratory, 3 or 6 hours) Concurrent enrollment in CHEM 322 required. Prerequisite: CHEM 324.

CHEM 326. Organic Chemistry Laboratory III (1-2)

Continuation of CHEM 325. (Laboratory, 3 or 6 hours) Prerequisite: CHEM 325.

CHEM 401. Advanced Inorganic Chemistry (4)

Principles of inorganic chemistry. Bonding, coordination chemistry, and thermodynamics as applied to the solution of problems in inorganic chemistry. (Lecture, 4 hours) Prerequisite: CHEM 461 or consent of instructor.

CHEM 412. Analytical Chemistry II (4)

Emphasis on instrumental and physical methods. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: CHEM 211 and 461, or consent of instructor.

CHEM 427. Advanced Organic Chemistry (4)

Principles of organic chemistry. Reaction mechanisms, syntheses, and stereochemistry. (Lecture, 4 hours) Prerequisite: CHEM 461 or consent of instructor.

CHEM 461. Physical Chemistry I (3)

Chemical thermodynamics, colligative properties, equilibrium, phase rule, kinetics, and other physical phenomena. (Lecture, 3 hours) Prerequisite: MATH 132; PHYS 103 or PHYS 223, 233.

CHEM 462. Physical Chemistry II (3)

Continuation of CHEM 461. (Lecture, 3 hours) Prerequisite: CHEM 461.

CHEM 463. Physical Chemistry III (3)

Continuation of CHEM 462. (Lecture, 3 hours) Prerequisite: MATH 133; CHEM 462.

CHEM 464. Physical Chemistry Laboratory I (1)

Laboratory application of the principles of physical chemistry. (Laboratory, 3 hours) Prerequisite: CHEM 461.

CHEM 465. Physical Chemistry Laboratory II (2)

Continuation of CHEM 464. (Laboratory, 6 hours) Prerequisite: CHEM 462.

CHEM 480. Introduction to Biochemistry (4)

Chemical composition of cells, metabolism, enzymology. (Lecture, 4 hours) Prerequisite: CHEM 323 or consent of instructor.

CHEM 495. Selected Topics in Chemistry (Topic 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.

Drama

Bruce D. Hood, M.A., Associate Professor, Chairman
Douglas McDermott, Ph.D., Professor
Jere D. Wade, Ph.D., Assistant Professor
Noble T. Dinse, M.A.T., Assistant Professor
Marion C. Rader, B.A., Instructor

The Department of Drama offers the degree, Bachelor of Arts, Drama. The coursework is designed to develop a substantial background in both theory and practice of theatre art, and emphasizes the development of individual skills and artistic judgment.

Upon completion of the major, students are prepared for professional work, for teaching, and for study at the graduate level. 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 48 upper division units as approved by the major adviser.
4. Completion of a minor is not required, but is recommended for secondary credential candidates.

DEGREE MAJOR IN DRAMA

Prerequisites to the Major

- DRAM 200. Expression for the Performing Artist, 4 units
- DRAM 230. Theatre Workshop I, 4 units
- DRAM 250. Pantomime and Movement, 4 units

THE MAJOR

	<i>Units</i>
DRAM 300. Acting	4
DRAM 320. Stagecraft I	4
DRAM 321. Stagecraft II	4
DRAM 340. Methods of Theatrical Production	4
DRAM 341. Dramatic Theory and Criticism	4
DRAM 421. History of Theatre I	4
DRAM 422. History of Theatre II	4
DRAM 423. Modern Theatre	4
DRAM 430. Theatre Workshop II	4
DRAM 460. Theory of Directing	4
DRAM 461. Practicum—Directing	4
One of the following as recommended by the major adviser:	
DRAM 306. Costuming	
DRAM 309. Makeup	
DRAM 322. Stage lighting *	
DRAM 323. Scene Design *	4
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Total	48

* DRAM 320 and DRAM 321 are prerequisites for DRAM 322 and DRAM 323

Elective Courses

Elective courses available for strengthening major courses, or substitution for required courses on approval of major adviser.

- DRAM 307. Costume History, 4 units
- DRAM 350. Creative Drama for Children, 4 units
- DRAM 400. Advanced Acting, 4 units
- DRAM 410. Advanced Theatrical Production, 4 units
- DRAM 424. History of Cinema, 4 units
- DRAM 425. American Theatre, 4 units
- DRAM 498. Individual Study, 1-5 units

DEGREE MINOR IN DRAMA

Twenty six units approved by the minor adviser are required, including at least 16 units in upper division courses. The required courses for the minor in drama are as follows:

DRAM 220. Introduction to Theatre.....	4
DRAM 200. Expression for Performing Artist or	
DRAM 250. Pantomime and Movement.....	4
DRAM 230. Theatre Workshop	2
DRAM 320. Stagecraft I.....	4
DRAM 321. Stagecraft II	4
DRAM 340. Methods of Theatrical production	4
DRAM 460. Theory of Directing.....	4
<hr/>	
Total.....	26

TEACHING CREDENTIALS †

- Majors in drama seeking secondary credentials must fulfill the following requirements:
1. Degree major in drama. Minor in an appropriate teaching field is recommended.
 2. Secondary credential candidates should complete nine units in drama as post-baccalaureate work and receive approval of drama adviser as to subject matter competence.
 3. Complete requirements for credential as presented by the Education Department.

**DRAMA
Lower Division**

DRAM 200. Expression for the Performing Artist (4)

Elementary principles and practice of stage speech and movement for the actor, singer and performer.

DRAM 220. Introduction to Theatre (4)

Introductory survey of theatrical arts; the theatre in history; the theatre as an art form; fundamentals of theatrical production.

DRAM 230. Theatre Workshop I (2)

Practice in all phases and forms of theatrical production for public performance. May be repeated for a total of 10 units in DRAM 230 and DRAM 430.

DRAM 250. Pantomime and Movement (4)

Theory and exercise in theatrical pantomime and body movement. Prerequisite: Consent of instructor.

DRAM 295. Selected Topics in Drama (Topics to be specified in *Class Schedule*) (1-5)

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

† See Education

Drama

Upper Division

DRAM 300. Acting (4)

Study and practice in the theories and techniques of developing and projecting a character. Prerequisite: DRAM 200 and 250 or consent of instructor.

DRAM 306. Costuming (4)

Principles and practice in the art of theatrical costuming. Prerequisite: Consent of instructor.

DRAM 307. Costume History (4)

Covers fundamentals of costume design and history of costume periods. Recommended prerequisite: DRAM 306.

DRAM 309. Makeup (4)

Principles and practice in the art of theatrical makeup. Prerequisite: Consent of instructor.

DRAM 320. Stagecraft I (4)

Principles and practice in the techniques of building, painting, mounting, and rigging of stage scenery and properties. (Formerly 210)

DRAM 321. Stagecraft II (4)

Principles and practice in the techniques of building, painting, mounting, and rigging of stage scenery for production. With an introduction to stage electricity, lighting, and sound. (Formerly 210) Prerequisite: DRAM 320

DRAM 322. Stage Lighting (4)

Theory and practice of theatrical stage lighting; basic electricity, design of effects and operation of current devices. (Formerly 303) Prerequisite: DRAM 320 and 321.

DRAM 323. Scene Design (4)

Practice in the techniques of creating effective theatrical scenery. Beginning drawing or two dimensional design is recommended. (Formerly 311) Prerequisite: DRAM 320 and 321.

DRAM 340. Methods of Theatrical Production (4)

Basic techniques for organization and management of all types of performance in the theatrical environment. Designed to give the student necessary background for directing the work of others and for achievement of attractive and successful mounting of activities in the theatre-auditorium.

DRAM 341. Dramatic Theory and Criticism (4)

Survey of the work of the major theorists and critics of the drama; implications of their work seen in current forms.

DRAM 350. Creative Drama for Children (4)

Study of use and methods for creative dramatics in work with children, including puppetry, story-telling, and theatre games.

DRAM 400. Advanced Acting (4)

Study and practice in the techniques of developing and projecting a character for the advanced student, with emphasis on special problems such as timing, line scansion in verse drama, etc. Prerequisite: Consent of instructor.

DRAM 410. Advanced Theatrical Production (4)

Advanced practice in the techniques of creating and mounting effective theatrical scenery and lighting. To include special problems in rigging, shifting, painting, and building. Prerequisite: DRAM 320 and 321 and consent of instructor.

DRAM 421. History of Theatre I (4)

Historical analysis of the theatre from its primitive origins through Elizabethan England.

DRAM 422. History of Theatre II (4)

Historical analysis of the theatre from the Renaissance to the end of the 19th century.

DRAM 423. The Modern Theatre (4)

Analysis of the theatre in the 20th century.

DRAM 424. History of Cinema (4)

Study of the cinema and its dynamics, and investigation of its impact upon contemporary culture (same as ENGL 424) Prerequisite: Consent of instructor.

DRAM 425. American Theatre (4)

A comprehensive survey of the theatre in America with investigation of the careers and contributions of prominent American playwrights, producers, directors and actors from Colonial times to the present.

DRAM 430. Theatre Workshop II (2)

Participation in student directed experimental production of dramatic manuscripts. may be repeated for a total of 10 units in DRAM 230 and DRAM 430. Prerequisite: Consent of instructor.

DRAM 460. Theory of Directing (4)

Examination of the history, processes, and functions of the theatrical director. Practice in cutting and preparation of manuscripts for production. Basic principles of composition, control of visual and aural elements of production.

DRAM 461. Practicum—Directing (4)

Practical application of the principles of directing; workshop productions. Prerequisites: Completion of DRAM 460 and consent of instructor.

DRAM 495. Selected Topics in Drama (Topic to be specified in *Class Schedule*) (1-5)

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

DRAM 498. Individual Study (1-5)

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

Economics

Frederick E. Kottke, Ph.D., Professor, Chairman
William J. Mason, Ph.D., Professor
H. Dieter Renning, Dr. rer. pol., Associate Professor
Edward C. Erickson, Ph.D., Assistant Professor
Yin-Po Lee, Ph.D., Assistant Professor
William Dale Crist, M.A., Assistant Professor

The Department of Economics offers the degree Bachelor of Arts, Economics. The objectives of the major in economics are: (1) to provide a concentration in economics as the central core of a liberal oriented education; (2) to provide the major with courses in advanced theories and principles of production, distribution, exchange, and consumption, thus enabling the major to enter graduate study at leading universities; (3) to provide an expanded preprofessional base for the prospective 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 interdepartmental 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 36 upper division units.
4. Completion of a minor is not required.

DEGREE MAJOR IN ECONOMICS

Prerequisites to the Major

ECON 250, 251, 252. Principles of Economics I-III, 12 units

Recommended courses in supporting fields:

Course work in mathematics as recommended by major adviser.

The Major

A minimum of 36 upper division units in economics including a course in microtheory and macrotheory (ECON 420 and 400), 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

DEGREE MINOR IN ECONOMICS

Twenty-four units approved by the minor adviser are required, including at least 16 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 9 units in courses in economics as post-baccalaureate 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, stability, public finance.

ECON 251. Principles of Economics II (4)

Microeconomics; price system and market structures, public policy and income distribution.

ECON 252. Principles of Economics III (4)

Fundamentals of international trade; principles and problems of economic growth and development, economic underdevelopment; analysis of economic systems.

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. Prerequisite: Consent of instructor.

Upper Division

ECONOMIC THEORY AND DOCTRINES

ECON 315. National Income Analysis (4)

Statistics of Output, Consumption, Investment, Employment, and Prices; National Income and Product Tables. Prerequisite: Economic principles or consent of instructor.

ECON 331. Managerial Economics (4)

Application of economics to management decision making; demand analysis and sales-forecasting, production and cost analysis, pricing approaches, government regulations, and capital budgeting. Prerequisite: Economic principles or consent of instructor.

ECON 400. Intermediate Theory (Macroeconomics) (4)

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

ECON 401. Economic Thought I (4)

Important ideas of major schools of economics and economists from 1500-1900; Mercantilism through Neoclassical economics.

ECON 402. Economic Thought II (4)

Important ideas of major schools of economics and economists from 1900-present; Institutionalism through Post-Keynesianism.

ECON 420. Intermediate Theory (Microeconomics) (4)

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.

Economics

MONEY AND BANKING

ECON 332. Monetary Theory and Policy (4)

Relationship of money to levels of economic activity; demand for money; supply of money; selection of alternative monetary policies to achieve economic goals. Prerequisite: Economic principles or consent of instructor.

ECON 333. Monetary Institutions (4)

The use and control of "money;" commercial banking; the Federal Reserve System; competition among financial institutions; regulation of financial institutions; international monetary arrangements. Prerequisite: Economic principles or consent of instructor.

PUBLIC FINANCE AND FISCAL POLICY

ECON 454. Public Finance and Fiscal Policy (4)

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 (4)

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.

ECON 456. State and Local Finance and Its Administration (4)

State and local revenues and expenditures; equity, tax administration, influence of tax policy on property and resource utilization; intergovernmental fiscal relations, debt, capital budgeting.

LABOR ECONOMICS

ECON 410. Labor Economics (4)

History and theory of labor movement in United States; theory of wages; income distribution and economic problems of the aged, the chronically unemployed and minority groups. Prerequisite: Economic principles or consent of instructor.

ECON 411. Collective Bargaining (4)

Labor law; theory of collective bargaining; case examination of labor-management negotiations. Prerequisite: Economic principles or consent of instructor.

INTERNATIONAL ECONOMICS

ECON 405. Comparative Economic Systems (4)

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

ECON 440. Economic Development (4)

Measurement of economic growth; economic development of contemporary underdeveloped countries; case studies; economic theories and policies for accelerated growth. Prerequisite: Economic principles or consent of instructor.

ECON 441. International Trade (4)

Concepts of international exchange; exchange rates, balance of payments, free versus regulated trade, and international investment. Prerequisite: Economic principles or consent of instructor.

ECON 442. Soviet Economics (4)

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

ECON 443. International Economics Policies (4)

United Nations-affiliated and other international economic organizations; objectives and evaluation of activities; current foreign economic policy of the U.S.

ECON 444. Case Study in Economic Underdevelopment (4)

Specific economic policies and problems associated with a particular underdeveloped country. Prerequisite: ECON 440.

ECON 445. Economic Planning (4)

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 310. European Economic History (4)

Analysis of economic development from medieval period to present; evolution of capitalism; economics of imperialism; industrial revolution; European economic community. Prerequisite: Sophomore standing.

ECON 311. Economic History of the United States (4)

Analysis of economic growth and development from colonial period to present; application of growth theory to the facts of history; special attention paid to industrialization, transportation, market expansion and the labor movement. Prerequisite: Economic principles or consent of instructor.

GENERAL COURSES

ECON 300. Concepts of Economics (4)

Fundamental economic concepts—micro and macro—and their relationship to current economic issues; full employment, economic growth, economic stability, and economic underdevelopment. Credit not allowed for students who have had a course in economic principles.

ECON 320. Quantitative Analysis I (4)

Central ideas and application of statistical inference; parameters of distribution analysis; time-series analysis; introduction to regression and correlation analysis.

ECON 321. Quantitative Analysis II (4)

Central ideas for application of variance analysis, multiple regression and correlation, partial correlation, rank correlation, test of homogeneity, nonparametric tests, χ^2 square tests, and poisson distribution. Prerequisite: ECON 320 or consent of instructor.

ECON 430. Mathematical Economics I (4)

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

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 (4)

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 9 units. Prerequisite: Consent of instructor.

Education

Richard V. Jones, Ed.D., Associate Professor, Chairman
James C. Cole, Ed.D., Professor
William W. Day, 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
Algin C. Hurst, M.A., Assistant Professor
Richard Prescott, M.A., Visiting Lecturer

The College, in addition to curricula in the liberal arts, offers professional programs in the Education Department 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 Dean of School of Professional Studies. 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 Education Department Office. The College also offers specialized preparation for teachers in the area of the speech and hearing handicapped, as described in the Speech Communication 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 educational 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.*

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, are subject to the requirements of the Teacher Preparation and Licensing Law of 1970.

* 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.

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	Business
Physical and Natural Science	Music
Mathematics	Art
Social Science	Home Economics
Industrial Arts	Foreign Languages
Physical Education	

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 126 quarter 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.

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 1972–73 academic year).

The credential programs at Stanislaus State College 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.

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 at least any fourteen quarter units of professional education courses and one semester, or its equivalent, of full-time student teaching

Education

- (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 Department of Education.

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 four areas of specialization: (1) elementary curriculum; (2) secondary curriculum; (3) supervision; and (4) 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 45 quarter 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 Education Department Office. Preadmission screening data must be filed with the department well in advance of registration in order that the Education Department may select the students to be admitted under existing quotas.

Applicants should contact the Department of Education for descriptive materials concerning admission procedures and advisement. These materials are available in the department.

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

1. Completed SSC 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 résumé which summarizes the candidate's educational background and professional experience.
5. Transcripts from all colleges attended.
6. Results of two interviews with SSC Education faculty members.

Before an applicant has been accepted as a pre-candidate, or during his first quarter as a pre-candidate, he will take a pre-assessment examination. The graduate adviser and committee will use the results of the examination in planning the student's individual M.A. program of studies.

Upon the completion of approximately 12 quarter units of course work and the Graduate Record Examination, the pre-candidate will be reevaluated for acceptance to full graduate standing.

In addition to the completion of an approved thesis, project, three master's papers, or a comprehensive examination, the student is required to complete at least 45 units of required and elective units for the degree. Listed below are specific course requirements for each of the four 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.

Elementary Curriculum & Instruction

One from: EDUC 501, 502, 503, 504

Required: EDUC 505, 526, 529, 527, 525, 520

Plus electives on advisement

School Counseling

One from: EDUC 501, 502, 503, 504

Required: EDUC 505, 506, 535

Two of: EDUC 575, 577, 587

Plus electives from:

EDUC 532, 533, 576, 580, 581

PSYCH 561, 379 (EDUC 579), 578 (EDUC 578), 416

Plus electives on advisement

Secondary Curriculum & Instruction

One from: EDUC 501, 502, 503, 504

Required: EDUC 505, 506, 575, 548, 564

Two from: EDUC 577, 587, 562, 447

Plus electives on advisement

Supervision

One from: EDUC 501, 502, 503, 504¹

Required: EDUC 505, 506, 561, 562, 563, 564, 694, 583

Plus electives from:

EDUC 575, 577, 580, 587

(Completion of at least 18 quarter 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 Individual Instruction (1)

Consideration of the role of the tutor and the teacher in the school. Values and limitations of various learning situations. Opportunities to assist teachers and students in practical instructional situations for the individual and small groups. 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.

EDUC 300. The Instructional Aide (3)

The role of the teacher's assistant in the public schools. Provides a regular assignment at times convenient to the student as a teacher aide. (Medical clearance required.)

Upper Division

EDUC 411. Social Foundations of Education (4)

Society and education; historical trends, philosophical stances, and social phenomena influencing American public education. Prerequisite: Consent of credential adviser; EDUC 200 and PSYC 313 recommended.

EDUC 412. Psychological Foundations of Education (4)

Educational implications of growth and development; learning process; use of psychological data in teaching; assessment techniques; observation techniques. Prerequisite: Consent of credential adviser; EDUC 200 and PSYC 313 recommended.

EDUC 414. Ethnic Groups in Public Education (4)

Study of selected ethnic groups in American public education: consideration of characteristics, trends, problems, and general instructional implications.

Education

EDUC 422. 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 necessary teaching competencies. Includes selected field experience.

EDUC 425. Reading Instruction in the Elementary Grades (4)

Includes an understanding of the principles and practices of reading (grades K-6) and its relation to the language arts; various approaches to reading; development of reading lessons; grouping; word analysis skills, including phonics; manipulative aids in reading. Prerequisite: Consent of credential adviser.

EDUC 426. Social Studies in Elementary Schools (4)

Teaching social studies in grades K-9; concepts and applications. Planning, materials, methods of teaching. Prerequisite: Consent of credential adviser.

EDUC 427. Language Arts in Elementary Schools (4)

Teaching language arts in grades K-9; instruction, materials, and methods; development of children's speech and listening skills, oral and written expression, handwriting and spelling. Prerequisite: Consent of credential adviser.

EDUC 428. Mathematics in Elementary Schools (4)

Teaching mathematics in grades K-9; concepts and applications. Instructional planning and demonstrations based on modern strands and techniques. Prerequisite: Consent of credential adviser.

EDUC 429. Science in Elementary Schools (4)

Teaching science in grades K-9; concepts and applications. Instructional planning and demonstrations based upon modern approaches. Prerequisite: Consent of credential adviser.

EDUC 430. Health and P.E. in Elementary Schools (4)

Purposes, materials, activities, and techniques applicable in elementary school health and physical education. Prerequisite: Consent of credential adviser.

EDUC 434. Outdoor Education (2)

Introduction to outdoor teacher education with appropriate teaching procedures and instructional materials. Includes one weekend directed outdoor camp field experience. Prerequisite: One curriculum course, preferably EDUC 426 or 429.

EDUC 435. Advanced Concepts in Reading Improvement (3)

Techniques of analysis of children's reading patterns; individualizing; grouping; production and use of materials in skills development; correlation of phonics as part of reading development. Designed for practicing teachers. Prerequisite: Teaching experience or consent of instructor.

EDUC 436. Selection and Use of Instructional Materials (3)

Use of libraries, instructional materials centers, and audio-visual materials and equipment. Preparation of resource files. Meets credential requirement in audio-visual. Prerequisite: Admission to credential program or consent of instructor.

EDUC 437. Reading Instruction in the Primary Grades (3)

Emphasis on all aspects of reading readiness, including methods and materials; techniques of beginning reading, including language experience. Prerequisite: EDUC 425 or 435, or consent of instructor.

EDUC 438. Reading Instruction in the Intermediate Grades (3)

Emphasis on reading to learn, particularly reading-study skills; individualized instruction; extension of concepts; research analysis. Prerequisite: EDUC 425 or 435, or consent of instructor.

EDUC 441. Student Teaching in Elementary Schools I (4 or 6)

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. Prerequisites: EDUC 412, or equivalent, and two curriculum courses (one may be taken concurrently). (Petition required for 6 units enrollment.)

EDUC 442. Student Teaching in Elementary Schools II (4)

Supervised observation-participation and student teaching in public elementary school settings. Includes a weekly on-campus meeting dealing with professional ethics and activities, use of audio-visual, and student teaching problems. P or F grade is given. Prerequisites: EDUC 441, and four curriculum courses (one or two of which may be taken concurrently)

EDUC 443. Student Teaching in Elementary Schools III (10 or 12)

Supervised observation-participation and student teaching in public elementary school. Full-day assignments. Includes a weekly two-hour seminar dealing with teaching topics and problems. Includes instruction and experience in audio-visual methods and materials. P or F grade is given. Prerequisite: EDUC 442 and/or approval of coordinator. (Petition required for 12 units enrollment.)

EDUC 444. Student Teaching in Outdoor Education: Elementary (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. P or F grade is given. Prerequisites: EDUC 434 and consent of credential adviser.

EDUC 447. Reading Instruction in the Secondary Grades (4)

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

EDUC 451. Curriculum and Instruction: Foreign Language (3)

Current practices in modern foreign language instruction, with emphasis on laboratory procedures and the audio-lingual-visual approaches. Prerequisite: Admission to credential program or teaching experience.

EDUC 452. Curriculum and Instruction: Art (4)

Contemporary trends in art education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. Prerequisites: Admission to student teaching and consent of credential adviser. (Same as ART 452.)

EDUC 453. Curriculum and Instruction: English (4)

Contemporary trends in English education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. Prerequisites: Admission to student teaching and consent of credential adviser. (Same as ENGL 453.)

EDUC 454. Curriculum and Instruction: Social Studies (4)

Contemporary trends in social studies education. Curriculum development, selection, and organization of materials and procedures for grades 7 through 12. Field observations. Prerequisites: Admission to student teaching and consent of credential adviser and/or consent of instructor

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.

Education

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 Education Department prior to registration. May be repeated for a total of 9 units. Prerequisites: Departmental approval and consent of instructor.

GRADUATE COURSES

(See Department for Master of Arts in Education Program Advisement)

EDUC 501. Seminar: Education in Society (3)

Study of social forces influencing the educative process, the curriculum, and institutional and professional roles in American public education. Prerequisite: EDUC 411, or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 502. Seminar: History of Education (3)

History of education, Western and United States, emphasizing the use of historical data and methods in interpreting problems and issues in public education. Prerequisite: EDUC 411, or equivalent, or consent of the instructor. Teaching experience recommended.

EDUC 503. Seminar: Comparative Education (3)

Study of representative national educational programs, emphasis on the political, social and economic determinants, and contemporary issues and trends. Prerequisite: EDUC 411, or equivalent, or consent of the instructor. Teaching experience recommended.

EDUC 504. Seminar: Philosophies of Education (3)

Modern philosophies of education and their significance for contemporary educational practices. Recommended for experienced elementary and secondary teachers; a required course in advanced credential programs. Prerequisite: EDUC 411, or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 505. Seminar: 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 412, or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 506. Seminar: Applied Theories of Learning (3)

Analysis and evaluation of learning theories as they apply to classroom teaching. Prerequisites: EDUC 412, or equivalent, or consent of instructor. Teaching experience recommended.

EDUC 520. Reading Diagnosis and Remediation (3)

Understanding and correcting reading difficulties; use of techniques in preventing reading retardation; selecting and developing materials; analysis of research in these two areas. Prerequisite: EDUC 425 or 435 or 447, consent of instructor.

EDUC 521. Seminar in Elementary Education (3)

Analysis and synthesis of relationship of content curricular to elementary school organization. Prerequisites: Work in EDUC 525-529 series; and permission of student's graduate committee chairman.

EDUC 525. Seminar in Reading Research (3)

Intensive investigation and review of research and writings in reading (grades K-6); students must select at least one topic for in-depth analysis. Prerequisites: EDUC 425 or 435 or 447, teaching experience, consent of instructor.

EDUC 526. Seminar in Social Studies Curriculum, K-6 (3)

Analysis and evaluation of social studies curriculum in elementary schools, K-6. Prerequisites: EDUC 426, teaching experience, and consent of graduate adviser or instructor.

EDUC 527. Seminar in Language Arts Curriculum, K-6 (3)

Analysis and evaluation of language arts curriculum in elementary schools, K-6. Prerequisites: EDUC 425, 427, teaching experience, and consent of graduate adviser or instructor.

EDUC 528. Seminar in Mathematics Curriculum, K-6 (3)

Analysis and evaluation of mathematics curriculum in elementary schools, K-6. Prerequisites: EDUC 428, teaching experience, and consent of graduate adviser or instructor.

EDUC 529. Seminar in Science Curriculum, K-6 (3)

Analysis and evaluation of science curriculum in elementary schools, K-6. Prerequisites: EDUC 429, teaching experience, and consent of graduate adviser or the instructor.

EDUC 532. Counseling and Community Resources (4)

Dynamics of relationships of family, community, and school; community-wide services, agency-school relationships; family visiting, including conferences, interviews, referrals. Required for Pupil Personnel Credential. (Formerly 632) Prerequisite: Consent of instructor.

EDUC 533. Case Study and Techniques (4)

Analysis of case studies; techniques and procedures used in case study; presentation of cases with critical analysis. Required for Pupil Personnel Credential. (Formerly 633) Prerequisite: Consent of instructor.

EDUC 535. Pupil Personnel Services Seminar (3)

Current practices in pupil personnel services. Organization and administration of pupil personnel services. Open to practicing personnel. (Formerly 635.) Prerequisite: Consent of instructor.

EDUC 548. Seminar in Secondary Education (3)

An analysis and evaluation of curriculum and instructional policies and practices in the modern secondary school. Prerequisites: EDUC 449, or equivalent, and one of the following: (541 or 542 or 543 or 544) or consent of the instructor.

EDUC 561. School Organization and Administration (3)

Study of organizational concepts and practices in the public schools; legal bases for schools; financial planning and budget systems. Analysis of administrative theory. Prerequisite: Teaching experience and/or consent of the instructor.

EDUC 562. School Supervision (3)

Techniques and practices used in school supervision; selection, placement and evaluation of school personnel; analysis of personnel administration.

EDUC 563. Educational Leadership (3)

Analysis and practices of leadership skills in education; study of the principal in the school; (students will emphasize that phase of the school system appropriate to their professional goals).

EDUC 564. Curriculum Planning and Development (3)

Analysis of models in curriculum development; systematic planning for curriculum improvement; behavioral objectives.

EDUC 575. Seminar: Tests, Measurement and Evaluation (3)

Construction of tests for classroom use, selection and use of standardized tests, statistical measurement in education, evaluation of progress. New statewide testing program. Prerequisites: EDUC 411 and 412, or equivalent.

Education

EDUC 576. Exceptional Children and Youth (4)

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

EDUC 577. Seminar: Counseling and Guidance (3)

Introduction to counseling and guidance; theory and techniques. Prerequisites: EDUC 411, 412, or equivalent, and consent of credential adviser.

EDUC 578. Advanced Counseling (4)

Counseling practices including commonly-used methods of psychotherapy. Practice in techniques of counseling. See PSYC 578. Prerequisite: EDUC 579.

EDUC 579. Counseling Theory (4)

Consideration of the major theories of counseling. Demonstrations, and reviews of current literature. Same as PSYC 379. Prerequisites: PSYC 332 or 432; consent of instructor.

EDUC 580. Legal Aspects of Education (3)

Legal principles related to education as defined by laws and judicial interpretations, with special reference to the *Education Code* of California. Prerequisite: Consent of instructor.

EDUC 581. Educational and Occupational Information (4)

Sources of occupational information; community and nationwide surveys; job analyses; procedures for relating vocational and self-information. Emphasis on meeting needs of school counselors. Prerequisite: Consent of instructor.

EDUC 582. School Finance (3)

Federal, state and local financing of public education; budgeting, accounting, auditing, purchase and management of school supplies. Prerequisite: Consent of instructor.

EDUC 583. School Supervision and Administration Seminar (3)

Case study analysis of practical problems in school administration and supervision. Open to practicing principals, supervisors, and consultants.

EDUC 587. Seminar in New Developments in Education (3)

New developments in elementary and secondary education: philosophical basis, organizational structure, curriculum innovation, instructional materials, methodology, evaluation. Open to practicing teachers, principals, supervisors, and consultants. 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 nine units.

EDUC 599. Thesis or Project (3)

This enrollment involves individual consultation in the preparation of a master's thesis or project. Prerequisite: Approval of student's graduate committee and consent of instructor. May be repeated for a total of six units.

Professional Postgraduate

EDUC 685. Seminar for Supervising Teachers—Elementary (3)

Seminar for regularly credentialed elementary personnel who have demonstrated professional competence and are interested in supervising student teachers of the College. May be repeated for a total of 6 units. Prerequisites: Recommendation from district superintendent's office and consent of the instructor.

EDUC 686. Seminar for Supervising Teachers—Secondary (3)

Seminar for regularly credentialed secondary personnel of proven professional competence interested in preparing for the supervision of student teachers of the College. May be repeated for a total of 6 units. Prerequisites: Recommendation from district superintendent's office and consent of instructor.

EDUC 694. Field Work

Actual work experience in field for which student is seeking credential. Joint supervision by district and college.

School Supervision and Administration (3-6)

Prerequisite: Consent of credential adviser.

Counseling and Pupil Personnel Services (3-6)

Prior or concurrent enrollment in EDUC 535 and consent of credential adviser.

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 Education Department six weeks prior to registration. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

Regular courses not scheduled 1972-73.

(For further information inquire at Department of Education office.)

- EDUC 448. Introduction to Secondary Education (6)**
- EDUC 449. Curriculum Planning in Secondary Schools (4)**
- EDUC 471. Student Teaching in Secondary Schools I (4)**
- EDUC 541. Seminar in Social Studies Curriculum, 7-12 (3)**
- EDUC 542. Seminar in English Language Arts Curriculum, 7-12 (3)**
- EDUC 543. Seminar in Mathematics Curriculum, 7-12 (3)**
- EDUC 544. Seminar in Science Curriculum, 7-12 (3)**
- EDUC 611. Internship Teaching in the Secondary School I (4)**
- EDUC 612. Internship Teaching in the Secondary School II (4)**
- EDUC 613. Internship Teaching in the Secondary School III (4)**
- EDUC 614. Secondary Internship Seminar I (5)**
- EDUC 615. Secondary Internship Seminar II (5)**
- EDUC 616. Secondary Internship Seminar III (5)**
- EDUC 628. Advanced Teaching of Mathematics—Elementary (3)**
- EDUC 641. Internship Teaching in Elementary School I (4 or 6)**
- EDUC 642. Internship Teaching in Elementary School II (4 or 6)**
- EDUC 643. Internship Teaching in Elementary School III (4 or 6)**
- EDUC 644. Internship Teaching in Elementary School IV (4)**

Education

- EDUC 645. Internship Teaching in Elementary School V (4)**
- EDUC 646. Internship Teaching in Elementary School VI (4)**
- EDUC 651. Internship Seminar I—Elementary (2)**
- EDUC 652. Internship Seminar II—Elementary (2)**
- EDUC 653. Internship Seminar III—Elementary (2)**
- EDUC 671. Student Teaching in Secondary Schools I (4)**
- EDUC 672. Student Teaching in Secondary Schools II (4)**
- EDUC 673. Student Teaching in Secondary Schools III (6)**
- EDUC 678. Seminar: Teaching in the Modern Secondary School (3)**

English

Douglas H. Taylor, Ph.D., Associate Professor, Chairman
 Lawrence D. Berkoben, Ph.D., Associate Professor
 Joseph Brewer, Ph.D., Associate Professor
 James P. Jensen, Ph.D., Associate Professor
 Lola V. Johnson, M.A., Associate Professor
 Paul P. Reuben, Ph.D., Associate Professor
 John E. Carroll, Ph.D., Assistant Professor
 Richard Corum, M.A., Assistant Professor
 T. Peter Finley, M.A., Assistant Professor
 Arnold L. Goldman, M.A., Assistant Professor
 George Settera, Jr., Ph.D., Assistant Professor
 Keith A. Tandy, M.A., Assistant Professor
 Jack W. Williams, M.A., Assistant Professor

The Department of English offers the degrees, Bachelor of Arts, and Master of Arts, English. 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 English fulfill college-wide needs regardless of the student's major, they also provide preparation for various professions. Certain subjects are indispensable for a proper grounding in English, but beyond these the student encounters a wide selection of courses in planning a program.

REQUIREMENT 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 48 upper division units.
4. Complete a minor to be selected in consultation with the major adviser *or* complete 28 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 Department, and should be demonstrably relevant to the student's major program.
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, 200. Freshman Composition and Sophomore Composition, 8 units
 ENGL 201; 202 or 204. Introduction to Literature I; II or IV, 8 units

The Major

	<i>Units</i>
ENGL 300. Junior Composition.....	4
Two courses from the following sequence:	
Engl 311, 312, 313, 314. English Literature I-II-III-IV	8

English

Two courses, one in each of the literary periods omitted from the 311, 312, 313, 314 sequence above:

ENGL 408, 410. Medieval Literature and Renaissance Literature	
ENGL 413, 414. Seventeenth Century Literature I-II	
ENGL 315, 316. Eighteenth Century Literature I-II	
ENGL 331, 332. Literature of the Romantic Period I-II	
ENGL 335, 336. Literature of the Victorian Period I-II	8

One course in one of the following sequences as approved by major adviser:

ENGL 405, 406. Chaucer I-II	4
ENGL 416, 417. Milton I-II	

Two courses in the following sequence as approved by major adviser:

ENGL 421, 422, 423. Shakespeare I-II-III	8
ENGL 496. Senior Seminar in English	4

Upper division courses in English as approved by major adviser.....	12
	—
	48

DEGREE MINOR IN ENGLISH

(28 units, to include at least 16 upper division units)

Lower Division

- ENGL 100, 200. Freshman Composition and Sophomore Composition, 8 units
- ENGL 201. Introduction to Literature I, 4 units.

Upper Division

- One of the following courses as approved by minor adviser, 4 units
ENGL 311, 312, 313, 314. English Literature I-IV
- One of the following courses as approved by minor adviser, 4 units
ENGL 421, 422, 423. Shakespeare I-III
- Two courses as approved by minor adviser, 8 units

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 9 units in courses in English as post-baccalaureate work and receive approval of English 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.

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. Each student admitted to the program will be assigned an adviser with whom he will consult in planning his course of study. The 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.
3. Satisfactory performance on Graduate Record Examinations.

Requirements for the Degree

Units

1. Completion of at least 45 units to include the following:
 - A. English 500. Seminar: Graduate Studies in English..... 5
 - B. Minimum of 30 units to be completed from among seminars in the following subject-areas *:
 - English 510. Seminar in English Literature to 1550
 - English 520. Seminar in English Literature 1550-1660
 - English 530. Seminar in English Literature 1660-1800
 - English 540. Seminar in English Literature 1800-1900
 - English 550. Seminar in American Literature
 - English 560. Seminar in Twentieth Century Literature
 - English 570. Seminar in Literary Criticism

No student can apply toward his degree more than ten units completed in graduate courses taken in any single subject-area.
 No student may apply toward his degree more than five units of credit completed in individual study 30
 - C. A minimum of ten units to be chosen from among the following:
 1. Thesis (5)
 2. Upper division courses in English selected in consultation with the student's graduate adviser (10)

10

Total..... 45
- D. Comprehensive examination:
 Candidates must pass a written comprehensive examination covering major figures in English and American Literature.
- E. Reading knowledge of an appropriate foreign language as determined by the Department of English.

Requirements for the Thesis Program:

1. A minimum of 40 units of approved graduate credit.
2. A minimum of 5 units of credit given for an approved thesis.
3. A one-hour oral examination upon the thesis.
4. A three-hour written comprehensive examination.

Requirements for the Non-Thesis Program:

1. A minimum of 45 units of graduate credit.
2. The acceptance by the student's graduate committee of two seminar papers written for courses in two different subject-areas.
3. A four-hour written comprehensive examination, on major figures in English and American literature.
4. A one-hour oral examination covering the subject areas of the candidate's seminar papers and his written examination.

COURSE DESCRIPTIONS

Lower Division

ENGL 100. Freshman Composition (4)

Directed writing based upon analytical reading and study of essays and short fiction.

ENGL 200. Sophomore Composition (4)

Directed writing based upon analytical reading and study of poetry, drama, and fiction.
 Prerequisites: ENGL 100 and sophomore standing.

* Specific seminar titles will be announced in the Quarterly Class Schedules.

English

ENGL 201. Introduction to Literature I (4)

Basic theories, approaches, techniques, and terminology in the study of literature with special emphasis on poetry.

ENGL 202. Introduction to Literature II (4)

A continuation of ENGL 201; special emphasis on fiction. Prerequisites: ENGL 201 or consent of major adviser.

ENGL 203. Introduction to Drama (4)

Basic theories, approaches, techniques, and terminology in the study of drama.

ENGL 204. Literary Backgrounds (Topic to be specified in *Class Schedule*) (4)

A study of classical, mythological, Biblical literature, and other backgrounds to Western literature.

ENGL 205. Technical and Report Writing (4)

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 206. Research and Term Paper Writing (4)

Principles of research and composition of the term paper. Directed writing in various fields. Recommended for students in the behavioral and social sciences. Prerequisite: ENGL 100.

ENGL 207. Journalistic Writing (4)

Principles of journalistic writing. Analytical readings in a selection of journalistic literature. Prerequisite: ENGL 100.

ENGL 215. Perspective in Literature (4)

Readings in various literary masterworks with emphasis upon their contemporary relevance.

ENGL 295. Selected Topics in English (Topics to be specified in *Class Schedule*) (1-5)

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

UPPER DIVISION

ENGL 300. Junior Composition (4)

Advanced expository writing on various subjects to be announced in the quarterly class schedules. Prerequisite: ENGL 200 or equivalent.

ENGL 303. The Modern Short Story (4)

Reading and analysis of modern short stories.

ENGL 304. Creative Writing Workshop (4)

Practice in the methods and techniques of writing poetry, fiction, and other literary forms. Prerequisites: ENGL 201 and 202, or consent of the instructor. May be repeated for a maximum of 12 units.

ENGL 311. English Literature I (4)

Beginnings to Spenser: Beowulf, Chaucer, Spenser, *et al.* Prerequisite: ENGL 201 or equivalent.

ENGL 312. English Literature II (4)

Spenser-1660: Shakespeare, Donne, Milton *et al.* Prerequisite: ENGL 201 or equivalent.

ENGL 313. English Literature III (4)

1660–1800; Dryden, Pope, Swift, Johnson, *et al.* Prerequisite: ENGL 201 or equivalent.

ENGL 314. English Literature IV (4)

1800 to the present: Wordsworth, Tennyson, Arnold, Yeats, *et al.* Prerequisite: ENGL 201 or equivalent.

ENGL 315. Eighteenth Century Literature I (4)

Literature of the Restoration: emphasis on Dryden, Pope, and Swift. Prerequisite: ENGL 201 or equivalent.

ENGL 316. Eighteenth Century Literature II (4)

Literature of the mid and late eighteenth century; emphasis on Johnson, Boswell, Goldsmith, *et al.* Prerequisite: ENGL 201 or equivalent.

ENGL 321. English Novel I (4)

Defoe, Richardson, Fielding, Sterne, and Austen.

ENGL 322. English Novel II (4)

Dickens, Thackeray, George Eliot, Hardy, and Conrad.

ENGL 331. Literature of the Romantic Period I (4)

Coleridge, Wordsworth, and Blake. (Formerly 319) Prerequisite: ENGL 201 or equivalent.

ENGL 332. Literature of the Romantic Period II (4)

Byron, Shelley, and Keats. (Formerly 319) Prerequisite: ENGL 201 or equivalent.

ENGL 335. Literature of the Victorian Period I (4)

Carlyle, Tennyson, Browning, Arnold. (Formerly 320) Prerequisite: ENGL 201 or equivalent.

ENGL 336. Literature of the Victorian Period II (4)

Pre-Raphaelites, Swinburne, *et al.* (Formerly 320) Prerequisite: ENGL 201 or equivalent.

ENGL 344. Early Nineteenth Century American Literature (4)

Hawthorne, Emerson, Thoreau, and Melville. Prerequisite: ENGL 201 or equivalent.

ENGL 345. Late Nineteenth Century American Literature (4)

Whitman, Dickinson, James, and Twain. Prerequisite: ENGL 201 or equivalent.

ENGL 362. History of Drama I (4)

A study of dramatic literature from the beginnings to 1660 with emphasis on Elizabethan and Jacobean drama. (Formerly 420)

ENGL 363. History of Drama II (4)

A study of dramatic literature of the Restoration, eighteenth century, and nineteenth century to Wilde, with some attention to major continental figures.

ENGL 364. History of Drama III (4)

A study of dramatic literature from Oscar Wilde through the present with some attention to major Continental and American dramatists. (Formerly 483)

ENGL 370. Minority Literature (4)

Literature of minority groups: *e.g.*, Black, Jewish, Mexican-American. (Authors to be announced in quarterly class schedules.)

English

ENGL 401. History of the English Language (4)

A study of the English language from its earliest origins to its present form. Prerequisite: ENGL 201 or equivalent.

ENGL 402. Introduction to Linguistics (4)

Modern approaches and methods in the study of language. Prerequisites: ENGL 100 and 200 or equivalent.

ENGL 403. Modern English Grammar (4)

A survey of traditional, structural and transformational theories of grammar as they apply to present day English. Prerequisite: ENGL 200 or equivalent.

ENGL 405. Chaucer I (4)

Troilus and Criseyde and the Minor Poems. Prerequisite: ENGL 201 or equivalent.

ENGL 406. Chaucer II (4)

The Canterbury Tales. Prerequisite: ENGL 201 or equivalent.

ENGL 408. Medieval Literature (4)

Medieval literature, exclusive of Chaucer: Piers Plowman, Sir Gawain and the Green Knight, The Pearl. Prerequisite: ENGL 201 or equivalent.

ENGL 410. Renaissance Literature (4)

Sidney, Spenser, Wyatt, and Surrey. Prerequisite: ENGL 201 or equivalent.

ENGL 413. Seventeenth Century Literature I (4)

Donne, Jonson, Webster, and Herbert. (Formerly 435) Prerequisite: ENGL 201 or equivalent.

ENGL 414. Seventeenth Century Literature II (4)

Marvell, Vaughn, and Burton. (Formerly 413) Prerequisite: ENGL 201 or equivalent.

ENGL 416. Milton I (4)

Minor poetry and prose. Prerequisite: ENGL 201 or equivalent.

ENGL 417. Milton II (4)

Major poetry and selected prose. (Formerly 415 and 435) Prerequisite: ENGL 201 or equivalent.

ENGL 420. Elizabethan and Jacobean Drama (4)

Non-Shakespearean drama. Prerequisite: ENGL 201 or equivalent.

ENGL 421. Shakespeare I (4)

Introduction to plays of various types.

ENGL 422. Shakespeare II (4)

Comedies and histories. (Formerly 421) Prerequisite: ENGL 421 or consent of instructor.

ENGL 423. Shakespeare III (4)

Tragedies and romances. (Formerly 422) Prerequisite: ENGL 421 or consent of instructor.

ENGL 424. History of the Cinema

Study of the cinema and its dynamics and investigation of its impact upon contemporary culture. (Same as DRAM 424) Prerequisite: Consent of instructor.

- ENGL 439. Modern British Literature I (4)**
1900 to 1930; Yeats, Joyce, Lawrence, Forster, *et al.* (Formerly 324)
- ENGL 440. Modern British Literature II (4)**
Since 1930; Huxley, Green, Greene, Waugh, *et al.*
- ENGL 441. Contemporary Literature (4)**
Recent poetry, fiction, and criticism, with emphasis upon works relevant to the current literary and cultural situation.
- ENGL 442. Twentieth Century American Literature (Authors to be specified in Class Schedule) (4)**
Intensified study of selected American authors of the period.
- ENGL 444. American Novel I (4)**
Hawthorne, Melville, Twain, James. (Formerly 341)
- ENGL 445. American Novel II (4)**
Fitzgerald, Hemingway, Faulkner, Steinbeck. (Formerly 342)
- ENGL 447. American Literature to 1800 (4)**
Literature of the colonies and the new nation. Prerequisite: ENGL 201 or equivalent.
- ENGL 450. Literary Interpretation (4)**
Approaches and methods in the study of literature. Prerequisite: ENGL 201 or equivalent.
- ENGL 453. Curriculum and Instruction: English (4)**
Contemporary trends in English education. Curriculum development, selection and organization of materials and procedures for the secondary school. Field observations. Prerequisites: Admission to student teaching and consent of credential adviser. Same as EDUC 453.
- ENGL 480. Early European Literature (4)**
Selected reading in translation from European literature between Petrarch and Zola.
- ENGL 481. Modern European Literature (4)**
Gide, Mann, Kafka, Sartre, Camus.
- ENGL 495. Selected Topics in English (Topics to be specified in Class Schedule) (1-5)**
Development of selected topics in English. May be repeated for credit. Prerequisite: Consent of instructor.
- ENGL 496. Senior Seminar in English (Topic to be specified in Class Schedule) (4)**
Intensified study of a major figure, area, or topic in English. Prerequisite: Senior standing or consent of instructor. (Formerly 494)
- 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 9 units. Prerequisite: Consent of instructor.

English

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. Seminar: Graduate Studies in English (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: English Literature to 1550 (5)

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 10 units.

ENGL 520. Seminar: English Literature 1550–1660 (5)

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 10 units.

ENGL 530. Seminar: English Literature 1660–1800 (5)

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 10 units.

ENGL 540. Seminar: Nineteenth Century English Literature (5)

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 10 units.

ENGL 550. Seminar: American Literature (5)

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 10 units.

ENGL 560. Seminar: Twentieth Century Literature (5)

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 10 units.

ENGL 570. Seminar: Literary Criticism (5)

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 10 units.

ENGL 595. Selected Topics in English (Topics to be specified in *Class Schedule*) (1–5)

Development of selected topics in English. 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 9 units. Prerequisite: Consent of instructor.

ENGL 599. Thesis (3–5)

Ethnic Studies

Algin C. Hurst, M. A., 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 inter-disciplinary 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 Director of Ethnic Studies.

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 (4)
- ETHS 210. Contemporary Chicano Studies (4)
- ETHS 220. Contemporary Asian-American Studies (4)
- ETHS 230. Contemporary Native-American Studies (4)

Category II

A detailed study of the cultural development of ethnic groups in America:

- MUS 231. History of Jazz (4)
Chicano Music (4)
- MUS 341. Music of Black America (4)
- ENGL 370. Minority Literature (4)
The Black Novel (4)
Black Cultural Theatre (4)
Chicano Literature (4)

Category III

A detailed study of the historical development of each minority group in America:

- HIST 371. Mexican-American History (4)
- HIST 373. Afro-American History (4)
- ANTH 335. The American Indian (4)
- ANTH 336. Indians of California and Western North America (4)

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 414. Ethnic Groups and Public Education (3)
- EDUC 422. Teaching the Culturally Different (3)
- PSCI 432. Minority Politics (4)
- SOCL 301. Race and Ethnic Group Relations (4)

Ethnic Studies

Category V

A fifth category of courses is being developed. These courses would synthesize knowledge gained in the preceding courses and introduce research methodology for the study of each ethnic group.

Courses in categories I and V are taught by Ethnic Studies Program faculty while others are offered through appropriate departments.

COURSE DESCRIPTIONS

ETHS 200. Contemporary Black Studies (4)

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 (4)

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 (4)

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 (4)

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".

Foreign Languages

Lowell G. Richardson, Ph.D., Associate Professor, Spanish
 Laura T. Tarquinio, Ph.D., Associate Professor, Spanish
 Robert K. Anderson, B.A., Assistant Professor, Spanish
 Michael C. Fuller, Ph.D., Assistant Professor, French
 Gerhard Mack, Ph.D., Assistant Professor, German
 George H. Yu, Ph.D., Assistant Professor, French

The School of Arts and Humanities offers the Bachelor of Arts, French and the Bachelor of Arts, Spanish, minors in French and Spanish, and a program of courses in German.

The programs in French, German, and Spanish, are designed to prepare students for professions and occupations which require their knowledge or for which this knowledge would be an asset.

Attendance in lower division classes is of special importance, and use of the language laboratory is a requirement for lower division students. Upper division courses are conducted in the language being taught. Two years of college level instruction in the language or its equivalent is required for admission to upper division courses.

A placement test is required for all transfer students. The department may exempt a student from taking from 4 to 24 of the lower division required units if it is determined that the student has received equivalent preparation.

REQUIREMENTS FOR THE BACHELOR OF ARTS, FRENCH and BACHELOR OF ARTS, SPANISH

French and Spanish major 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 36 upper division units.
4. Completion of minor is not required but is strongly recommended for secondary candidates.

DEGREE MAJOR IN FRENCH

Prerequisites to the Major

FREN 101, 102, 103. Elementary French, I-III, 12 units *
 FREN 201, 202, 203. Intermediate French, I-III, 12 units *

The Major

Required course in supporting field.

SPCH 467. Structural Linguistics and Phonology, 4 units

Required courses in major field:

	<i>Units</i>
FREN 301. Advanced French I	4
FREN 302. Advanced French II.....	4
FREN 303. Advanced French III.....	4
FREN 350. History of the Language and French Phonetics.....	4
FREN 425. Classical Literature of the 17th Century.....	4
One course in French literature as approved by major adviser.....	4

* A student who can demonstrate equivalent preparation may be exempt from 4 to 24 units of the lower division requirement. Two years of college level French or the equivalent is required for admission to upper division courses.

Foreign Languages

One course in French civilization as approved by major adviser **	4
Elective courses in the field as approved by major adviser	8
Total	36

DEGREE MINOR IN FRENCH

(40 units, to include at least 16 units in upper division with a minimum of 22 college units)

Lower Division

- FREN 101, 102, 103. Elementary French I-III, 12 units *
 FREN 201, 202, 203. Intermediate French I-III, 12 units *

Upper Division

- FREN 301. Advanced French I, 4 units
 FREN 302. Advanced French II, 4 units
 FREN 350. History of the Language and French Phonetics, 4 units
 Elective course in the field as approved by minor adviser, 4 units

DEGREE MAJOR IN SPANISH

Prerequisites to the Major

- SPAN 101, 102, 103. Elementary Spanish I-III, 12 units *
 SPAN 201, 202, 203. Intermediate Spanish I-III, 12 units *

The Major

	<i>Units</i>
SPAN 301. Advanced Spanish I	4
SPAN 302. Advanced Spanish II	4
SPAN 303. Advanced Spanish III	4
One course in Spanish Literature as approved by major adviser	4
One course in Spanish-American Literature as approved by major adviser	4
SPAN 350. History of the Language and Spanish Phonetics	4
SPAN 360. History and Civilization of Spain **	4
SPAN 361. History and Civilization of Spanish America **	4
Elective course in the field as approved by major adviser	4
Total	36

DEGREE MINOR IN SPANISH

(40 units, to include at least 16 units in upper division with a minimum of 22 college units)

Lower Division

- SPAN 101, 102, 103. Elementary Spanish I-III, 12 units *
 SPAN 201, 202, 203. Intermediate Spanish I-III, 12 units *

Upper Division

- SPAN 301. Advanced Spanish I, 4 units
 SPAN 302. Advanced Spanish II, 4 units
 SPAN 350. History of the Language and Spanish Phonetics, 4 units
 Elective course in the field as approved by minor adviser, 4 units

TEACHING CREDENTIALS †

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

- ** An approved course in the History Department in this subject will fulfill the requirement
 * A student who can demonstrate equivalent preparation may be exempt from 4 to 24 units of the lower division requirement Two years of college level French (for French), two years of college level Spanish (for Spanish) or the equivalent is required for admission to upper division courses.
 † See Education.

Foreign Languages

1. Degree major in the language.
 2. Secondary credential candidates must complete 9 units in courses in the language as postbaccalaureate work and receive approval of foreign languages as to subject matter competence.
 3. Complete requirements for credential as presented by the Education Department.
- Minors in foreign languages seeking elementary and secondary credentials must fulfill the following requirements:
1. Degree minor in the language.
 2. Approval of the minor adviser as to subject matter competence.

COURSE DESCRIPTIONS

FRENCH

Lower Division

FREN 101 Elementary French I (4)

First year French. Audio-lingual approach with emphasis on the spoken language aiming at the development of fluency. Reading and writing as secondary aims. Use of English to be minimized. No Prerequisite.

FREN 102 Elementary French II (4)

Continuation of FREN 101. Prerequisite: FREN 101 or equivalent.

FREN 103 Elementary French III (4)

Continuation of FREN 102. Prerequisite: FREN 102 or equivalent.

FREN 201 Intermediate French I (4)

Second year French, with emphasis on the spoken language. Review of structure patterns, reading and writing. Prerequisite: One year of college level French or its equivalent, or consent of instructor.

FREN 202 Intermediate French II (4)

Continuation of FREN 201. Prerequisite: FREN 201 or its equivalent, or consent of instructor.

FREN 203 Intermediate French III (4)

Continuation of FREN 202. Prerequisite: FREN 202 or its equivalent, or consent of instructor.

FREN 295. Selected Topics in French (Topics to be specified in Class Schedule) (1-5)

Development of a selected topic in French literature. Topics vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

(Classes to be taught in French)

FREN 301 Advanced French I (4)

Oral and written practice of the language, morphological and syntactical analysis of selected works, written compositions, and oral reports. Prerequisite: Two years of college level French or its equivalent, or consent of instructor.

FREN 302 Advanced French II (4)

Continuation of FREN 301. Prerequisite: FREN 301, or its equivalent, or consent of instructor.

FREN 303 Advanced French III (4)

Continuation of FREN 302. Prerequisite: FREN 302, or its equivalent, or consent of instructor.

Foreign Languages

FREN 320 French Literature I (4)

Middle Ages and Renaissance. A survey course including the reading of important works of the periods. (Formerly 341) Prerequisite: Two years of college level French or its equivalent, or consent of instructor.

FREN 321 French Literature II (4)

Seventeenth and eighteenth centuries. A survey course including the reading of important works of the periods. (Formerly 342) Prerequisite: Two years of college level French or its equivalent, or consent of instructor.

FREN 322 French Literature III (4)

Nineteenth and twentieth centuries. A survey course including the reading of important works of the periods. Prerequisite: Two years of college level French or its equivalent, or consent of instructor.

FREN 350 French Phonetics and History of the Language (4)

A study of the phonological, morphological, and syntactical changes of the language with emphasis on the sounds of modern French. (Formerly 468) Prerequisite: Two years of college level French or its equivalent, or consent of instructor.

FREN 360 History and Civilization of France I (4)

A survey course of the cultural development of France from ancient Gaul to the Revolution of 1789. (Formerly 461) Prerequisite: Consent of instructor.

FREN 361 History and Civilization of France II (4)

A survey course of the cultural development of France from the French Revolution of 1789 to the present day. (Formerly 462) Prerequisite: Consent of instructor.

FREN 400 Advanced Conversation (4)

Free conversation on current events and topics of common interest. Prerequisite: Consent of instructor.

FREN 424 Literature of the Middle Ages and the Renaissance (4)

A study of the literature of the Middle Ages and Renaissance. Prerequisite: Two years of college French, or its equivalent, or consent of instructor.

FREN 425 Classical Literature of the 17th Century (4)

A course designed to present the major literary figures and genres of the period. (Formerly 441) Prerequisite: Two years of college French or its equivalent, or consent of instructor.

FREN 426 Eighteenth Century Literature and the Enlightenment (4)

An examination of the principal intellectual and literary aspects of the 18th century. (Formerly 442) Prerequisite: Two years of college French or its equivalent, or consent of instructor.

FREN 427 Nineteenth Century Literature I (4)

A study of the major poetic and dramatic works of the period. (Formerly 421) Prerequisite: Two years of college French or its equivalent, or consent of instructor.

FREN 428 Nineteenth Century Literature II (4)

A study of major novels of the period. (Formerly 422) Prerequisite: Two years of college French or its equivalent, or consent of instructor.

FREN 429 Contemporary Literature I (4)

A study of major poetry and prose of the period. (Formerly 431) Prerequisite: Two years of college French or its equivalent, or consent of instructor.

FREN 430 Contemporary Literature II (4)

A study of major dramatic works of the period. (Formerly 432) Prerequisite: Two years of college French or its equivalent, or consent of instructor.

FREN 495 Selected Topics in French (1-5)

Study of a selected topic. Topics vary each term, thus may be repeated for credit. Prerequisite: Consent of instructor.

FREN 498 Individual Study (1-5)

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

FREN 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.

GERMAN

Lower Division

GERM 101 Elementary German I (4)

First year German. Audio-lingual approach with emphasis on the spoken language aiming at the development of fluency. Reading and writing as secondary aims. Use of English to be minimized. No prerequisite.

GERM 102 Elementary German II (4)

Continuation of GERM 101. Prerequisite: GERM 101 or equivalent.

GERM 103 Elementary German III (4)

Continuation of GERM 102. Prerequisite: GERM 102 or equivalent.

GERM 201 Intermediate German I (4)

Second year German, with emphasis on the spoken language. Review of structure patterns, reading and writing. Prerequisite: One year of college level German or the equivalent, or consent of instructor.

GERM 202 Intermediate German II (4)

Continuation of GERM 201. Prerequisite: GERM 201 or equivalent, or consent of instructor.

GERM 203 Intermediate German III (4)

Continuation of GERM 202. Prerequisite: GERM 202 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 literature. Topics may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

(Classes to be taught in German)

GERM 301 Advanced German I

Oral and written practice of the language, morphological, syntactical analysis of selected works, written compositions, and oral reports. Prerequisite: Two years of college German or its equivalent, or consent of instructor.

GERM 302 Advanced German II (4)

Continuation of GERM 301. Prerequisite: GERM 301, or its equivalent, or consent of instructor.

Foreign Languages

GERM 320 German Literature I (4)

A survey of German Literature from its beginning to the early 19th century. (Formerly 341) Prerequisite: Two years of college German or its equivalent, or consent of instructor.

GERM 321 German Literature II (4)

A survey of German Literature in the 19th and 20th Centuries. (Formerly 342) Prerequisite: Two years of college German or its equivalent, or consent of instructor.

GERM 350 German Phonetics and History of the Language (4)

A study of the phonological, morphological and syntactical changes of the language with emphasis on the sounds of modern German. Prerequisite: Two years of college level German, or its equivalent.

GERM 360 German Civilization (4)

A survey course of the history and civilization of Germany. Prerequisite: Consent of instructor.

GERM 495 Selected Topics in German (Topics to be specified in Class Schedule) (1-5)

Study of a selected topic. Topics vary each term, thus may be repeated for credit. Prerequisite: Consent of instructor.

GERM 498 Individual Study (1-5)

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

SPANISH

Lower Division

SPAN 101 Elementary Spanish I (4)

First year Spanish. Audio-lingual approach with emphasis on the spoken language aiming at the development of fluency. Reading and writing as secondary aim; use of English to be minimized. No prerequisite.

SPAN 102 Elementary Spanish II (4)

Continuation of SPAN 101. Prerequisite: SPAN 101 or its equivalent.

SPAN 103 Elementary Spanish III (4)

Continuation of SPAN 102. Prerequisite: SPAN 102 or its equivalent.

SPAN 201 Intermediate Spanish I (4)

Second year Spanish with emphasis on the spoken language. Review of structure patterns. Reading and writing. Prerequisite: One year of college level Spanish or its equivalent, or consent of instructor.

SPAN 202 Intermediate Spanish II (4)

Continuation of SPAN 201. Prerequisite: SPAN 201 or its equivalent, or consent of instructor.

SPAN 203 Intermediate Spanish III (4)

Continuation of SPAN 202. Prerequisite: SPAN 202 or its equivalent, or consent of instructor.

Foreign Languages

SPAN 295. Selected Topics in Spanish (Topics to be specified in *Class Schedule*) (1-5)

Development of a selected topic in Spanish. Topics may vary each term. May be repeated for credit. Prerequisite: Consent of instructor.

Upper Division

(Classes to be taught in Spanish)

SPAN 301 Advanced Spanish I (4)

Oral and written practice of the language, morphological and syntactical analysis of selected works, written compositions and oral reports. Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 302 Advanced Spanish II (4)

Continuation of 301. (Formerly 311) Prerequisite: SPAN 301 or its equivalent, or consent of instructor.

SPAN 303 Advanced Spanish III (4)

Continuation of SPAN 302. (Formerly 312) Prerequisite: SPAN 302 or its equivalent, or consent of instructor.

SPAN 320 Literature of Spain I (4)

Middle Ages and Golden Age. A survey course including the reading of important works of the periods. (Formerly 341) Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 321 Literature of Spain II (4)

Eighteenth and Nineteenth centuries. A survey course including the reading of important works of the periods. (Formerly 342) Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 322 Literature of Spain III (4)

Twentieth century. A survey course including the reading of important works of the period. Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 330 Literature of Spanish America I (4)

Colonial time to pre-modernismo. (Formerly 343) Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 331 Literature of Spanish America II (4)

Modernismo. A survey course including the reading of important works of the period with emphasis on the poetry of R ben Dar o. (Formerly 344) Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 332 Literature of Spanish America III (4)

Prose and poetry of the twentieth century. A survey course including the reading of important works of the period. Prerequisite: Two years of college Spanish or its equivalent, or consent of instructor.

SPAN 350 Spanish Phonetics and History of the Language (4)

A study of the phonological, morphological, and syntactical changes of the language with emphasis on the sounds of modern Spanish. (Formerly 468) Prerequisite: Two years of college level Spanish, or its equivalent, or consent of instructor.

SPAN 360 History and Civilization of Spain (4)

A brief survey course of the history of Spain, its culture and civilization.

Foreign Languages

SPAN 361 History and Civilization of Spanish America (4)

A survey course of the history and civilization of Spanish America. (Formerly 461)
Prerequisite: Consent of instructor.

SPAN 400 Advanced Conversation (4)

A course designed for students who have completed at least three years of college Spanish or its equivalent and who are fluent in the language. Class work will include discussion of current events and of topics of common interest as well as talks by students. No written work. No exam. Prerequisite: Fluency in the language.

SPAN 420 El Teatro en Espana (4)

A study of Spanish theatre from early times to the present, including reading of selected plays. Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 423 La literatura picaresca (4)

A study of the development of the picaresque literature in Spain, including the reading of selected works. Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 424 Cervantes (4)

A study of the works of Cervantes including *Don Quijote*. Prerequisite: Two years of college Spanish, or consent of instructor.

SPAN 460 Literatura Mexicana (4)

A study of the literary production of Mexico from colonial times to the present. (Formerly 421) Prerequisite: Two years of college level Spanish or its equivalent, or consent of instructor.

SPAN 495 Selected Topics in Spanish (Topics to be specified in Class Schedule) (1-5)

Study of a selected topic. Topics vary each term, thus 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.

Graduate

SPAN 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.

Geography

Joel Canby, Ph.D., Professor, Chairman
Department of Anthropology/Geography/Sociology
Melvin H. Aamodt, Ph.D., Associate Professor
Ira L. Fogel, M.A., Assistant Professor
Leon S. Pitman, M.A., Assistant Professor

Geography is the study of spatial distributions and space relationships on the earth's surface. It is concerned with the interrelationships between the environmental characteristics of the earth and man's perception and use of them.

The Department of Anthropology/Geography/Sociology offers courses in geography as an area of concentration for the major in the social sciences. 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

TEACHING CREDENTIALS

Major in social sciences for elementary and secondary credentials, see Social Sciences.

COURSE DESCRIPTIONS

Lower Division

GEOG 201. Principles of Physical Geography (4)

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.

GEOG 202. Principles of Cultural Geography (4)

Study of the cultural elements of geography, including the major culture regions—their areas, population, land-use and the like, and their correlation with the physical elements.

GEOG 240. World Regional Geography I (4)

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.

GEOG 241. World Regional Geography II (4)

A survey of the major culture regions of the New World including North America, South America, and the Pacific, with emphasis on environment and contemporary economic and cultural conditions.

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.

Geography

Upper Division

SYSTEMATIC HUMAN GEOGRAPHY

GEOG 330. Economic Geography (4)

Study of location, extraction, production, consumption, and exchange of raw materials, manufactured products and services; development, form and function of economic regions.

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.

GEOG 402. Human Ecology (4)

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.

GEOG 430. Geography of Resource Planning (4)

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 (4)

The elements and controls of weather and climate, and an analysis of the various climatic regions.

GEOG 311. Vegetation and Soils (4)

A survey of world soil and vegetation patterns and the processes of their formation; man's impact on world soils and vegetation. Prerequisite: GEOG 201, or consent of instructor.

REGIONAL GEOGRAPHY

GEOG 351. Geography of North America (4)

Spatial pattern, analysis and relations of environments in North America with emphasis on their evolution, influences of human-natural environmental factors, problems of regional inequalities. Prerequisite: Any 200 level geography course or consent of instructor.

GEOG 352. Geography of Latin America (4)

A topical and regional analysis of the physical, economic, and cultural characteristics of Mexico, Central and South America. Prerequisite: Any 200 level geography course or consent of instructor.

GEOG 355. Geography of Europe (4)

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 (4)

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 451. Geography of California (4)

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 or 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; the application of cartographic portrayal in aerial photo analysis. Prerequisite: Two geography courses or consent of instructor.

GEOG 471. Field Studies (4)

Methods of field observation; techniques of data collection and analysis; investigations of rural and urban land use in the San Joaquin Valley. Prerequisite: Eight units in geography.

GEOG 480. Survey of Geographic Thought and Literature (4)

A pro-seminar designed to give majors and minors an awareness 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: Eight upper division units in geography (may be concurrent).

GEOG 484. Geography and the Earth Sciences for Teachers (4)

For in-service teachers and teacher trainees who are or will be teaching geographic and earth science concepts at the elementary, high school, or college level; a survey of the concepts, tools, and methods of modern geography and related earth science. Prerequisite: Eight units in geography.

GEOG 495. Selected Topics in Geography (Topic to be specified in the *Class Schedule*) (1-5)

Topics vary each term, thus may be repeated for credit. 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 9 units. Prerequisite: Consent of instructor.

History

Curtis R. Grant, Ph.D., Associate Professor, Chairman
John E. Caswell, Ph.D., Professor
John P. Rasmussen, Ph.D., Professor
J. W. Smurr, Ph.D., Professor
David Bentheim Stenzel, Ph.D., Professor
Britten Dean, Ph.D., Associate Professor
Franklin B. Holder, Ph.D., Associate Professor
Phebe Ann Marr, Ph.D., Associate Professor
Austin Metumara Ahanotu, Ph.D., Assistant Professor
Samuel A. Oppenheim, M.A., Assistant Professor
Robert R. Smith, Ph.D., Assistant Professor
Ronald Jay VanderMolen, 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 40 upper division units.
4. Complete 36 units of course work in addition to the General Education requirements upon advisement from liberal arts fields outside of history, which support their major program. (For students completing a minor in Business Administration or in Physical Education this requirement is lowered to 24 units).

NOTE. Two years of college level foreign language are *recommended* for history majors.*

DEGREE MAJOR IN HISTORY

Prerequisites to the Major

Required courses in the major field:

HIST 101, 102, 103. Western Civilization I-III, 12 units

At least one course in non-Western history, either upper or lower division, 4 units

The Major

Completion of courses in each of the following groups as approved by major adviser:

Group One (Two courses required)

HIST 361. Colonial America

HIST 362. Ante-Bellum America

HIST 363. America After Civil War

Units

* A foreign language requirement is planned for the proposed honors program in History, see the Department of History for details.

HIST 364.	Contemporary America	
HIST 368.	Westward Movement	
HIST 470.	American Diplomatic History	
HIST 474.	American Constitutional History	
HIST 478.	American Intellectual and Social History I	
HIST 479.	American Intellectual and Social History II	8
Group Two (Two courses required)		
HIST 311.	Hellenic Civilization I	
HIST 312.	Hellenic Civilization II	
HIST 314.	Medieval Europe I	
HIST 315.	Medieval Europe II	
HIST 321.	Europe from 1500 to 1648	
HIST 322.	Europe from 1648 to 1799	
HIST 323.	Nineteenth Century Europe	
HIST 324.	Twentieth Century Europe	8
Group Three (Two courses required)		
HIST 351.	Colonial Latin America	
HIST 352.	Latin America Since Independence	
HIST 380.	East Asia in Traditional Times	
HIST 381.	East Asia in Modern World	
HIST 386.	Africa Before 1800	
HIST 387.	Africa Since 1800	
HIST 388.	Contemporary Africa	
HIST 390.	Islamic Middle East	
HIST 391.	Middle East to 1914	
HIST 392.	Contemporary Middle East	
HIST 403.	Age of Exploration	
HIST 404.	Rise of European Colonial Systems 1800-1914	
HIST 405.	Fall of European Colonial Systems 1914-1965	8
Completion of the following:		
HIST 499.	Senior Thesis	4
	Electives on advisement	12
		<hr/>
	Total	40

DEGREE MINOR IN HISTORY

(24 units, to include at least 16 units in upper division)

The courses for the degree minor in history are selected in consultation with and approved by the minor adviser.

TEACHING CREDENTIALS

Major in history for elementary and secondary credentials must fulfill the following requirements:

1. Degree major in history.
2. Secondary credential candidate must complete 9 units in courses in history as postbaccalaureate work and receive approval of History Department as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

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. The student may elect either the Thesis Plan (A) or the Colloquia Plan (B) described below.

History

Prerequisites for Admission to the Program

1. Thirty-six quarter units of upper division history to include HIST 499 Senior Thesis, or equivalent.
2. A grade point average of 3.0 in the undergraduate major.
3. Satisfactory performance in the Graduate Record Examinations, both general aptitude and history.
4. Reading knowledge of an appropriate foreign language as determined by the Department of History.

Requirements for the Degree

I. Completion of at least 45 units to include the following:

	<i>Units</i>
Option A. Thesis Plan	
HIST 593. The History of Historical Writing	5
HIST 599. Thesis	3-9
Electives selected from the following upon advisement (to include at least one seminar and one colloquium):	
HIST 523. Colloquium in Modern European History	
HIST 524. Seminar in Modern European History	
HIST 563. Colloquium in American History	
HIST 564. Seminar in American History	
HIST 598. Individual Study	4-9

Minimum required in 500 level courses 23

Additional electives selected from courses listed under II below to complete at least 45 units for the degree.

Approval of the thesis and recommendation for the degree by the candidate's committee.

Option B. Colloquia or Seminar Plan

1. Colloquia Plan

HIST 593. The History of Historical Writing	5
At least one seminar	5
At least three colloquia	15

Minimum required in 500 level courses 25

2. Seminar Plan

HIST 593. The History of Historical Writing	5
At least one colloquium	5
At least three seminars, two of which focus on a general theme or period approved by the candidate's committee	15

Minimum required in 500 level courses 25

Satisfactory performance on a *written comprehensive examination in the candidate's chosen field*, i.e. American History or European History, with emphasis on a theme or period approved by his committee. The candidate's committee evaluates the examination.

Recommendation for the degree by the candidate's committee.

II. Additional electives selected from the following upon advisement:

- HIST 403. Age of Exploration, 4 units
- HIST 404. Rise of European Colonial Systems 1800-1914, 4 units
- HIST 405. Fall of European Colonial Systems 1914-1965, 4 units
- HIST 406. Science, Technology and Society Since 1700, 4 units
- HIST 408. Introduction to Comparative Civilization I, 4 units
- HIST 409. Introduction to Comparative Civilization II, 4 units
- HIST 420. Modern Spain, 4 units

- HIST 435. Modern France, 4 units
- HIST 440. Modern Germany, 4 units
- HIST 442. Imperial Russia, 4 units
- HIST 443. Soviet Russia, 4 units
- HIST 466. Modern Britain, 4 units
- HIST 450. History of Mexico, 4 units
- HIST 452. Social Change in Contemporary Latin America, 4 units
- HIST 460. Islamic Culture and Institutions, 4 units
- HIST 462. Ideology and Social Change in the Modern Middle East
- HIST 470. American Diplomatic History, 4 units
- HIST 474. American Constitutional History, 4 units
- HIST 476. American Religious History, 4 units
- HIST 478. American Intellectual and Social History I, 4 units
- HIST 479. American Intellectual and Social History II, 4 units
- HIST 480. Modern China, 4 units
- HIST 484. Modern Japan, 4 units
- HIST 486. North Africa, 4 units
- HIST 487. West Africa, 4 units
- HIST 488. East Africa, 4 units
- HIST 489. South Africa, 4 units
- HIST 523. Colloquium in Modern European History, 5 units
- HIST 524. Seminar in Modern European History, 5 units
- HIST 563. Colloquium in American History, 5 units
- HIST 564. Seminar in American History, 5 units
- HIST 598. Individual Study, 3-5 units

Units

Additional Electives 20-25

III. Additional Requirements

Satisfactory completion of an oral examination covering course work undertaken in the M.A. program.

Of the 45 units required for the degree, at least 36 shall be in residence. At least 23 of these units in residence must 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 quarter, departmental review of the candidate's eligibility is mandatory. Withdrawal of candidacy may result.

COURSE DESCRIPTIONS

Lower Division

HIST 101. Western Civilization I (4)

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. Intellectual, political, and social history from early civilizations to 800 A.D.

HIST 102. Western Civilization II (4)

Continuation of HIST 101; from Charlemagne to the Enlightenment. Prerequisite: Consent of instructor.

HIST 103. Western Civilization III (4)

Continuation of HIST 102; the modern world since the Enlightenment. Meets General Education requirement in U.S. History. Prerequisite: Consent of instructor.

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.

History

Upper Division

HIST 308. Modern World History 1850–1945 (4)

Integrated global history and discussion of selected problems of global significance during the period. Prerequisites: HIST 103 and sophomore standing.

HIST 309. Modern World History Since 1945 (4)

Integrated global history and discussion of selected problems of global significance during the period. Prerequisite: HIST 103 and sophomore standing.

HIST 310. Ancient Near East (4)

The ancient civilizations of Mesopotamia, Egypt, Anatolia, Syria, Iran, and the Aegean. Prerequisite: HIST 101 or equivalent.

HIST 311. Hellenic Civilization I (4)

Greek leadership from the Dorians to the debacle of the second century B.C. Prerequisite: HIST 101, 102, 103 or equivalent.

HIST 312. Hellenic Civilization II (4)

Roman leadership, from the Republic to the collapse of the Empire in the 5th Century A.D. Prerequisite: HIST 311 or consent of instructor.

HIST 314. Medieval Europe I (4)

Western Europe from the fading of Roman rule to 1100. Prerequisites: Sophomore standing and HIST 101, 102 and 103 or equivalent.

HIST 315. Medieval Europe II (4)

Western Europe from 1100 to 1500. Prerequisites: Sophomore standing and HIST 101, 102, and 103 or equivalent. HIST 314 should precede HIST 315 when possible.

321. Europe From 1500 to 1648 (4)

The Renaissance in Italy and Northern Europe; the spread of Reformation ideals; the politics of Absolutism. Prerequisites: Sophomore standing and HIST 101, 102, 103 or equivalent.

HIST 322. Europe From 1648–1815 (4)

Politics of the Old Regime; Enlightenment ideology; the French Revolution; Napoleonic wars and Congress of Vienna. Prerequisites: Sophomore standing and HIST 101, 102, 103 or equivalent.

HIST 323. Nineteenth Century Europe (4)

Democratization in the age of nationalism; Napoleon to Sarajevo. Prerequisites: Sophomore standing and HIST 101, 102 and 103, or equivalent.

HIST 324. Twentieth Century Europe (4)

Prerequisites: HIST 103 and sophomore standing or consent of instructor.

HIST 351. Colonial Latin America (4)

From the eve of European conquest to the end of colonial control by Spain and Portugal. (Formerly 251) Prerequisite: one year of college level history.

HIST 352. Latin American States Since Independence (4)

From the struggle for independence to the mid-twentieth century. (Formerly 252) Prerequisite: One year of college level history.

HIST 356. History of Twentieth Century Cuba (4)

A history of modern Cuba from 1898 to the present. Emphasis on the pattern of politics, Cuba's relations with the United States, and the changes resulting from the Castro Revolution. Prerequisite: Junior standing.

HIST 361. Colonial America (4)

America 1492-1789. Age of Exploration through the American Revolution, Articles of Confederation, and the ratification of the federal Constitution; emergence of distinctively American social, political, and economic institutions; problems of nationalism. Prerequisite: Sophomore standing.

HIST 362. Ante-Bellum America (4)

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. Meets General Education requirement in U.S. history. Prerequisite: Sophomore standing.

HIST 363. America After Civil War (4)

United States, 1865-1914. Reconstruction through Progressivism; development of a complex urban-industrial society; coming of world power. Meets General Education requirement in U.S. history. Prerequisite: Sophomore standing.

HIST 364. Contemporary America (4)

United States since 1914. World War I to present: America's role as a great power; problems of welfare capitalism. Meets General Education requirement in U.S. History. Prerequisite: Sophomore standing.

HIST 367. California History (4)

Spanish exploration and settlement, environment, political, economic and social developments which give California its unique character. Prerequisites: Sophomore standing and one year of college level history.

HIST 368. Westward Movement (4)

Frontier and its influence on American institutions and character since Jamestown. Evaluation of the Turner thesis. Prerequisites: Sophomore standing and one year of college level history.

HIST 371. Mexican-American History (4)

The role of the Mexican-American in the 19th and 20th centuries with emphasis on the modern period. Prerequisites: Junior standing and a course in Latin American or U.S. history or consent of instructor.

HIST 373. Afro-American History (4)

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. Prerequisites: Junior standing; one course in American history.

HIST 380. East Asia in Traditional Times (4)

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: One year of college level history.

HIST 381. East Asia in the Modern World (4)

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: One year of college level history.

HIST 386. Africa Before 1800 (4)

Characteristic features of African civilizations from the earliest times to 1800. (Formerly 286) Prerequisite: One year of college level history.

History

HIST 387. Africa Since 1800 (4)

Historical foundations of modern African states. (Formerly 287) Prerequisite: One year of college level history.

HIST 388. Contemporary Africa (4)

Development of Pan-African ideology and the quest for political and economic stability in contemporary Africa. (Formerly 386) Prerequisite: Sophomore standing.

HIST 389. East Asian Intellectual History (4)

Historical survey of the major works of Chinese and Japanese thought. Prerequisites: Sophomore standing and HIST 380 and 381.

HIST 390. Islamic Middle East (4)

The Islamic Middle East from the rise of Muhammad to the 15th century. Establishment of Islam, its political and social institutions, rise of medieval empires, impact of the Crusades, Islamic Society on eve of Western expansion. Prerequisite: One year of college level history.

HIST 391. Middle East to 1914 (4)

The Middle East from the 15th century to World War I. The development and decline of Ottoman and Safavid Empires. The encroachment of Western powers, emergence of national movements. Arab nationalism and Zionism; origins of present conflicts. Prerequisite: One year of college level history.

HIST 392. Contemporary Middle East (4)

The Middle East from World War I to present. Results of Colonial rule, establishment of independent states, Arab-Israeli problem, impact of oil and rise of radical socialist regimes. Prerequisite: One year of college level history.

HIST 403. Age of Exploration. (4)

Exploration since Henry the Navigator; search for gold and spices. Establishment of trading factories and mercantilist colonies in Asia and Africa. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 404. Rise of European Colonial Systems 1800-1914 (4)

New colonialism of the nineteenth century in Asia and Africa. Prerequisites: Junior standing and one year of college level history.

HIST 405. Fall of European Colonial Systems 1914-1965 (4)

The collapse of colonialism in the twentieth century. Prerequisites: Junior standing and one year of college level history.

HIST 406. Science, Technology and Society Since 1700 (4)

Growth of science and technology, and their influences on modern thought and life. Prerequisites: Junior standing and HIST 101, 102, and 103 or equivalent.

HIST 408. Introduction to Comparative Civilization I (4)

The art and science of determining the basic patterns of man's career by comparing the great societies. Fundamental instruction in the methods of Toynbee and his successors. Prerequisites: Advanced training in literature or history or social science or philosophy, and consent of instructor.

HIST 409. Introduction to Comparative Civilization II (4)

Individual student investigations using techniques acquired in HIST 408. Prerequisite: HIST 408.

HIST 420. Modern Spain (4)

Spanish political, economic, and cultural life from 1492 to World War II. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 435. Modern France (4)

Development of the French nation, with emphasis on period since 1870. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 440. Modern Germany (4)

Germany since 1648. Prerequisites: Junior standing and HIST 103 or consent of instructor.

HIST 442. Imperial Russia (4)

Russia from the development of Czarist autocracy to the revolution of 1917. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 443. Soviet Russia (4)

Russia from the revolution of 1917 to the present. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 446. Modern Britain (4)

Political, social, and intellectual development from the Tudor era to mid-twentieth century. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 450. History of Mexico (4)

From independence to the mid-twentieth century. Prerequisite: Junior standing.

HIST 452. Social Change in Contemporary Latin America (4)

Major developmental changes during the twentieth century. Intensive readings and research projects. Prerequisites: Junior standing and HIST 351 and 352 or consent of instructor.

HIST 460. Islamic Culture and Institutions (4)

Intellectual and social history of Islam. Emphasis on development of Islamic institutions, thought, and way of life to 16th century; Islam in Africa, India, and Asia. Modern attempts to reform Islam. Writings of Islamic authors will be read in translation. Prerequisite: One course in Middle Eastern history or consent of instructor.

HIST 462. Ideology and Social Change in the Modern Middle East (4)

Examination of major social and intellectual currents in the 19th and 20th century Middle East. Emphasis on impact of European ideas, changing social and economic structure, shift from liberalism to radical reform nationalism. Prerequisite: One course in Middle Eastern history or consent of instructor. (To be given alternate years.)

HIST 470. American Diplomatic History (4)

U.S. foreign relations from colonial period to present. Prerequisites: Junior standing and one year of college level history to include a course in American history.

HIST 474. Constitutional History of the United States (4)

The theory of limited government, and how the American people have applied it. Prerequisites: Junior standing and one year of college level history to include two courses in United States history.

HIST 476. American Religious History (4)

History of American religious institutions and thought from colonial origins to present; importance of European backgrounds and American environment in producing a unique American religious tradition; impact of religion upon American social and cultural development. Prerequisites: Junior standing and two courses in American history.

History

HIST 478. American Intellectual and Social History I (4)

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. Prerequisites: Junior standing and one year of college level history to include the first half of American History.

HIST 479. American Intellectual and Social History II (4)

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. Prerequisites: Junior standing and one year of college level history to include the second half of American history.

HIST 480. Modern China (4)

Development of China; emphasis on the period 1839 to present. Prerequisites: Junior standing and HIST 380 and 381, or consent of instructor.

HIST 484. Modern Japan (4)

Development of Japan; emphasis on the period 1853 to present. Prerequisites: Junior standing and HIST 380 and 381, or consent of instructor.

HIST 486. North Africa (4)

Morocco, Algeria, Tunisia and Libya during the 19th and 20th centuries. Colonial rule, independence movements, and the political and social structures of the states which evolved. Prerequisite: Junior standing.

HIST 487. West Africa from 1000 A.D. to the Present (4)

Formation and expansion of early states and the interaction between religion and society. Cultural and political impact of the trans-Saharan and Atlantic trade, decline of colonial power and the problems of organizing the new states, (Nigeria, Ivory Coast, Ghana, Senegal, etc.). Prerequisite: Junior standing.

HIST 488. East Africa from 1000 A.D. to the Present (4)

Historical evolution of Uganda, Kenya, and Tanzania with emphasis on Swahili civilization, control of long-distance trade, resistance to colonial rule, and attempts to create national institutions. Prerequisite: Junior standing.

HIST 489. South Africa from 1400 to the Present (4)

Political, economic, and social history since the 15th century; historical background of race relations in Zambia, Botswana, the Republic of South Africa, and the non-independent states of South Africa. Prerequisite: Junior standing.

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 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.

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.

Graduate

HIST 523. Colloquium in Modern European History (Topics to be specified in *Class Schedule*) (5)

Directed reading in the literature of the field. Prerequisites: Advanced course work in European history and consent of instructor.

HIST 524. Seminar in Modern European History (5)

Intensive original research in the source material of modern European history. Prerequisites: Advanced course work in European history to include HIST 324 and HIST 499, or equivalent, and consent of instructor.

HIST 563. Colloquium in American History (Topics to be specified in *Class Schedule*) (5)

Directed reading in the literature of the field. Prerequisites: Advanced course work in American history and consent of instructor.

HIST 564. Seminar in American History (Topics to be specified in *Class Schedule*) (5)

Intensive original research in the source material of American History. Prerequisites: Advanced course work in American history to include HIST 361 or 362 or 363 or 364 or equivalent, and consent of instructor.

HIST 593. The History of Historical Writing (5)

The problem of reproducing the past, as seen through the eyes of leading practitioners and critics from earliest times to the present. Prerequisite: Advanced course work in history.

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 (3-9)

Thesis research. Prerequisite: Consent of instructor.

Mathematics

Narendra L. Maria, Ph.D., Professor, Chairman
 James N. Javaher, Doctorat d'Universite, Professor
 Louis A. Feldman, Ph.D., Associate Professor
 Edward L. Pugh, Ph.D., Associate Professor
 Chester W. Dyche, M.A., Associate Professor
 Michael J. Berg, Ph.D., Assistant Professor
 Shang-Wang Chang, Ph.D., Assistant Professor
 Leonard P. D'Amato, Ph.D., Assistant Professor
 Gary B. Green, Ph.D., Assistant Professor
 Ralph L. James, Ph.D., Assistant Professor
 James L. Southam, Ph.D., Assistant Professor

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 ($\frac{1}{2}$ 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 two years of French, German, or Russian, and 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 36 upper division units as specified for a Bachelor of Science Degree or 40 units as specified for a Bachelor of Arts Degree.
- Completion of a minor is not required.

DEGREE MAJOR FOR THE BACHELOR OF ARTS, MATHEMATICS

Prerequisites to the Major

MATH 131, 132, 133. Calculus With Analytic Geometry I-II-III, 12 units
 MATH 231, 232. Linear Algebra and Multivariate Calculus I-II, 8 units

The Major

	<i>Units</i>
MATH 301, 302. Foundations of Mathematics I-II	
OR	
MATH 411, 412. Analysis I-II	8
MATH 320. Advanced Calculus.....	4
MATH 321. Ordinary Differential Equations I.....	4
MATH 351, 352. Algebra I-II.....	8
Upper division courses in mathematics as approved by the major adviser.....	16
Total.....	40

DEGREE MAJOR FOR THE BACHELOR OF SCIENCE, MATHEMATICS

Prerequisites to the Major

- MATH 131, 132, 133. Calculus With Analytic Geometry I-II-III, 12 units
- MATH 200. Introduction to Computers, 4 units
- MATH 201. Computer Programming, 3 units
- MATH 231, 232. Linear Algebra and Multivariate Calculus I-II, 8 units

The Major

Units

Two of the following year sequences of courses as approved by the major adviser.

MATH 321, 322, 323. Ordinary Differential Equations I-II and Partial Differential Equations

MATH 361, 362, 363. Probability, Inferential Statistics, Decision Theory

MATH 431, 432, 433. Numerical Analysis I-II-III

MATH 441, 442, 443. Introduction to Linear Programming, Operations Research I-II 24

Upper division courses in mathematics as approved by the major adviser..... 12

Total..... 36

DEGREE MINOR IN MATHEMATICS

(28 units including at least 16 units in upper division)

MATH 131, 132, 133. Calculus With Analytic Geometry I-II-III

OR

MATH 391, 392, 393. Survey of Algebra, Analysis, and Their Applications I-II-III, 12 units

Additional upper division courses as approved by the minor adviser, 16 units.

TEACHING CREDENTIALS

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

1. Degree major in mathematics.
2. Complete MATH 303.
3. Secondary credential candidates must complete 9 units in courses in mathematics as postbaccalaureate work and receive the approval of the Department of Mathematics as to the subject matter competence.
4. Complete requirements for the credential as presented by the Education Department.

COURSE DESCRIPTIONS *

Lower Division

MATH 100. Math for Liberal Arts Students (5)

Sets and relations, natural numbers, arithmetic operations on the set of natural numbers, integers, rational numbers, real numbers, non-metric geometry, introduction to metric geometry. Recommended for general students and those seeking an elementary teaching credential. Not open to students who have had MATH 131 or the equivalent or MATH 150 or the equivalent. Credit not applicable to the major or minor in mathematics.

MATH 102. Mathematics in Human Affairs (4)

Social functions of mathematics; the origins of the various branches of mathematics in problems of human affairs; the development of mathematics as an independent entity; influences of mathematical thinking in the development of the behavioral, biological, decision, natural, and social sciences; effects of mathematics on the course of human affairs.

Prerequisite: Consent of the instructor.

* Students must earn a grade of C or better in all mathematics courses listed as prerequisites. Courses in which grades of less than C are earned will not be accepted toward the major or minor in mathematics.

Mathematics

MATH 105. Intermediate Algebra (4)

Exponents, fractions, radicals, linear and quadratic equations; arithmetic, geometric and harmonic series; functions and their graphs, permutations and combinations, binomial theorem. Not open to students who have had MATH 110 or equivalent. Credit not applicable to major or minor in mathematics. Prerequisite: One year of high school algebra or MATH 100.

MATH 110. College Algebra and Trigonometry (4)

Inequalities, theory of equations, determinants, trigonometric functions, solution of triangles, linear transformations and matrices, applications to practical problems. Recommended for students of applied sciences. Credit not applicable to major or minor in mathematics. Prerequisite: Two years of high school algebra or MATH 105.

MATH 131. Calculus With Analytic Geometry I (4)

Inequalities, sets and functions, coordinate systems, the line, limit and continuity, differentiation of algebraic functions. Prerequisites: Two years of high school algebra, one year of plane geometry, and one-half year of plane trigonometry, or MATH 110.

MATH 132. Calculus With Analytic Geometry II (4)

Applications of differentiation, the differential, the definite integral, analytic geometry and conic sections, trigonometric and exponential functions, parametric equations and arc length. Prerequisite: MATH 131.

MATH 133. Calculus With Analytic Geometry III (4)

Polar coordinates, formulas and methods of integration, applications of the integral, infinite series. Prerequisite: MATH 132.

MATH 150. Finite Mathematics (4)

Fundamental principle of truth, laws of deductive logic, tree diagrams, algebra of sets, permutations, ordered partitions and counting, probability, conditional probability, finite stochastic processes. (Formerly 210) Prerequisite: One year of high school algebra or MATH 100 or consent of the instructor.

MATH 160. Statistics (5)

Introductory course designed for students in the behavioral, decision, 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, 4 hours; laboratory, 2 hours). Prerequisite: One year of high school algebra.

MATH 200. Introduction to Computers (4)

A detailed study of programming digital computers using the FORTRAN language. Includes analysis of problems, development of algorithms and flowcharts, FORTRAN coding, running and testing of programs. (Lecture, 3 hours; laboratory, 2 hours). Prerequisite: MATH 105 or two years of high school algebra.

MATH 201. Computer Programming (3)

A continuation of Math 200 with emphasis on more sophisticated applications of FORTRAN and use of the capabilities of the computer. Laboratory projects will involve the student's area of interest when possible. (Lecture, 2 hours; Laboratory, 2 hours). Prerequisite: MATH 200 or equivalent.

MATH 231. Linear Algebra and Multivariate Calculus I (4)

Solid analytic geometry, vectors in three dimensions, partial differentiation, line integral, Lagrange multipliers, multiple integration. Prerequisite: MATH 133.

MATH 232. Linear Algebra and Multivariate Calculus II (4)

Matrices and determinants, vector spaces, inner product spaces, implicit function theorem, transformations. Prerequisite: MATH 231.

MATH 295. Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5)

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

Upper Division**MATH 300. History of Mathematics (4)**

Origin and development of mathematical ideas from early civilization to the present time. Prerequisite: Consent of instructor.

MATH 301. Foundations of Mathematics I (4)

Early attempts to axiomatize set theory and the naive axioms; the Russel paradox, modern set theory, general theory of functions and relations, the cardinal numbers, introduction to the ordinal numbers. Recommended for elementary and junior high school teachers seeking an advanced course in mathematics. Prerequisites: PHIL 110 or consent of instructor.

MATH 302. Foundations of Mathematics II (4)

Derivation of the positive integers from the Peano axioms, the existence of zero and negative integers, real numbers as the completion of the rational numbers, uniqueness of the real numbers as a complete Archimedean ordered field, continuum hypothesis from Cantor to Cohen, complex numbers and their properties as a field. Recommended for secondary credential candidates. Prerequisite: MATH 301.

MATH 303. Foundations of Mathematics III (4)

The incidence axioms, the theory of distance and its connection with the incidence axioms, the separation axioms, congruence of triangles, Euclid's Fifth Postulate and the general Euclidean geometry, related non-Euclidean geometries. Recommended for secondary credential candidates. Prerequisite: MATH 302.

MATH 320. Advanced Calculus (4)

Uniform convergence, functions defined by integrals, improper integrals, vector field theory, theorems of Green and Stokes. Prerequisite: MATH 232.

MATH 321. Ordinary Differential Equations I (4)

Exact equations, linear equations, Laplace transforms and operational methods for linear equations, linear systems, initial value problems, existence and uniqueness of solutions. Picard's method of successive approximations, series solutions, Legendre equations and polynomials, linear equations with regular singular points. Bessel's equation and functions. Prerequisite: MATH 232 or consent of instructor.

MATH 322. Ordinary Differential Equations II (4)

Continuation of MATH 321. Prerequisite: MATH 321.

MATH 323. Partial Differential Equations (4)

Introduction to partial differential equations. Boundary value problems for elliptic and parabolic equations. Initial value problems for hyperbolic equations. Prerequisite: MATH 321.

MATH 351. Algebra I (4)

Sets, equivalence relations, rings, integral domains, mathematical induction, fields, field of quotients, unique factorization for integers and polynomials, real and complex numbers, groups, homomorphisms, subgroups, cosets, factor groups, vector spaces, linear transformations, matrices, null space, rank, linear equations, dual vector spaces, determinants, charac-

Mathematics

teristic values, similarity, canonical forms, unitary spaces, quadratic forms. Prerequisite: Consent of instructor.

MATH 352. Algebra II (4)

Continuation of MATH 351. Prerequisite: MATH 351.

MATH 353. Algebra III (4)

Continuation of MATH 352. Prerequisite: MATH 352.

MATH 361. Probability (4)

Concept of probability; theorems of total and compound probabilities; concepts of random variables, expected value, variance and covariance; corresponding rules; continuous probability distributions; binomial distribution and its limiting cases; normal distribution and Poisson distribution. Prerequisite: MATH 132.

MATH 362. Inferential Statistics (4)

Normal and binomial distributions, normal probability function, tests of hypotheses, power of tests, statistical inference, regression analysis. Prerequisites: MATH 110 and 160.

MATH 363. Decision Theory (4)

Game theory and decision theory, the main theorems of decision theory, distributions and sufficient statistics, testing hypotheses, sequential decision problems. Prerequisite: MATH 361.

MATH 391. Survey of Algebra, Analysis, and Their Applications I (4)

Selected applications of algebra and analysis to the behavioral, biological, decision, and social sciences. This course is not applicable to the major in mathematics and is not open to students who have had MATH 131 or the equivalent. Prerequisites: Specialization outside of mathematics and the physical sciences; MATH 105, or the equivalent, or consent of the instructor.

MATH 392. Survey of Algebra, Analysis, and Their Applications II (4)

Continuation of MATH 391. This course is not applicable to the major in mathematics and is not open to students who have had MATH 132 or the equivalent. Prerequisite: MATH 391.

MATH 393. Survey of Algebra, Analysis, and Their Applications III (4)

Continuation of MATH 392. This course is not applicable to the major in mathematics and is not open to students who have had MATH 133 or the equivalent. Prerequisite: MATH 392.

MATH 400. Mathematical Logic I (4)

Propositional calculus, quantification theory, axiomatics and natural deduction, decision procedures. Introduction to some non-classical logics, such as intuitionistic logic, modal logic, deontic logic, doxastic logic. Indication of the significance of mathematical logic for mathematics and computer science. Prerequisite: MATH 301 or PHIL 110 or consent of instructor. Same as PHIL 400.

MATH 401. Mathematical Logic II (4)

Continuation of MATH 400. Prerequisite: MATH 400. Same as PHIL 401.

MATH 411. Analysis I (4)

Real and complex number systems, point set topology, metric and normed linear spaces, compactness, Bolzano-Weierstrass theorem, completeness, limit and continuity. Prerequisite: MATH 232.

MATH 412. Analysis II (4)

Differentiation, Riemann-Stieltjes integral, sequences and series of functions, uniform convergence, functions of several variables, implicit and inverse function theorems. Prerequisite: MATH 411.

MATH 413. Lebesgue Integration (4)

Lebesgue measure and integration, convergence theorems, L_p spaces. Prerequisite: MATH 412.

MATH 431. Numerical Analysis I (4)

Numerical methods for solution of systems of linear equations and determination of eigenvalues and eigenvectors of matrices. Applications to solution of partial differential equations. Prerequisite: MATH 200 and 232.

MATH 432. Numerical Analysis II (4)

Numerical methods for solution of nonlinear algebraic equations. Approximation theory including least square and Chebyshev approximation. Interpolation. Finite Differences. Prerequisite: MATH 431.

MATH 433. Numerical Analysis III (4)

Numerical methods for differentiation and quadrature. Difference equations. Solution of ordinary differential equations. Prerequisite: MATH 432.

MATH 440. Theory of Numbers (4)

Euclid's algorithm and fundamental theorems on divisibility, prime numbers, congruence of numbers, theorems of Fermat, Euler, and Wilson, congruence of the first and higher degrees, Lagrange's theorem and its applications, residues of power, quadratic residues, introduction to the theory of binary quadratic forms. Prerequisite: MATH 132.

MATH 441. Introduction to Linear Programming (4)

Vectors and matrices, linear programming, the simplex method, transportation problems, network analysis. Prerequisite: MATH 110 or consent of instructor.

MATH 442. Operations Research I (4)

Vector spaces and matrices, theory of the simplex method, revised simplex method, duality, post-optimality analysis, matrix games, selected topics in linear programming, dynamic programming, integer programming. Prerequisite: MATH 131 or consent of instructor.

MATH 443. Operations Research II (4)

Continuation of MATH 442. Prerequisite: MATH 442.

MATH 460. Complex Variables (4)

Analytic functions, Cauchy-Riemann equations, theorem of Cauchy, Laurent series, calculus of residues. Prerequisite: MATH 320 or consent of instructor.

MATH 469. Differential Geometry (4)

Vector spaces and their duals, tangent vectors, differentiable manifolds, directional derivatives, curves, forms, covariant derivatives, structural equations, orientation, Riemann metrics, calculus on manifolds, the shape operator, normal curvature, Gaussian curvature, geodesics, topological invariants, applications. Prerequisite: MATH 332 or 411.

MATH 495. Selected Topics in Mathematics (Topics to be specified in Class Schedule) (1-5)

Development of a selected branch in mathematics

Topics vary each term. May be repeated for credit. Prerequisites: Senior standing and consent of instructor.

MATH 496. Seminar in Mathematics (4)

Presentation and discussion of selected topics in mathematics from the current literature. Prerequisite: Consent of the instructor.

Mathematics

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. Prerequisites: Senior standing, consent of instructor, and also see departmental regulations.

Graduate

MATH 598. Individual Study (1-5)

For qualified graduate students in need of advanced or specialized study. Prerequisite: Consent of instructor, and also see departmental regulations.

Professional Postgraduate

MATH 600. Structure of the Real Number System (5)

Elementary set theory, mappings, natural numbers, systems of numeration, modular arithmetic, elementary number theory, rational and irrational numbers, structure of the real number system. Open only to in-service teachers who hold the bachelor degree and who wish to qualify for the Standard Teaching Credential. Prerequisite: Consent of instructor.

MATH 601. Geometry and Mathematical Systems (4)

Continuation of MATH 600. Euclidean geometry, measurements, functions and graphs, Cartesian coordinates, mathematical patterns and mathematical systems, permutations and combinations, probability. Recommended for elementary and junior high school teachers seeking an advanced course in mathematics

Music

Scott Coulter, M.M., Associate Professor, Chairman
Joseph E. Bruggman, Ed.D., Professor
Giovanni Camajani, Ph.D., Professor
Anthony Desiderio, D.M.A., Professor
Gene C. Wisler, Ed.D., Professor
Sylvia M. Ghiglieri, M.M., Associate Professor

The music curriculum provides aesthetic and cultural development to the general student in liberal arts. It also offers courses appropriate to the establishment of backgrounds for private music teaching, elementary and secondary school classroom and vocal music teaching, and graduate study in music. The total program attempts to develop each student's creative potential through study and experience in performance, theory and composition, history and literature.

The College offers the degree Bachelor of Arts, Music. The student who intends to major in music is advised to consult with the music chairman concerning the development of programs of study in specific fields of specialization. Responsibility rests with the potential music major to secure the music area list of testing dates and other details pertaining to music area requirements.

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 39 upper division 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 for the acceptance as a major or minor in music during the final quarter of the sophomore year. 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 quarter 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.

Music

4. Students are required to perform in recital as a 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 prior to being accepted as a music major. 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 junior year. The student should consult his adviser about this requirement and if necessary schedule courses in piano and voice. Class instruction is offered at the beginning level in both areas.
6. Music majors are required to participate in at least one performing group (chorus, band or orchestra) each quarter. It is expected that the student will participate in one of the organizations involving his major performance medium.
7. At the conclusion of each quarter of study, music majors and minors will be expected to demonstrate proficiency on his or her instrument or 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 performance.

DEGREE MAJOR IN MUSIC

Prerequisites to the Major

- MUS 122, 123. Foundational Theory I-II, 8 units.
 MUS 161. Basic Class Piano. 1 unit. May be met by examination.
 MUS 164. Basic Class Voice. 1 unit. May be met by examination.
 MUS 222, 223, 224. Intermediate Theory I-III, 12 units:
 MUS 241, 244, or 268. Group Performance (chorus, concert band, orchestra) 6 units.
 MUS 261 through 267. Applied Music (major performance medium), 6 units.

The Major

	<i>Units</i>
MUS 301, 302, 303. History and Literature I-III	9
MUS 320. Counterpoint	3
MUS 321. Analysis and Composition	3
MUS 324. Orchestration.....	3
MUS 325. Instrumental Conducting or 326 Choral Conducting	3
MUS 441, 444, 468. Group Performance (Chorus, Concert Band or Orchestra)	6
MUS 461 through 467. Applied Music (major performance medium).....	6
Courses approved by major adviser	6

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Students preparing for the credential program in music are advised to include courses in string, woodwind, brass techniques and percussion.

DEGREE MINOR IN MUSIC

(31 units, to include at least 15 units in upper division)

Lower Division

- MUS 122, 123. Foundational Theory I-II, 8 units.
- MUS 161. Basic Class Piano. 1 unit. May be met by examination.
- MUS 164. Basic Class Voice. 1 unit. May be met by examination.
- MUS 222. Intermediate Theory I, 4 units.
- MUS 241, 244, or 268. Group Performance (chorus, concert band, or orchestra), 3 units.
- MUS 261 or 264 or 267. Major instrument or voice, 3 units.

Upper Division

Music units selected from the following as approved by major adviser, 9 units.

- MUS 301, 302, 303. History and Literature I-III
- MUS 325. Instrumental Conducting or MUS 326 Choral Conducting
- MUS 335. Music in Elementary Schools
- MUS 365. String Techniques I
- MUS 366. String Techniques II
- MUS 367. Woodwind Techniques
- MUS 368. Brass Techniques
- MUS 369. Percussion Techniques
- MUS 441, 444, or 468. Group Performance, 3 units
- MUS 461 or 464 or 467. Major instrument or voice, 3 units.

TEACHING CREDENTIALS

Majors in music seeking an elementary credential must complete the following:

1. Degree major in music.
2. In the undergraduate program: MUS 326 and 335; 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 vocal music must complete the following:

1. Degree major in music.
2. In the undergraduate program: MUS 365; 366; 367; 368; 369; 325; 326; 335; and 336.
3. In the graduate program: MUS 451 and 6 units of courses as approved by the credential adviser in music. Requirements of the Education Department for the secondary teaching credential.

Majors in music seeking a secondary credential in instrumental music must complete the following:

1. Degree major in music.
2. In the undergraduate program: MUS 365; 366; 367; 368; 369; 325; 326; 335; and 336.
3. In the graduate program: MUS 450 and 6 units in courses as approved by the credential adviser in music. Requirements of the Education Department of the secondary teaching credential.

MUSIC COURSES FOR NON-MAJORS

For the non-major who is interested in music as cultural heritage, the Department of Music offers courses in Basic and Intermediate Class Piano and Class Voice, Basic Musicianship, Introduction to Music, Symphonic Literature, the World of Opera, American Music, Survey of the Oratorio, History of Jazz, and Music of Black America. The department also welcomes general student participation in its group performance courses (chorus, chamber singers, ensembles, concert band and orchestra).

GROUP PERFORMANCE COURSE CREDIT

A maximum of 18 units, including no more than 9 units in lower division in group performance courses (chorus, ensemble, band or orchestra) may apply toward a degree.

Music

COURSE DESCRIPTION

GROUP PERFORMANCE

Each course may be repeated for a total of 12 units per course:

- MUS 241-441. Chorus (1)
- MUS 242-442. Vocal Ensemble (1)
- MUS 243-443. Chamber Singers (1)
- MUS 244-444. Concert Band (1)
- MUS 245-445. String Ensemble (1)
- MUS 246-446. Brass Ensemble (1)
- MUS 247-447. Woodwind Ensemble (1)
- MUS 268-468. Orchestra (1)

THEORY

Lower Division

MUS 101. Basic Musicianship (3)

Study of the rudiments of rhythm, intervals, notation, triads and sight-reading. Students who major or minor in music may enroll for the basic musicianship and solfege courses to be taken concurrently with the theory courses. Units are not credited to the major or minor, but may be credited towards graduation. No prerequisites.

MUS 102. Solfege-I (3)

Continuation of MUS 101. Two-part exercises and elaboration of rhythmic and chromatic difficulties. Prerequisite: MUS 101.

MUS 103. Solfege II (3)

Continuation of MUS 102. Two-part exercises with text, maximum difficulties of pitch and rhythm. Readings of four-part excerpts from accepted masterworks. Prerequisite: MUS 102.

MUS 122. Foundational Theory I (4)

All triads and inversions, cadences, non-harmonic tones, chord connections and creative writing in various textures. Ear training, sight-singing, analysis, and keyboard harmony. Prerequisite: MUS 101 or equivalent.

MUS 123. Foundational Theory II (4)

Continuation of MUS 122. Dominant seventh chord with inversions, modulation, and secondary dominants. Ear-training, sight-singing, keyboard harmony, and creative writing. Prerequisite: MUS 122.

MUS 222. Intermediate Theory I (4)

Continuation of MUS 123. Seventh chords and inversions, diminished seventh chord with modulation and sequence. Ear-training, sight-singing, keyboard harmony, and creative writing. Prerequisite: MUS 123.

MUS 223. Intermediate Theory II (4)

Continuation of MUS 222. Ninth, eleventh, and thirteenth chords, altered chords, and chromatic modulation. Ear-training, sight-singing, analysis, keyboard-harmony, and creative writing. Prerequisite: MUS 222.

MUS 224. Intermediate Theory III (4)

Continuation of MUS 223. Modal harmony, impressionistic devices and twentieth century harmony and techniques. Ear-training, sight-singing, analysis, keyboard-harmony and creative writing. Prerequisite: MUST 223.

Upper Division**MUS 320. Counterpoint (3)**

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, Book I; emphasis on creative writing in contrapuntal two- and three-part forms. Prerequisite: MUS 224.

MUS 321. Analysis and Composition (3)

Analysis of musical structure from the short two- and three-part forms to sonata-form, emphasis on the comparison of styles and the development of an ability to write in various forms. Prerequisite: MUS 320.

MUS 324. Orchestration (3)

A study of all orchestral instruments as to range, technique and general use, including study of color and combinations. Emphasis on writing and studying scores. Prerequisite: MUS 224 or consent of instructor.

MUS 325. Instrumental Conducting (3)

A study of basic baton technique and score reading with emphasis upon applied conducting techniques in group performance of standard orchestral literature. Prerequisite: MUS 224 or consent of instructor.

MUS 326. Choral Conducting (3)

A study of choral conducting technique with emphasis upon performance of standard choral literature. Prerequisite: MUS 224 or consent of instructor. Students must be currently enrolled in MUS 241 or 441.

HISTORY AND LITERATURE**Lower Division****MUS 100. Introduction to Music (4)**

Music considered as a facet of the intellectual continuum involving the philosophical, sociological and historical aspects; consideration of origins; symbols of the language in its theory and introduction to form. Can be taken on a credit or no credit basis. No prerequisites.

MUS 230. Symphonic Literature (4)

The symphony: abstract and programmatic aspects; the tone poem and its relations to the sonata form; in-depth approach to analysis of a limited number of representative works in this medium. Prerequisite: MUS 100.

MUS 231. History of Jazz (4)

An introduction to jazz with concentration on its historical background and its development in the United States.

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 301. History and Literature I (3)**

A historical perspective of music from ancient Greek through the Middle Ages and the Renaissance eras; philosophical and sociological impacts; early monody and polyphony; analysis of styles and forms. Lectures, discussions, collateral readings, term thesis. Prerequisite: Ability to read music.

Music

MUS 302. History and Literature II (3)

Continuation of MUS 301. Music of the Baroque and Classical eras. Prerequisite: Ability to read music.

MUS 303. History and Literature III (3)

Continuation of MUS 302. Music of the Romantic and Contemporary eras. Prerequisite: Ability to read-music.

MUS 310. The World of Opera (4)

A study of one representative work from each of the English, French, German, Italian and Russian literature. Considerations of the nature, reality and components of this medium, plus linguistic problems. (Formerly 320). Prerequisite: MUS 100.

MUS 340. American Music (4)

This course is restricted to music of the United States and surveys the contributions of composers of our country from the American Revolution to the present. Prerequisite: MUS 100.

MUS 341. Music of Black America (4)

A survey and appraisal of Negro-American music, its heritage and impact on the American scene. Consideration of African ethnic roots through to jazz and contemporary rock.

MUS 350. Survey of the Oratorio (4)

A chronological survey of the oratorio from the Sacre Rappresentazioni of the sixteenth century to Stravinsky's Symphony of Psalms and Kodaly's Psalmus Hungaricus, with an analysis of one work from each of the historical periods. Prerequisite: MUS 100.

MUS 401. Music in the Renaissance Era (3)

A critical analysis of music from the late fourteenth century through the sixteenth century.

MUS 402. Music of the Baroque Era (3)

An intensive analysis of vocal and instrumental forms of the period from 1600 to 1750; the early opera, oratorio and cantata; suite, concerto grosso and sonata.

MUS 403. Music of the Classical Era (3)

An analytical examination of the music from 1750 to 1827, with special emphasis on the works of the Viennese classicists: Haydn, Mozart and Beethoven.

MUS 404. Romantic Music of the Nineteenth Century (3)

Concepts and ideals of the Romantic periods from circa 1820 to 1900 seen through the focal point of music.

MUS 405. Twentieth Century Music (3)

A critical examination of impressionism and expressionism in music of Debussy and Webern. Polytonal and atonal ramifications; primitivism of Stravinsky.

MUS 450. Analysis of Instrumental Literature (3)

A comprehensive review of instrumental literature of the various music periods for orchestra, band, chamber music and solo performance. Prerequisite: Senior standing as a music major or minor, or consent of instructor.

MUS 451. Analysis of Vocal Literature (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. Course limited to students in upper division.

MUS 496. Senior Seminar (4)

Individual research in specific problems. Emphasis on introduction to musicology. Weekly reports and term thesis required. Open only to qualified seniors with consent of instructor.

INSTRUMENTAL TECHNIQUE**Upper Division**

Courses in instrumental techniques may be repeated for credit provided the student studies a different instrument each time the course is offered. These courses are open to all students of the college.

MUS 365. String Techniques I (1)

Performance and techniques of playing violin, viola, cello and double bass. Prerequisite: Consent of instructor.

MUS 366. String Techniques II (1)

Continuation of MUS 365. Performance techniques of playing violin, viola, cello and double bass. Prerequisite: MUS 365 or consent of instructor.

MUS 367. Woodwind Techniques (1)

Performance techniques of playing flute, clarinet, oboe and bassoon. Prerequisite: Consent of instructor.

MUS 368. Brass Techniques (1)

Performance techniques of playing trumpet, horn, trombone, baritone, and tuba. Prerequisite: Consent of instructor.

MUS 369. Percussion Techniques (1)

Performance techniques of playing snare drum, bass drum, tympani, melodic percussion instruments. Prerequisite: 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 6 units. No prerequisite.

MUS 164. 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 6 units. Prerequisite: Ability to read music.

MUS 261. Intermediate Piano (1)

Study and performance of the smaller compositions in the standard piano literature. May be repeated for a total of 6 units. (Formerly 271) Prerequisite: Consent of instructor.

MUS 262. Intermediate Class Piano (1)

Continuation of MUS 161. Keyboard experience in reading and playing music through intermediate level. May be repeated for a total of 6 units. Prerequisite: MUS 161 or consent of instructor.

MUS. 263. Intermediate Class Voice (1)

Continuation of MUS 164. Class study of the easier song literature of such composers as Brahms, Schumann, Barber and others. May be repeated for a total of six units. Prerequisite: MUS 164 or consent of instructor.

Music

MUS 264. Intermediate Voice (1)

Continuation of fundamentals of voice training; development of expressive singing for solo and ensemble performance. 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 6 units. Prerequisite: Consent of instructor.

Upper Division

MUS 461. Advanced Piano (1)

Study and performance of advanced repertoire with emphasis upon development of style and interpretation as well as technique. May be repeated for a total of 12 units. Prerequisite: Consent of instructor.

MUS 464. Advanced Voice (1)

Vocal technique for the advanced student; study of German Lieder, French and Italian repertoire, and solo material in cantata, oratorio, and opera. May be repeated for a total of 12 units. Prerequisite: Consent of instructor.

MUS 467. Advanced Orchestral Instruments (1)

Advanced instruction in orchestral instruments: strings, woodwinds, brasses, and percussion. May be repeated for a total of 12 units. Prerequisite: Consent of instructor.

MUSIC EDUCATION

Upper Division

MUS 335. Music in Elementary Schools (3)

Application of music to the elementary classroom. Problems, methods and materials covering such areas as singing, rhythms, creative music, music reading and music appreciation. Not open to lower division students.

MUS 336. Music in Secondary Schools (3)

The music programs in the junior and senior high schools, general music classes, performance groups, arts and humanities courses.

SPECIAL STUDY PROJECTS

MUS 495. Selected Topics in Music (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 9 units. Prerequisite: Consent of instructor

MUS 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.

Philosophy

Catherine D. Rau, Ph.D., Professor, Coordinator
William H. Hayes, Ph.D., Professor
Hsiu-hwang Ho, Ph.D., Assistant Professor

DEGREE MINOR IN PHILOSOPHY

Twelve units in lower division, as approved by the minor adviser and programmed over at least three quarters. Twenty-four units in upper division, as approved by the minor adviser and programmed over at least six quarters.

TEACHING CREDENTIALS

Minors in philosophy for elementary and secondary credentials must fulfill the following requirements:

1. Degree minor in philosophy, plus additional courses in philosophy to total a minimum of 30 units, as recommended by the minor adviser and approved by the credential adviser.
2. Secondary credential candidate must receive approval of Philosophy as to competence in subject matter.

COURSE DESCRIPTIONS

PHIL 101. Classics of Philosophy I (4)

Reading and discussion of selected works of the major philosophers as introduction to the principal philosophic disciplines of metaphysics, ethics, theory of knowledge, political theory, and philosophy of religion.

PHIL 102. Classics of Philosophy II (4)

Continuation of PHIL 101. PHIL 101 not prerequisite to PHIL 102.

PHIL 103. Classics of Philosophy III (4)

Continuation of PHIL 102. Neither PHIL 101 nor PHIL 102 prerequisite to PHIL 103.

PHIL 110. Deductive Logic (4)

Analysis of the methods and principles of deductive reasoning, including traditional Aristotelian syllogistic logic, and an introduction to modern symbolic logic. (Formerly 201)

PHIL 111. Inductive Logic (4)

Analysis of the methods of science: definition, classification, inductive reasoning, scientific explanation. (Formerly 201)

PHIL 250. History of Philosophy I (4)

A general survey of the history of Western philosophy from the pre-Socratics to the end of the Classical Period. (Formerly 311) Prerequisite: Sophomore standing.

PHIL 251. History of Philosophy II (4)

Continuation of PHIL 250. From late Antiquity through the Middle Ages. (Formerly 311) Prerequisite: PHIL 250.

PHIL 252. History of Philosophy III (4)

Continuation of PHIL 251. From the Renaissance through the nineteenth century. (Formerly 312) Prerequisite: PHIL 251.

PHIL 295. Selected Topics in Philosophy. (Topics to be specified in Class Schedule) (1-5)

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

Philosophy

PHIL 320. Theory of Knowledge (4)

Analysis of the concept of knowledge; examination of the principal problems of knowledge. Readings from contemporary epistemologists. (Formerly 412) Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 325. Philosophy of Language (4)

Inquiry into the theory of signs: pragmatics, semantics and syntactics. Prerequisites: PHIL 110, and at least eight units in other lower division courses in philosophy.

PHIL 330. Metaphysics (4)

Critical examination of metaphysical problems such as reality, substance, qualities and relations, causality, universals and particulars, space, time, freedom and determinism. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 340. Ethics (4)

Critical analysis of fundamental ethical concepts, with readings from classical and contemporary writers in the field. (Formerly 301) Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 346. Aesthetics I (4)

Critical examination of theories of artistic creation and aesthetic experience. Analysis of principles of design and pattern. Analysis of the organizing structures of architecture, sculpture, and painting. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 347. Aesthetics II (4)

Analysis of the organizing structures of music, poetry, novel, and drama. Critical examination of principles of art criticism. Prerequisite: PHIL 346.

PHIL 365. Oriental Philosophy (4)

An introductory and critical examination of the principal philosophical ideas and systems in Chinese and Indian philosophy. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 380. Plato (4)

Critical study of a selection of the *Dialogues* of Plato. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 381. Aristotle (4)

Critical study of selected works of Aristotle. Prerequisite: PHIL 380.

PHIL 382. Later Antiquity (4)

Critical study of epicureanism, Stoicism, and Plotinus. Prerequisite: PHIL 381.

PHIL 390. Descartes (4)

Critical study of selected philosophical works of Descartes with emphasis on his epistemological and metaphysical systems. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 391. Spinoza (4)

Critical examination of the principal works of Spinoza. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 395. Hume (4)

Critical examination of the principal works of Hume. Prerequisite: Twelve units in lower division courses in philosophy.

PHIL 400. Mathematical Logic I (4)

Propositional calculus, quantification theory, axiomatics and natural deduction, decision procedures. Introduction to some non-classical logics, such as intuitionistic logic, modal logic, deontic logic, doxastic logic. Indication of the significance of mathematical logic for mathematics and computer science. Prerequisites: PHIL 110 or MATH 301 or consent of instructor. Same as MATH 400.

PHIL 401. Mathematical Logic II (4)

Continuation of PHIL 400. Prerequisite: PHIL 400. Same as MATH 401.

PHIL 420. Theory of Science (4)

Analysis of logical and methodological problems in the sciences: theory construction, criteria of confirmation, the nature of explanation, the goal of prediction, or other selected topics. Prerequisites: PHIL 110 and 111 or 400 and 401 or a major in one of the sciences.

PHIL 430. Philosophy of Mind (4)

Critical reading of Freud, Austin, Ryle *et al.* on the concept of mind. Prerequisite: Twelve units in lower division courses in philosophy and senior standing.

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 students prepared for independent work, and in need of advanced and specialized study. May be repeated for a total of 6 units. 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 a total of 9 units. Prerequisite: Consent of instructor.

Physical Education and Health

Richard D. Conant, Ph.D., Associate Professor, Chairman
Zaki I. Habashi, Ed.D., Associate Professor
James K. Hanny, M.A., Associate Professor
James C. Bowen, M.A., Assistant Professor
William M. Morris Ed.D., Assistant Professor
Wayne E. Nelson, Ed.D., Assistant Professor
Armin P. Pipho, Ph.D., Assistant Professor
Gladys R. Rose, M.A., Assistant Professor
Martha M. Seban, M.S., Instructor

The Department of Physical Education and Health offers the degree Bachelor of Arts, Physical Education. It is designed to provide a background in physical education for those planning to enter the teaching field, an educational foundation for those planning to undertake graduate work or a program for preprofessional work.

REQUIREMENTS FOR THE BACHELOR OF ARTS, PHYSICAL EDUCATION

Physical education majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete the prerequisites to the major including required courses in related fields.
3. Complete the major of not less than 37 upper division units.
4. Complete an academic minor.
5. 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 requirement, are required for physical education majors.

- BIOL 101. Principles of Biology, 5 units
ZOOL 106. Principles of Zoology, 5 units
PHED 101, 102, 103. Physical Education Activities, 3—12 units

Required courses in related fields:

- ZOOL 312. Anatomy, 5 units
ZOOL 323. Physiology, 4 units
MATH 160. Statistics, 5 units

The Major:

	<i>Units</i>
PHED 310. Foundations of Physical Education	4
PHED 340. Motor Development	4
PHED 480. Measurement and Evaluation in Physical Education	5
PHED 484. Kinesiology	5
PHED 487. Exercise Physiology.....	4
HLTH 310. Prevention and Care of Athletic Injuries	3
One of the following:.....	4
PHED 370. Sociological Factors in Physical Education	
PHED 380. Psychological Factors in Physical Education	

Physical Education and Health

Two of the following:	8
PHED 440. History of Physical Education	
PHED 460. Administration and Organization of Physical Education	
PHED 490. Adapted Physical Education	

Total..... 37

All physical education majors must demonstrate satisfactory proficiency in six activities before graduation. Students can prove satisfactory proficiency in either of the following ways:

1. Earn a grade of "B" or better in an advanced activity course.
2. Obtain credit for the activity under challenge procedure. Qualifications should be presented to your instructor no later than the third week of the quarter.

DEGREE MINOR IN PHYSICAL EDUCATION

(32 units approved by the minor adviser are required, including at least 17 units in upper division courses)

Prerequisites to the Minor:

- BIOL 101. Principles of Biology, 5 units
- ZOOL 106. Principles of Zoology, 5 units
- ZOOL 312. Anatomy, 5 units

Lower Division

- PHED 101, 102, 103. Physical Education Activities, 1½–3 units

Upper Division:

- PHED 310. Foundations of Physical Education, 4 units
- PHED 325. Analysis of Movement, 3 units
- PHED 340. Motor Development, 4 units

A minimum of 6 units of electives to be selected from the following physical education courses:

- PHED 320. Theory and Practice of Team Sports, 3 units
- PHED 321. Theory and Practice of Individual Sports, 3 units
- PHED 324. Theory and Practice of Social Dance, 3 units

Additional courses to complete 32 units as approved by the minor adviser. Minors must demonstrate satisfactory proficiency in three activities through procedures outlined under the physical education major.

TEACHING CREDENTIALS

Majors in physical education seeking elementary and secondary credentials are encouraged to fulfill the following requirements:

1. Complete 11 additional units in health and physical education from the courses listed below and receive approval of the Department of Physical Education and Health as to subject matter competence.

At least two courses not to exceed 9 units from:

- PHED 320. Theory and Practice of Team Sports, 3 units
- PHED 321. Theory and Practice of Individual Sports, 3 units
- PHED 324. Theory and Practice of Dance, 3 units

Additional courses to complete the 11 units in health and physical education in addition to courses taken for the major from.

- PHED 200. Sports Officiating, 2 units
- HLTH 201. First Aid and Safety, 3 units
- HLTH 220. Health and Society, 3 units
- PHED 350. Recreation and Society, 4 units
- PHED 360. Intramural Athletic Programs, 3 units
- PHED 370. Sociological Factors in Physical Education, 4 units
- PHED 380. Psychological Factors in Physical Education, 4 units
- PHED 390. Philosophy of Physical Education, 4 units

Physical Education and Health

- PHED 440. History of Physical Education, 4 units
PHED 460. Administration and Organization of Physical Education, 4 units
PHED 490. Adapted Physical Education, 4 units
PHED 495. Selected Topics in Physical Education, 1-5 units
PHED 498. Individual Study, 1-5 units
2. Secondary credential candidates must complete 9 units of upper division courses in the major after obtaining the degree in physical education.
 3. Complete a degree major in physical education.
 4. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTIONS

PHYSICAL EDUCATION

Lower Division

PHED 101. Fitness (Men-Women) (½)

Promotion of fitness through participation in various physical exercises; understanding of biological, psychological, and sociological interpretation of physical activities.

PHED 102. Lifetime Activities (½)

Historical and cultural background of the lifetime activity and its nature. Fundamental skills, rules of the game, and participation in game situations. Activities to be designated for men and women from the following: archery, badminton, bowling, social dance, fencing, golf, gymnastics, personal safety and self-defense, swimming, tennis, water activities, and wrestling. May be repeated for credit.

PHED 103. Team Activities (½)

Historical and cultural background of the activity and its nature. Fundamental skills, rules of the game, and participation in game situations. Activities to be designated for men and women from the following: basketball, flag football, field hockey, soccer, softball, track, and volleyball. May be repeated for credit.

PHED 200. Sports Officiating (2)

The study and interpretation of rules for various sports; procedures, mechanics and practice in officiating. May be repeated for a total of 4 units.

PHED 251. Intercollegiate Athletics (½)

To be selected from baseball, basketball, cross country, golf, tennis, track and volleyball. May be repeated for credit. Prerequisite: Consent of instructor.

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.

Upper Division

PHED 310. Foundations of Physical Education (4)

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.

PHED 320. Theory and Practice of Team Sports (3)

Development of fundamental skills and special abilities; a study of competencies, skills, and knowledge needed for teaching and organization. Rules and field experience in officiating techniques, game strategy, and tactics; evaluation techniques. Sports to be designated from the following: baseball, basketball, field hockey, football, soccer, softball, swimming, track and field, and volleyball. May be repeated for credit. Prerequisites: Advanced activity course for applicable sport or consent of instructor.

PHED 321. Theory and Practice of Individual Sports (3)

Development of fundamental skills and special abilities; a study of competencies, skills, and knowledge needed for teaching and organization. Rules and field experience in officiating techniques, game strategy and tactics, evaluation techniques. Individual sports to be designated from the following: archery, badminton, bowling, fencing, golf, and tennis. May be repeated for credit. Prerequisites: Advanced activity course for applicable sport or consent of instructor.

PHED 324. Theory and Practice of Social Dance (3)

Development of dance materials for various age groups; a study of competencies, skills, and knowledge needed for teaching and organization. May be repeated for credit. Prerequisite: Advanced activity course in dance or consent of instructor.

PHED 325. Analysis of Movement (3)

Mechanical laws and human movement; the efficient use of energy in physical activities as applied to daily life and the field of physical education. Prerequisite: One course in human anatomy. PHYS 100 is recommended.

PHED 340. Motor Development (4)

Study of principles and theories of growth and development related to motor learning and performance in infancy, childhood, adolescence, adulthood, and old age.

PHED 350. Recreation and Society (4)

Study of leisure in a technological society, recreational programs and recreational organizations.

PHED 360. Intramural Athletic Programs (3)

The organization, administration and motivation of intramural activities for schools including practical field experience.

PHED 370. Sociological Factors in Physical Education (4)

Principles and theories of sociology and anthropology which relate to individual and group motor performance. Prerequisite: SOCL 101.

PHED 380. Psychological Factors in Physical Education (4)

Psychological principles and theories relating to human movement: the state of the performer, perceptual input to the performer, and motor learning. Prerequisite: PSYC 201.

PHED 390. Philosophy of Physical Education (4)

Philosophical thoughts guiding the development of physical education from ancient time to modern time. Prerequisite: Junior Standing. PHIL 101, 102, or 103 is recommended.

PHED 440. History of Physical Education (4)

Study of the historical, cultural, and theoretical background of physical education in primitive times, and ancient, medieval and modern societies. Prerequisites: Junior Standing. HIST 101, 102, or 103 is recommended.

PHED 460. Administration and Organization of Physical Education (4)

Current problems in administration and organization of physical education; guiding administrative policies and principles; selection, purchase, and care of equipment; maintenance of facilities, student leadership in physical education; evaluation of physical education programs. Prerequisite: PHED 310.

PHED 480. Measurement and Evaluation in Physical Education (5)

Historical development of evaluation in physical education, measurement of physical fitness, social efficiency, and physical education skills.

Physical Education and Health

PHED 484. Kinesiology (5)

Study of anatomical and physical laws applied to human movement. Analysis of motor skills related to physical education activities. (Lecture, 4 hours, laboratory, 3 hours) Prerequisites: Anatomy, PHYS 100 is recommended.

PHED 487. Exercise Physiology (4)

Study of different body systems and the effects of physical exercise on each system and physical performance. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: Physiology, CHEM 100 is recommended.

PHED 490. Adapted Physical Education (4)

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. Prerequisites: Anatomy, PHED 484 is recommended.

PHED 495. Selected Topics in Physical Education (1-5)

The topic of this course will vary according to students' interests and the availability of faculty members and will be mentioned in the class schedule. Prerequisite: Consent of instructor.

PHED 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 9 units. Prerequisite: Consent of instructor.

HEALTH

Lower Division

HLTH 101. Healthful Living (2)

Body structure and elementary physiology; formation of sound health habits and attitudes, development of an effective philosophy of personal health.

HLTH 201. First Aid and Safety (3)

Effects, causes, and prevention of accidents in our society. Theory and practice of first aid for the injured. Course conforms to the American Red Cross standard and advanced first aid course.

HLTH 220. Health and Society (3)

Nature of man. Modern health knowledge, attitudes and practices essential to healthful living with emphasis on exercises, nutrition, fatigue, and mental health. Community health problems and services. Meets credential requirements in alcohol, narcotics, and safety.

Upper Division

HLTH 310. Prevention and Care of Athletic Injuries (3)

Principles and practices of conditioning athletes, with emphasis on the prevention and care of athletic injuries, bandaging, therapy, health habits, and protective equipment. Prerequisite: Anatomy. HLTH 201 is recommended.

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., Assistant 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 or chemistry.

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 advisor 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 42 upper division units of physics.
4. Complete a minor to be selected in consultation with the major adviser. A minor in mathematics, chemistry or biology is recommended.

DEGREE MAJOR IN PHYSICS

Prerequisites to the Major

Required courses in major field:

PHYS 221, 222, 223, 224. General Physics I-IV, 16 units

PHYS 231, 232, 233, 234. General Physics Laboratory I-IV, 4 units

Required courses in supporting field.

(These courses may also apply towards the minor)

MATH 131, 132, 133. Calculus with Analytic Geometry I-III, 12 units

MATH 231. Multivariate Calculus and Linear Algebra I, 4 units

MATH 321, 322. Ordinary Differential Equations I-II, 8 units

MATH 323. Partial Differential Equations, 4 units

CHEM 101, 102, 103. Principles of Chemistry I-III, 15 units

Physics and Physical Sciences

Recommended course:

MATH 232. Multivariate Calculus and Linear Algebra II, 4 units

The Major

	<i>Units</i>
PHYS 311, 312. Analytical Mechanics I-II.....	8
PHYS 322, 323. Electromagnetism I-II.....	8
PHYS 372. Modern Physics	3
PHYS 373, 374. Quantum Mechanics I-II	8
PHYS 400. Advanced Laboratory	4
(Must be repeated for at least four units. PHYS 330, Electronics, may be substituted for one unit of PHYS 400.)	
PHYS 451, 452. Thermal and Statistical Physics	8
A minimum of three units of upper division electives, which may include:	
CHEM 461, 462, 463. Physical Chemistry I-III.....	3
<hr/>	
Total.....	42

Physics majors are required to earn a grade of C or better in all required major courses and their prerequisites.

Degree Minor in Physics

Consists of 27 units in physics as approved by the minor advisor, to include at least 12 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 39 upper division units.
4. Complete a minor to be selected in consultation with the major adviser. A minor in mathematics or biology is recommended.

DEGREE IN MAJOR IN PHYSICAL SCIENCES

Prerequisites to the Major

Required courses in major field:

PHYS 221, 222, 223, 224. General Physics I-IV, 16 units

PHYS 231, 232, 233, 234. General Physics Laboratory I-IV, 4 units

CHEM 401, 102, 103. Principles of Chemistry I-III, 15 units

CHEM 211. Analytical Chemistry I, 4 units

One of the following as approved by major adviser, 4 units

ASTR 200. Descriptive Astronomy

GEOL 200. Principles of Geology I

Required courses in supporting field:

MATH 131, 132, 133. Calculus with Analytic Geometry I-III, 12 units

MATH 231. Multivariate Calculus and Linear Algebra I-II, 4 units

MATH 321. Ordinary Differential Equations I, 4 units

Recommended courses:

PHSC 101. Environmental Pollution, 3 units

Philosophy 110. Deductive Logic, 4 units

MATH 322. Ordinary Differential Equations II, 4 units

MATH 323. Partial Differential Equations, 4 units

Physics and Physical Sciences

The Major

Units

One of the following sequences:

PHYS 311, 312. Analytical Mechanics I, II	
PHYS 322, 323. Electromagnetism I, II	
PHYS 373, 374. Quantum Mechanics I, II	
PHYS 451, 452. Thermal and Statistical Physics I, II.....	8
PHYS 372. Modern Physics	3
Either group 1 or group 2:	
1. CHEM 461. Physical Chemistry I (3 units)	
CHEM 412. Analytic Chemistry II (4 units)	
CHEM 321, 324. Organic Chemistry I (4-5 units)	
2. CHEM 321, 322, 323, 324, 325, 326. Organic Chemistry I-III (12-15 units)	11-15
Additional upper division courses in the physical sciences as approved by the major adviser.....	13-17
Total.....	39

Physical sciences majors are required to earn a grade of C or better in all required major courses and their prerequisites.

TEACHING CREDENTIALS

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

1. Degree major in physical sciences.
2. Secondary credential candidates must complete 9 units in courses in the physical sciences as postbaccalaureate work and receive approval of Department of Physical Science as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

PREPARATION FOR GRADUATE STUDY

It is recommended that the physical science major who intends to continue study on the graduate level complete a minimum of one year, or the equivalent, of college French, German, or Russian.

DEGREE MINOR IN PHYSICAL SCIENCES

Consists of 22 units in physical sciences as approved by the minor advisor to include 12 units in the upper division.

COURSE DESCRIPTIONS

PHYSICS

Lower Division

PHYS 100. Introduction to Physical Concepts (5)

A non-mathematical descriptive survey of the basic concepts in physics from Newton to modern scientific theories. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) No prerequisites.

PHYS 101. Mechanics and Heat (5)

Force, equilibrium, uniform and accelerated motion, work, momentum, and energy; properties of matter, heat, and temperature. Recommended for general students and for students preparing for biology or medicine. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) Prerequisite: algebra, plane geometry, and trigonometry at the high school level.

Physics and Physical Sciences

PHYS 102. Electricity and Optics (5)

Electric charges and currents, magnetism, induced currents, wave motion, interference, diffraction, geometrical optics. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) Prerequisite: PHYS 101.

PHYS 103. Modern Physics (5)

Basis of modern atomic theory, structure and properties of atoms, the nucleus and radioactivity. (Lectures, 3 hours; discussion, 1 hour; laboratory, 3 hours) Prerequisite: PHYS 102.

PHYS 105. Science—What It's All About (4)

A non-mathematical descriptive survey of physics, chemistry and biology, emphasizing the unity of the scientific disciplines. (Lecture, 4 hours) No prerequisites. Same as BIOL 105 and CHEM 105.

PHYS 106. Science—What It's All About (4)

Continuation of PHYS 105. (Lecture, 4 hours) Prerequisite: PHYS 105. Same as BIOL 106 and CHEM 106.

PHYS 107. Science—What It's All About (5)

Continuation of PHYS 106, with the inclusion of a laboratory. (Lecture, 4 hours; laboratory, 3 hours) Prerequisite: PHYS 106. Same as BIOL 107 and CHEM 107.

PHYS 221. General Physics I (4)

General physics with calculus, for scientists and engineers. Mechanics, energy, momentum and angular momentum. Linear and rotational dynamics. Electricity, magnetism, heat, wave motion, modern physics. (Lecture, 3 hours; discussion, 1 hour) Prerequisite: Concurrent enrollment in MATH 132.

PHYS 222. General Physics II (4)

Continuation of PHYS 221. Prerequisite: PHYS 221.

PHYS 223. General Physics III (4)

Continuation of PHYS 222. Prerequisite: PHYS 222.

PHYS 224. General Physics IV (4)

Continuation of PHYS 223. Prerequisite: PHYS 223.

PHYS 231. General Physics Laboratory I (1)

Laboratory to accompany PHYS 221. Prerequisite: PHYS 221 or concurrent enrollment in PHYS 221.

PHYS 232. General Physics Laboratory II (1)

Laboratory to accompany PHYS 222. Prerequisite: PHYS 222 or concurrent enrollment in PHYS 222.

PHYS 233. General Physics Laboratory III (1)

Laboratory to accompany PHYS 223. Prerequisite: PHYS 223 or concurrent enrollment in PHYS 223.

PHYS 234. General Physics Laboratory IV (1)

Laboratory to accompany PHYS 224. Prerequisite: PHYS 224 or concurrent enrollment in PHYS 224.

PHYS 225. 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.

Physics and Physical Sciences

Upper Division

PHYS 311. Analytical Mechanics I (4)

Basic principles of mechanics with applications to central force and harmonic oscillator problems; study of statics and dynamics of rigid bodies with the aid of Lagrangian and Hamiltonian equations. (Lecture, 3 hours; discussion, 1 hour) Prerequisites: MATH 321 and PHYS 221.

PHYS 312. Analytical Mechanics II (4)

Continuation of PHYS 311. Prerequisite: PHYS 311.

PHYS 322. Electromagnetism I (4)

Fundamental principles, their application to both direct current and alternating current circuit theory. Introduction to Maxwell's electromagnetic theory of light and radio waves. (Lecture, 3 hours; discussion, 1 hour) Prerequisites: MATH 321 and PHYS 222.

PHYS 323. Electromagnetism II (4)

Continuation of PHYS 322. Prerequisite: PHYS 322.

PHYS 325. Electromagnetism and Theory of Relativity (3)

Classical mechanics, waves and particles, Maxwell theory of electromagnetic waves, Michelson-Morley Experiment, the Lorentz transformation, experimental tests of the general relativity. Prerequisites: PHYS 323 and MATH 321.

PHYS 372. Modern Physics (3)

Significant developments in physics arising from the discovery of the electron X-rays, and radioactivity. Prerequisites: MATH 222 and PHYS 323.

PHYS 373. Quantum Mechanics I (4)

Development of Schrödinger'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 problems. Application to atomic phenomena. Prerequisite: PHYS 372 or consent of instructor.

PHYS 374. Quantum Mechanics II (4)

Continuation of PHYS 373. Prerequisite: PHYS 373.

PHYS 400. Advanced Physics Laboratory (1)

Fundamental experiments in mechanics, heat, electricity, and magnetism, optics, atomic physics, nuclear physics, etc. Prerequisite: Upper division standing or consent of instructor. This course may be repeated for a maximum of 6 units.

PHYS 435. Nuclear Physics (3)

Elements of nuclear structure, radioactivity, interaction of nuclear radiations with matter, detection of nuclear radiation, fission and fusion, nuclear models. (Lecture, 3 hours) Prerequisites: PHYS 372, and PHYS 373, or consent of instructor.

PHYS 451. Thermal and Statistical Physics I (4)

Thermodynamics and statistical mechanics. A unified approach based on a microscopic description using quantum states following the approach of Gibbs, Fermi, Bose and "Classical" systems are discussed, with applications to standard and current topics. Prerequisite: Concurrent enrollment in PHYS 373 or consent of instructor.

PHYS 452. Thermal and Statistical Physics II (4)

Continuation of PHYS 451. Prerequisite: PHYS 451 or consent of instructor.

Physics and Physical Sciences

PHYS 455. Solid State Physics (3)

Crystal structure, metal crystals, molecular crystals. Thermal, electrical, magnetic properties of crystals. Free electron model of metals, band theory of solids. (Lecture, 3 hours) Prerequisite: PHYS 373.

PHYS 471. Introduction to Theoretical Physics I (3)

Fourier series and Fourier integrals. General theory of orthonormal functions. Vibrating strings and membranes. Viscous and inviscid fluid flow. Heat flow and Green's theorem. Tensor analysis with application to elasticity and relativity. Prerequisites: PHYS 312, 323, and MATH 321.

PHYS 472. Introduction to Theoretical Physics II (3)

Continuation of PHYS 471. Prerequisite: PHYS 471.

PHYS 491. Optics and Waves (3)

Principles of geometrical optics. Image formation by thick and thin lenses. Aberrations. Optical instruments such as the camera, telescope, and microscope. Principles of physical optics. Inference and diffraction. Prerequisites: PHYS 223 and MATH 321 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 9 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 9 units. Prerequisite: Consent of instructor.

PHYSICAL SCIENCES

Lower Division

PHSC 101. Environmental Pollution (3)

This course will survey the chemical and physical aspects of pollution as it affects the air, water, and land environment. No prerequisites.

PHSC 295. 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.

PHYSICAL SCIENCES

Upper Division

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.

ASTRONOMY

Lower Division

ASTR 200. Descriptive Astronomy (4)

Topics in development of astronomy: solar system and stars. (Lectures, 4 hours)

ASTR 201. Astronomy Lab (1)

Telescope observations of planets, their satellite, and sunspots. Optical experiments related to astronomy. Concurrent enrollment in ASTR 200 is required. (Lab., 3 hours)

GEOLOGY

Lower Division

GEOL 200. Principles of Geology I (4)

Study of rocks, minerals, fossils, geologic history, and evolution of life on earth. (Lecture, 3 hours) 1 or 2 field trips; laboratory approximately 2 hours per week, depending on number of field trips.

GEOL 201. Principles of Geology II (4)

Continuation of GEOL 200. Survey of the structure and materials that compose the outer portion of the earth, and the geologic processes responsible for sculpturing the earth of today. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: GEOL 200 or consent of instructor.

Political Science

Paul F. Magnelia, Ph.D., Associate Professor, Chairman
 Kenneth Entin, Ph.D., Assistant Professor
 Barbara Greene, Ph.D., Assistant Professor
 Steven Hughes, Ph.D., Assistant Professor
 Richard Mendes, Ph.D., Assistant Professor
 Gary Shaw, 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 preprofessional training for the student who intends to enter law or graduate school or study for a teaching credential.

REQUIREMENTS FOR THE BACHELOR OF ARTS, POLITICAL SCIENCE

Political science majors are to:

1. Complete the requirements for the Bachelor of Arts degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 36 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, 4 units
- PSCI 200. Introduction to Political Science, 4 units
- or
- PSCI 201. Modern Political Ideologies, 4 units

Required courses in supporting fields: two of the following.

- ANTH 206. Introduction to Cultural Anthropology
- ECON 250. Principles of Economics
- SOCL 201. Introduction to Sociology

The Major

Three courses required in supporting fields as approved by major adviser. MATH 160 or equivalent is a prerequisite to PSCI 310.

Required courses in political science

	<i>Units</i>
PSCI 310. Scope and Methods in Political Science	4
One 300 level course from each of the following fields: Political Theory and Methodology; American Politics; Comparative Politics; International Relations	16
Courses in Political Science as approved by major adviser.....	16
Total.....	36

DEGREE MINOR IN POLITICAL SCIENCE

Twenty-four units approved by the minor adviser are required, including at least 16 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 9 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

Lower Division

PSCI 120. American Government (4)

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 Politican Science (4)

To examine and to ascertain various concepts and theories of social and political significance. Emphasis is placed on broadening the understanding of political science as a discipline. (Formerly 220) Recommended for majors.

PSCI 201. Modern Political Ideologies (4)

Survey of modern ideologies, including Democracy, Communism, Nationalism and Fascism. (Formerly 222)

PSCI 260. Issues in International Politics (4)

Study of contemporary issues in international relations. Such topical items as East-West conflict, 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. Ancient and Medieval Political Thought (4)

Historical development of political philosophy from ancient times to seventeenth century. (Formerly 321) Prerequisite: PSCI 120.

PSCI 301. Modern Political Thought (4)

Political thought from seventeenth century to present, with emphasis on such European philosophers as Hobbes, Locke, Rousseau, and Marx. (Formerly 322) Prerequisite: PSCI 120

PSCI 310. Scope and Methods of Political Science (4)

An introduction to political analysis with emphasis on the focus and the requirements of empirical political research. (Formerly 326) Prerequisites: PSCI 120, MATH 160 or equivalent.

Political Science

PSCI 400. American Political Thought (4)

Main trends of American political thinking from colonial times to the present. Meets U.S. Constitution requirement for general education. (Formerly 323) Prerequisites: PSCI 120 and 301, or consent of instructor.

PSCI 401. Problems in Political Theory (4)

Analysis and discussion of selected issues and/or systems in political thought. (Formerly 324) Prerequisites: PSCI 120, 300 or 301, or consent of instructor.

PSCI 410. Survey Research (4)

Techniques in the systematic collection of individual data. (Formerly 420) Prerequisite: PSCI 310.

PSCI 411. Political Psychology (4)

The study of political man as an individual, and how he develops, maintains and changes his attitudes toward political phenomena. (Formerly 422) Prerequisites: PSCI 120, and 310 or equivalent.

PSCI 412. Political Socialization (4)

An examination of the major variables and processes related to political socialization. (Formerly 461) Prerequisites: PSCI 120, and 310.

AMERICAN POLITICS

PSCI 320. The Chief Executive (4)

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. (Formerly 353) Prerequisite: PSCI 120.

PSCI 321. Legislative Process (4)

Analysis of the procedures and politics of legislatures with emphasis on the American Congress; executive-legislative relations and proposals for congressional reform are also studied. (Formerly 354) Prerequisite: PSCI 120.

PSCI 322. Constitutional Law (4)

The study of the role of law in a society; the nature of law; development of the various lines of precedence in the specific areas of commerce, due process (procedural and substantive), nation-state relations, and the powers and limits of the national government. (Formerly 450) Prerequisite: PSCI 120.

PSCI 323. Political Parties (4)

Critical analysis of the organization and activities of political parties in the American political system; role of parties in campaigns and elections; their influence on the behavior of elected officials; evaluation of proposals for reform of parties. (Formerly 351) Prerequisite: PSCI 120.

PSCI 324. Interest Groups (4)

A study of the development and role of private and voluntary associations in the operation of American government. (Formerly 452) Prerequisite: PSCI 120.

PSCI 325. Public Opinion and Voting Behavior (4)

American voting behavior, political attitude and group decision-making. (Formerly 362) Prerequisite: PSCI 120.

PSCI 330. Public Administration (4)

An introductory study of the principles and problems of administrative organization. Specific areas of examination include: the relationship between bureaucracy and democracy, organization theory, personnel administration; fiscal management, and regulatory administration (Formerly 370) Prerequisite: PSCI 120.

PSCI 331. Urban Politics (4)

A study of urban politics and organization, including the social and economic problems of cities, and possible remedial actions of the state and federal governments. (Formerly 455)
Prerequisite: PSCI 120.

PSCI 420. Civil Liberties (4)

A study of the development and scope of civil liberties in the United States. Emphasis is placed on judicial review and enforcement of individual rights in such areas as speech; religion; criminal procedures; public school desegregation; voting; personal security; and legislative apportionment. (Formerly 356) Prerequisites: PSCI 120; PSCI 322 is recommended.

PSCI 421. The Judicial Process (4)

A study of judicial decision-making and of the organization of the American judiciary. Emphasis is placed on the federal courts. (Formerly 457) Prerequisites: PSCI 120, PSCI 322 is recommended.

PSCI 430. Organization Theory (4)

The administrative and policy areas have produced a great deal of new information as to the importance of complex organizations. This course is designed to acquaint the student with current research in this area. Prerequisite: PSCI 120; PSCI 330 is 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. Prerequisites: PSCI 120, PSCI 330 is recommended.

PSCI 432. Minority Politics (4)

An examination of political and social problems facing minority groups in the United States. Attention will be focused on the sources and manifestations of inequalities with special emphasis placed on analysis of recent innovative attempts to reduce discrimination. (Formerly 494) Prerequisites: PSCI 120; PSCI 331 is recommended.

COMPARATIVE POLITICS

PSCI 340. Comparative Politics: Europe (4)

A comparative analysis of some of the political systems in Western Europe. (Formerly 311) Prerequisite: PSCI 120

PSCI 341. Comparative Politics: Latin America (4)

An analysis of the political systems of Latin America; emphasis on political change and development. (Formerly 314) Prerequisite: PSCI 120

PSCI 342. Comparative Politics: Southeast Asia (4)

Survey and analysis of Southeast Asia political systems. Emphasis is placed on examining the various social and political forces that shape the political change and political development of that region. (Formerly 315) Prerequisite: PSCI 120

PSCI 343. Comparative Politics: Japan (4)

A study of political structure and the political dynamics of Japan in contemporary context. Emphasis is placed on broad examination of Japanese party politics, public opinion, voting behavior, the new middle class, and the foreign relations of Japan in the 1970's. (Formerly 412) Prerequisite: PSCI 120

PSCI 344. Comparative Politics: China (4)

To examine the political background through which the Communist regime took power in China; to analyze the goal of the State, the structure of the leadership, and the degree to which the Communist regime has succeeded in modernizing and developing the political system. (Formerly 411) Prerequisite: PSCI 120

Political Science

PSCI 345. Comparative Politics: U.S.S.R. (4)

An analysis of government, politics, and political development in the U.S.S.R. (Formerly 317) Prerequisite: PSCI 120

PSCI 346. Politics of the Underdeveloped Areas (4)

Comparative analysis of nation-building as a political process. Emphasis is placed on the political development in the underdeveloped countries of Asia, Africa, Latin America, and the Middle East. (Formerly 414) Prerequisite: PSCI 120

PSCI 440. Comparative Communist Systems (4)

A comparative analysis of ruling Communist Parties outside the U.S.S.R. Emphasis will be placed on Communism as a modernizing ideology. (Formerly 318) Prerequisite: PSCI 120; PSCI 345 is recommended.

PSCI 441. Political Change: A Study of Revolution (4)

A systematic and analytic study of revolution as one form of political change. (Formerly 462) Prerequisite: PSCI 120, PSCI 346 is recommended.

PSCI 442. Comparative Bureaucracies (4)

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 is recommended.

INTERNATIONAL RELATIONS

PSCI 360. International Relations (4)

Introduction to the elements of international relations. (Formerly 331) Prerequisite: PSCI 120

PSCI 361. Readings in International Relations (4)

Analysis and evaluation of a number of the significant writings in international relations. (Formerly 336) Prerequisite: PSCI 120

PSCI 362. Soviet Foreign Policy (4)

Analytical and historical examination of Soviet policy. Emphasis on the role of Communist ideology, Russian tradition, and the politics of the Soviet Union. (Formerly 434) Prerequisite: PSCI 120

PSCI 460. Approaches to the Study of International Relations (4)

Systematic study of the abstract, theoretical, and semi-formal aspects of international relations. (Formerly 333) Prerequisite: PSCI 120, PSCI 360 is recommended.

PSCI 461. National Security I (4)

Study of national security decision-making with emphasis on the role of the President and executive officials, Congress, the military and industry, survey and examination of American defense policy. Prerequisite: PSCI 120, PSCI 360 is recommended.

PSCI 462. National Security II (4)

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. Prerequisites: PSCI 120, PSCI 360 is recommended.

PSCI 463. Inter-American Affairs (4)

A study of political and economic relations among the countries of the Western hemisphere with particular emphasis on U.S. relations with other hemispheric nations. Such topical items as the Alliance for Progress, the Monroe Doctrine, the organization of American States, the Rio Treaty are included in the course. (Formerly 435) Prerequisite: PSCI 120

PSCI 495. Selected Topics in Political Science (Topics to be specified in the Class Schedule) (1-5)

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

PSCI 496. Senior Seminar (4)

Topic to be selected from one of the 5 major areas: Political Theory, Comparative Systems, International Relations, American Politics, Political Dynamics. May be repeated for a maximum of 8 units. Prerequisite: Consent of instructor.

PSCI 497. Seminar in Criminal Justice (4)

A seminar in the development of and trends in the administration of criminal justice. Emphasis is placed upon relevant constitutional, statutory, and procedural problems. Specific focus is 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 9 units. Prerequisite: Consent of instructor.

Psychology

Douglas A Spanier, Ph.D., Associate Professor, Chairman
W. Mack Goldsmith, Ph.D., Associate Professor
V. Kenneth Shrable, Ph.D., Associate Professor
Lewis E. Holt, Ph.D., Associate Professor
Stanley E. Sherman, Ph.D., Associate Professor
Frank C. Eichensehr, M.A., Assistant Professor
G. Thomas Peters, Ph.D., Assistant Professor
Thomas K. Dempsey, Ph.D., Assistant Professor
Helen Remick, 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, or plan to enter a profession or occupation in which a strong background in psychology is necessary, (2) wish to prepare for graduate work in psychology.

The Division of Arts and Sciences also offers a Bachelor of Arts, Social Sciences, with an interdepartmental major in psychology and any other two disciplines within the social sciences. (For further information, see Social Sciences.)

REQUIREMENTS FOR BACHELOR OF ARTS, PSYCHOLOGY

Psychology majors are to:

1. Complete requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 38 upper division units; as approved by the major adviser.
4. Completion of a minor or a special program in lieu of a minor; prior approval of the major adviser must be secured before undertaking either option.
5. Seniors are required to take the Undergraduate Record Examination the quarter in which they graduate.

DEGREE MAJOR IN PSYCHOLOGY

Prerequisites to the Major

PSYC 201. Introduction to Psychology, 4 units or equivalent

PSYC 202. Introduction to Psychological Methods, 4 units or equivalent

Required courses in supporting fields:

1. ANTH 206. Introduction to Cultural Anthropology, 4 units
or
SOCL 101. Introduction to Sociology, 4 units
2. BIOL 101. Principles of Biology, 5 units
or
ZOOL 105. Animal Diversity, 4 units
3. MATH 160.* Statistics, 4 units

* Under certain circumstances MATH 110 or MATH 150 will be accepted in lieu of MATH 160 with prior approval of the major adviser.

Major Requirements	<i>Units</i>
PSYC 304. Experimental Methods in Psychology I.....	5
PSYC 305. Experimental Methods in Psychology II.....	5
PSYC 496. Senior Seminar	4
or PSYC 497. Advanced General Psychology	
Upper division courses in psychology as approved by major adviser	24
Total.....	38

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, 4 units
- PSYC 316. Introduction to Psychological Testing, 4 units
- PSYC 335. Introduction to Abnormal Behavior, 4 units
- PSYC 379. Introduction to Counseling Theory, 4 units

Group II

- PSYC 309. Comparative Animal Behavior, 4 units
- PSYC 350. Introduction to Perception and Cognition, 4 units
- PSYC 370. Introduction to Learning and Motivation, 4 units

Group III

- PSYC 331. Introduction to Social Psychology, 4 units
- PSYC 332. Introduction to Personality, 4 units

DEGREE MINOR IN PSYCHOLOGY

1. Twenty-eight units in psychology.
2. Complete prerequisites to minor.
3. Twenty units in psychology approved by minor adviser, including at least 16 units in upper division courses.

Prerequisites to Minor:

- PSYC 201. Introduction to Psychology or equivalent, 4 units
- PSYC 202. Introduction to Psychological Methods or equivalent, 4 units

Areas of possible concentration in major or minor:

Area I—Learning and Motivation

- PSYC 370. Introduction to learning and Motivation, 4 units
- PSYC 471. Theory and Research in Learning, 4 units
- PSYC 472. Experimental Analysis of Behavior, 4 units
- PSYC 478. Theory and Research in Motivation, 4 units

Area II—Comparative and Physiological Psychology

- PSYC 309. Comparative Animal Behavior, 4 units
- PSYC 310. Introduction to Physiological Psychology, 4 units
- PSYC 409. Theory and Research in Comparative and Physiological Psychology, 4 units

Area III—Personality and Social Psychology

- PSYC 331. Introduction to Social Psychology, 4 units
- PSYC 332. Introduction to Personality, 4 units
- PSYC 432. Theory and Research in Personality, 4 units
- PSYC 481. Theory and Research in Social Psychology, 4 units
- PSYC 482. Group Dynamics Seminar, 4 units

Area IV—Clinical and Testing

- PSYC 313. Human Development, 4 units
- PSYC 314. Mental Deficiency, 4 units
- PSYC 316. Introduction to Psychological Testing, 4 units
- PSYC 335. Introduction to Abnormal Behavior, 4 units
- PSYC 379. Introduction to Counseling Theory, 4 units

Psychology

- PSYC 416. Advanced Tests and Measurement, 4 units
- PSYC 436. Theory and Research in Clinical and Abnormal Psychology, 4 units
- PSYC 491. Correlation and Theory of Tests, 4 units

Area V—Perception and Cognition

- PSYC 350. Introduction to Perception and Cognition, 4 units
- PSYC 450. Theory and Research in Perception, 4 units
- PSYC 451. Theory and Research in Cognition, 4 units

Area VI—Research and Systems

- PSYC 402. History of Psychology, 4 units
- PSYC 490. Psychological Research Design, 4 units
- PSYC 495. Seminar of Special Topics in Psychology, 4 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 9 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 30 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 offers graduate study leading to a Master of Science Degree in Psychology with a concentration in either Criminal Psychology or School Psychology.

Prerequisites for Admission to the Master of Science Degree Program:

1. A bachelor's degree with a minimum of 24 units in approved psychology courses or satisfactory performance on the Graduate Record Psychology Examination.
2. Superior performance in the undergraduate major (3.0 G.P.A.).
3. Completion of competency examinations administered by the department to determine those areas in which further preparation is required.*
4. Approval by the department and by the Graduate Dean.

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. Satisfactory completion of 8 units of approved Field Work (PSYC 592 and 593).
2. Satisfactory completion of approved thesis (5 units).
3. Satisfactory performance on all competency examinations.

Upon applying to the program, each student will be required to take preliminary examinations covering Basic Principles, Clinical Principles, and either Correctional Principles or School Psychology Principles. The following courses *may be required*, depending upon the student's performance on the respective area examinations:

† 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.

* A candidate's performance on the preliminary examinations does not affect admission to the program.

A. Basic Principles (17 units)

- PSYC 472. Seminar in Experimental Analysis of Behavior, 4 units
 - PSYC 500. Proseminar I (Applied Research Methods), 5 units
 - PSYC 501. Proseminar II (Advanced Learning), 4 units
 - PSYC 502. Proseminar III (Advanced Cognition), 4 units
- and:

B. Clinical Principles (20 units)

- PSYC 416. Advanced Psychological Testing, 5 units
 - PSYC 436. Theory and Research in Abnormal Clinical Psychology, 4 units
 - PSYC 513. Advanced Human Development, 4 units
 - PSYC 516. Individual Assessment, 3 units
 - PSYC 578. Advanced Counseling, 4 units
- and, *one* of the following specialty areas:

C. Correctional Principles (24 units)

- PSCI 497. Seminar in Criminal Justice, 4 units
- SOGL 421. Corrections, 4 units
- SOCL 422. Juvenile Delinquency, 4 units
- SOCL 423. Criminology, 4 units
- SOCL 424. Social Deviance and Control, 4 units
- SOCL 500. Seminar in Criminology, 4 units

D. School Psychology Principles (26 units)

- EDUC 504. Seminar: Philosophies of Education, 3 units
- EDUC 506. Seminar: Applied Theories of Learning, 3 units
- EDUC 535. Pupil Personnel Services Seminar, 3 units
- EDUC 561. School Organization and Administration, 3 units
- EDUC 576. Exceptional Children and Youth, 4 units
- EDUC 577. Seminar: Counseling and Guidance, 3 units
- EDUC 580. Legal Aspects of Education, 3 units
- PSYC 562. Advanced Individual Testing, 4 units

The candidate who has completed courses in those areas in which his initial test performance was unsatisfactory will be required to retake the competency examinations for those areas. However, with his adviser's approval, the student may challenge an examination prior to completion of the recommended course(s). Course credit will be given for all examinations successfully completed. The candidate must demonstrate competence in all areas prior to enrollment in the second field work experience or masters thesis units.

E. Elective Courses. Subject to prior approval of the adviser, the following elective courses may be accepted under the M.S. degree program:

- ANTH 401. Culture and Personality, 4 units
- PSYC 482. Group Dynamics Seminar, 4 units
- PSYC 491. Correlation and Theory of Tests, 4 units
- PSYC 532. Advanced Personality, 4 units
- PSYC 561. Individual Intelligence Testing, 4 units
- PSYC 581. Advanced Social Psychology, 4 units
- PSYC 590. Advanced Research Design, 4 units
- SPCH 470. Clinical Practice of Speech Disorders, 1-3 units
- SPCH 500. Psycholinguistics, 5 units

Or other courses as approved by the Departmental Graduate Committee

COURSE DESCRIPTIONS

Lower Division

PSYC 201. Introduction to Psychology (4)

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 (4)

Techniques and procedures for making observations in a variety of psychological situations. Psychological methods demonstrated through topics of current research and application. Prerequisite: PSYC 201 or equivalent. Required for all 300 level courses.

PSYC 203. Psychology of Marriage (4)

Psychological and ethical aspects of courtship, marriage and family life. (Formerly 300) Prerequisite: PSYC 201 or equivalent.

PSYC 221. Psychology of Adjustment (4)

The principles of personal adjustment; maintenance and enhancement of mental health. Prerequisite: PSYC 201.

PSYC 241. Applied and Industrial Psychology (4)

Application of psychological principles to business and industry, as well as to other fields. (Formerly 205 and 441) 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 304. Experimental Methods in Psychology I (5)

Quantitative and experimental methodology with emphasis on psychophysical methods and measurement. Includes understanding and performing of basic experiments. (Lecture 4 hours, Lab 3 hours) Prerequisites: PSYC 202, MATH 160 or equivalent.

PSYC 305. Experimental Methods in Psychology II (5)

Continuation of PSYC 304. Psychological scaling, techniques of data control, design and evaluation of experimental procedures. (Lecture 4 hours, Lab 3 hours) Prerequisite: PSYC 304.

PSYC 309. Comparative Animal Behavior (4)

Study of behavior systems in animals, including man, with reference to major psychological constructs. Prerequisite: PSYC 202. BIOL 101 is recommended.

PSYC 310. Introduction to Physiological Psychology (4)

Relationship between behavior and physiological processes, particularly neurophysiological processes. Prerequisites: PSYC 202. ZOOL 323 is recommended.

PSYC 313. Human Development (4)

The psychology of development: infancy, childhood, adolescence, and maturity. Prerequisite: PSYC 202.

PSYC 314. Mental Deficiency (4)

The etiology, diagnosis and remediation of mental deficiency. (Formerly 413) Prerequisite: PSYC 313.

PSYC 316. Introduction to Psychological Testing (4)

Principles of psychological testing presented in a non-technical way. Descriptions of representative types of tests in common use. Prerequisite: PSYC 202.

PSYC 330. Social Psychology Laboratory (2)

Laboratory experiments to demonstrate the variety of methods and content areas in social psychology such as social reinforcement and attitude change, impression formation, deviation and conformity. Prerequisite: Concurrent enrollment in PSYC 331 or permission of instructor.

PSYC 331. Introduction to Social Psychology (4)

Interpersonal relations including social attitudes, opinions; social structure and group dynamics. (Formerly 431) Prerequisite: PSYC 202.

PSYC 332. Introduction to Personality (4)

Introduction to concepts of normal personality functioning. (Formerly 321) Prerequisite: PSYC 202.

PSYC 335. Introduction to the Study of Abnormal Behavior (4)

Abnormal behavior in man, stressing symptoms and dynamics of neuroses and psychoses. (Formerly 435) Prerequisites: PSYC 202 plus 2 additional courses in psychology. PSYC 313 and PSYC 332 are recommended.

PSYC 350. Introduction to Perception and Cognition (4)

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 370. Introduction to Learning and Motivation (4)

Basic phenomena of learning and motivation such as: instrumental and classical conditioning, stimulus generalization, verbal learning, transfer and retention, drives, rewards, punishment. Prerequisite: PSYC 202.

PSYC 379. Introduction to Counseling Theory (4)

Introduction to major theories of counseling. Demonstrations and review of current literature. (Formerly 477) Prerequisite: PSYC 331, or 332, or 335.

PSYC 402. History of Psychology (4)

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 409. Theory and Research in Comparative and Physiological Psychology (4)

Psychophysiological theory and research as it relates to comparative study of animal behavior, including man. Prerequisites: PSYC 304, 309 and 310 or consent of instructor.

PSYC 413. Early Child Development (4)

Psychological development during the first five years of life: emphasis on learning and perceptual-motor development. Prerequisite: PSYC 313 or consent of instructor.

PSYC 416. Advanced Tests and Measurements (5)

Advanced concepts of psychological measurement as applied to the evaluation and use of psychological tests with emphasis on group tests. Prerequisites: PSYC 304 and 316. (Lecture 4 hours, Laboratory 3 hours)

PSYC 432. Theory and Research in Personality (4)

Theory and research in the field of personality. Prerequisite: PSYC 332.

PSYC 436. Theory and Research in Clinical and Abnormal Psychology (4)

Theory and research in clinical and abnormal psychology with emphasis on diagnostic and treatment systems. Prerequisites: PSYC 313 or 332 and PSYC 316, 335.

Psychology

PSYC 450. Theory and Research in Perception (4)

Classical and contemporary theories and problems in perception. Prerequisite: PSYC 304 and 350.

PSYC 451. Theory and Research in Cognition (4)

Theories and problems in attention and thinking such as: consciousness, psycholinguistics, creativity, decision making. Prerequisites: PSYC 304 and 350. PSYC 305 is recommended.

PSYC 471. Theory and Research in Learning (4)

Classical and contemporary theories on research in the learning process. Prerequisites: PSYC 304 and 370. PSYC 305 is recommended.

PSYC 472. Seminar in Experimental Analysis of Behavior (4)

Study of the advanced applications and methods in operant research. Prerequisites: PSYC 304 and 370, satisfactory score on exam, or consent of instructor.

PSYC 478. Theory and Research in Motivation (4)

Theories and major research areas in motivation. Prerequisites: PSYC 304 and 370.

PSYC 481. Theory and Research in Social Psychology (4)

Advanced study of social behavior emphasizing theories and research in social perception, social motivation, social attitudes. Prerequisite: PSYC 331.

PSYC 482. Group Dynamics Seminar (4)

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. Prerequisites: PSYC 304 and 331, or consent of instructor. (Seminar, 3 hours, Lab, 3 hours)

PSYC 490. Psychological Research Design (4)

Application of quantitative inferential procedures to the design of psychological research. Prerequisites: PSYC 305 and senior standing.

PSYC 491. Correlation and Test Theory (4)

Correlation and factor analytic concepts and procedures as they apply to evaluation of psychological data and construction of tests. Prerequisites: PSYC 305 or consent of instructor. PSYC 416 is recommended.

PSYC 495. Selected Topics in Psychology (1-5)

Development of a specific area in psychology. Topics will vary depending on instructor. May be repeated for a total of 8 units. Prerequisite: Consent of instructor. PSYC 304 and one psychology course at 400 level are recommended.

PSYC 496. Senior Seminar (4)

Review and discussion of current literature on general psychological topics. Prerequisites: PSYC 305 and senior standing.

PSYC 497. Advanced General Psychology (4)

Review of the major content areas of psychology. Synthesis of concepts, facts and methods studied in specialized upper division courses. Prerequisites: PSYC 305 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 9 units. Prerequisite: Consent of instructor.

Graduate

PSYC 500. Proseminar I (5)

A survey of advanced psychological methods applicable to human research problems. Prerequisite: Graduate standing and consent of instructor.

PSYC 501. Proseminar II (3)

Study of advanced principles of learning and motivation with special reference to human learning. Prerequisites: PSYC 500 or satisfactory performance on PSYC 500 examination.

PSYC 502. Proseminar III (3)

Study of advanced principles of perception and cognition with emphasis on the techniques of studying these phenomena. Prerequisites: PSYC 500 and 501, or satisfactory performance on PSYC 502 examination.

PSYC 513. Advanced Human Development (4)

Empirical research on theoretical constructs in human development. Prerequisites: PSYC 313 or equivalent and four upper division courses in psychology.

PSYC 516. Individual Assessment (3)

Intensive training in the administration, scoring and interpretation of a variety of techniques used in the individual assessment of human behavior. Students will be supervised in assessment practice and in the preparation of reports. Prerequisite: PSYC 416, or satisfactory performance on PSYC 416 examination.

PSYC 532. Advanced Theory of Personality (4)

Research in personality structure and dynamics. Prerequisites: PSYC 305 and 432.

PSYC 561. Individual Intelligence Testing (4)

Administration, scoring, interpretation of Wechsler and Binet tests of intelligence. Prerequisites: PSYC 305, 416 and consent of instructor. PSYC 491 is recommended.

PSYC 578. Advanced Counseling (4)

Counseling practices including commonly used methods of psychotherapy practice in techniques of counseling. See EDUC 578. Prerequisite: PSYC 379 PSYC 436 is recommended.

PSYC 581. Advanced Social Psychology (4)

Theories and research in social psychology. Prerequisites: PSYC 305 and 481.

PSYC 590. Advanced Research Design (4)

Advanced techniques of experimental design. Prerequisite: PSYC 490.

PSYC 592. Field Work in Psychology I (4)

Work of a psychological nature performed in schools, agencies and institutions under joint supervision of the college and agency where assigned. Prerequisites: Graduate standing, consent of instructor.

PSYC 593. Field Work in PSYC II (4)

Internship in psychology which includes working in a variety of positions within a specific community agency. Under joint supervision of college and agency concerned. Prerequisites: PSYC 592 and consent of instructor.

PSYC 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.

Psychology

PSYC 599. Master's Thesis (5)

Preparation of a thesis in area of specialty to fulfill requirements. Prerequisite: Admission to classified graduate standing (satisfactory performance on competency examinations).

Social Sciences

John E. Caswell, Ph.D., Coordinator

The student seeking a Bachelor of Arts, Social Sciences, may elect an interdepartmental major in social sciences. A major in the social sciences may serve as an academic major for the elementary teaching credential.

REQUIREMENTS FOR BACHELOR OF ARTS, SOCIAL SCIENCES

Social Sciences Interdepartmental majors are to:

1. Complete the requirements for the Bachelor of Arts Degree.
2. Complete the major of not less than 48 upper division units approved by the major adviser in three of the following disciplines: anthropology, economics, geography, history, political science, psychology, and sociology. The student must satisfactorily complete 16 upper division units in each of three selected disciplines.

Recommended courses:

- A. Anthropology: Prerequisite: ANTH 206.
 1. Anthropology 365.
 2. Three courses from ANTH 306, 307, 404, 309, 335, 336, 402, or 421
- B. Economics: Prerequisite: ECON 250 or equivalent. One course from each of four of the following fields:
 1. Economic Theory and Doctrine (ECON 315, 331, 400, 420, 401, 402)
 2. Public Finance and Fiscal Policy (ECON 454, 455, 456)
 3. International Economics (ECON 405, 440, 441, 442, 443, 444, 445)
 4. Money and Banking (ECON 332, 333)
 5. Labor Economics (ECON 410, 411)
 6. Economic History (ECON 310, 311)
- C. Geography: Prerequisite: GEOG 201 or 202 or 240 or 241. At least four upper division courses, one of which must be selected from group 1 and one from group 2:
 1. Topical Geography (GEOG 310, 330, 335, 402, 495)
 2. Regional Geography (GEOG 351, 352, 355, 357, 451, 495)
- D. History: Prerequisite: HIST 101, or 102, or 103 or equivalent. Entire sequence recommended. At least one lower or upper division course in each of the following fields:
 1. European History
 2. United States History
 3. Non-Western History
- E. Political Science: Prerequisite: PSCI 120 (formerly 202) and 200 (formerly 220)
 1. American Politics: Select two courses at the 300 level.
 2. Select two courses at the 300 level from two of the following

Social Sciences

fields:

Political Theory and Methodology
Comparative Politics
International Relations

F. Psychology: Prerequisite: PSYC 201, 202

1. PSYC 313.

2. At least 3 courses selected from the following:

PSYC 314, 331, 332, 335, 432, 481.

G. Sociology: Prerequisite: SOCL 101, 102. Select two courses from each of the following categories:

1. Family, Community, and Social Structure: SOCL 301, 315, 321, 331, 372, or 440.

2. Specialized Courses: SOCL 241, 344, 361, 400, 424, 432, or 451.

DEGREE MINOR IN SOCIAL SCIENCES

A minor in social sciences is not offered. For requirements for minors in the social sciences, see sections of this catalog pertaining to anthropology, economics, geography, history, political science, psychology, and sociology.

TEACHING CREDENTIALS

Majors in social sciences seeking elementary and secondary credentials:

1. For students seeking the Standard Elementary credential, the interdepartmental major in social sciences is recommended.

2. Students seeking the Standard Secondary Credential who elect the interdepartmental major must have at least 24 upper division units in history, geography, political science, or economics. Anthropology, psychology, and sociology are not commonly taught in the secondary schools.

Sociology

Joel S. Canby, Ph.D., Professor, Chairman
 Harriet C. Stull, Ph.D., Professor
 Antonio Donini, Ph.D., Associate Professor
 Joseph A. Novack, Ph.D., Associate Professor
 Donald W. Bowers, M.A., Assistant Professor
 Frank Tripi, Ph.D., Assistant Professor

The Department of Anthropology/Geography/Sociology offers the Bachelor of Arts, Sociology. The major is designed to provide a comprehensive academic experience in sociology. For the student seeking a liberal education, the major gives an insight into this important aspect of human relationships. The student, with the consent of his adviser, selects courses which provide a background in theory, research and selected specialized areas.

The student may arrange his program to attain background for professional roles in social welfare services, corrections and other related services, teaching, institutions, and organizations.

The college also offers the degree of Bachelor of Arts, Social Sciences. The student seeking this degree may select an interdepartmental major in sociology and any two other disciplines within the social sciences. (For further information, see Social Sciences.)

REQUIREMENTS FOR THE BACHELOR OF ARTS, SOCIOLOGY

Sociology majors are to:

1. Complete requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 40 upper division units, as approved by the major adviser.
4. Completion of a minor is not required.

DEGREE MAJOR IN SOCIOLOGY*

Lower Division Requirements

SOCL 101, 102, 203, 241. Introduction to Sociology; Contemporary Sociology; Sociological Analysis; History of Social Thought, 16 units.

ANTH 206. Introduction to Cultural Anthropology, 4 units.

(MATH 160. Statistics is strongly recommended)

Upper Division Requirements

Units

A minimum of 40 upper division units distributed as follows:

Theory & Methodology (SOCL 303, 341, 441)	12
Electives from Sociology	28
Total.....	40

DEGREE MINOR IN SOCIOLOGY

Twenty-eight units approved by the minor adviser are required, including SOCL 101, 102, 203, 241, 341, and at least 20 units in upper division courses.

*Prerequisite for all upper division courses for majors: 101, 102 or consent of instructor

Sociology

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 9 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.

COURSE DESCRIPTIONS

Lower Division

SOCL 101. Introduction to Sociology (4)

Basic concepts and perspectives in sociological analysis. This course together with SOCL 102 is a prerequisite for 300 and 400 level courses.

SOCL 102. Contemporary Sociology (4)

A survey of theoretical and empirical work in present-day sociology. Prerequisite: SOCL 101.

SOCL 203. Sociological Analysis (4)

Analysis of sociological variables in terms of conceptualization, measurement, graphic and tabular presentation; hypothesis formation and testing. Prerequisite: SOCL 101 and 102 or equivalent.

SOCL 224. Social Problems in the United States (4)

A study of selected social problems in our society including causes, interrelationships and programs of amelioration. Prerequisite: SOCL 101 or 102 or consent of instructor.

SOCL 241. History of Social Thought (4)

Development of social theories from ancient times to the 20th Century. Stress on some of the precursors of sociology. (Formerly 341)

SOCL 295. Selected Topics in Sociology (Topics to be specified in Class Schedule) (1-5)

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

Upper Division

SOCL 301. Race and Ethnic Relations (4)

The sociology of minority group relations; with attention to specific racial, ethnic, and religious minorities. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 315. The Family (4)

Social structure and changing functions of the modern family. Social interaction. Recent research and theoretical developments. Prerequisites: SOCL 101 and 102 or consent of instructor.

SOCL 320. Social Change (4)

Sociology and social change, types and problems of change, factors in rate and direction, resistance to and acceptance of change, classic and modern theories on social change, structural-functional analysis of change. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 321. Urban Sociology (4)

The urban concept; origin and development of urban areas; effects of urbanization on social institutions and social relations; research methods applied to urban life and form. Prerequisite: SOCL 101 and 102 or consent of instructor.

*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 331. Social Stratification (4)

Origins, characteristics, and functions of social classes and castes; emphasis on recent research and theoretical developments. Prerequisites: SOCL 101 and 102 or consent of instructor.

SOCL 342. Population Theory and Research (4)

World population theory and empirical studies from Malthus to the present, natality and mortality trends, basic sources of data and their research uses. Prerequisites: SOCL 101 and 102 or consent of instructor.

SOCL 344. Black Studies (4)

Examination of the economic, political, religious and psychological sources of stability and of change in the black communities of the United States. Prerequisite: Junior standing, SOCL 101 and 102 or consent of instructor.

SOCL 361. Small Groups (4)

Structure and dynamics of small human groups; theory, research methods and empirical findings. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 372. Social Welfare Services (4)

Study of the private and public policies relative to public welfare as they have developed with particular reference to American society. Prerequisite: SOCL 101 and 102.

SOCL 400. Mexican-American Studies (4)

Sociological analysis of the Mexican-American minority in American society. Prerequisite: Junior standing, SOCL 101 and 102 or consent of instructor.

SOCL 421. Corrections (4)

Special measures of prevention and treatment, probation, imprisonment, correctional institutions and classification, programs in correctional institutions, correctional institutions as social systems, sub-cultures in correctional institution, parole.

SOCL 422. Juvenile Delinquency (4)

Characteristics of the juvenile delinquent and the youth under the age of criminal adulthood. Powers, procedures, and rationale of specialized courts. Probation. Juvenile Halls. The youth authority concept; facilities, programs, criticism. Preventive measures, tests of effectiveness of control methods.

SOCL 423. Criminology (4)

Theories, causes, characteristics, and social function of crime and delinquency in our society. The administration of criminal justice and the methods of prevention and reduction of crime will be analyzed. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 424. Social Deviance and Control (4)

Examination of the normative structure and control mechanisms of the social system. Theories of deviant behavior, and relevant modern research. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 432. Sociology of Religion (4)

Sociological analysis of religious belief, behavior, and organization; classical and current theory and research. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 440. Social Organization (4)

Analysis of various types of organizations in American Society; internal and external processes and organizational structure. Prerequisite: SOCL 101 and 102 or permission of instructor.

Sociology

SOCL 445. Theories of Community (4)

Historical examination and critical analysis of the most important classic and modern sociological theories of community. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 451. Personality, Culture, and Social Structure (4)

Relations between personality and social structure in a cultural context. Socialization and the allocation of status. Research methods and empirical findings. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 460. Industrial Sociology (4)

Sociological analysis of industrial and other institutions of employment and work; work relations, labor unions, management policies, and industrialization as a worldwide phenomena. Prerequisite: SOCL 101 and 102 or consent of instructor.

SOCL 495. Selected Topics in Sociology (1-5)

Topic to be specified in the *Class Schedule*. Topics vary each term, thus may be repeated for credit. Prerequisite: Consent of instructor.

SOCL 496. Senior Seminar (4)

Seminar for seniors majoring or minoring in sociology. Review and discussion of selected topics in sociology. Each student will be expected to report on an individual project. Prerequisite: Consent of instructor.

SOCL 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.

SOCL 500. Seminar in Criminology (4)

Advanced study of crime causation and criminal classification; specialized group and individual treatment approaches.

THEORY AND METHODOLOGY

SOCL 303. Research Design in Sociology (4)

Development of designs for survey research; applications to the operating context of a survey. Prerequisite: SOCL 203.

SOCL 403. Research Techniques (4)

Techniques of sociological research; questionnaire construction, interviewing techniques, scale construction and data analysis. Prerequisite: SOCL 303.

SOCL 341. Modern Sociological Theory I (4)

Critical analysis of the classical sociological theories of Comte, Pareto, Weber, Durkheim, Mannheim, and other classic sociologists. Prerequisite: SOCL 241.

SOCL 441. Modern Sociological Theory II (4)

Major contributions to our systematic sociological theory. Reading and critical analysis of selected works from Sorokin, Parsons, Merton, and other leading contemporary sociologists. Prerequisite: SOCL 341.

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
William J. Worthley, Ph.D., 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 40 upper division units.
4. Completion of a minor is not required.

DEGREE MAJOR IN SPEECH

Prerequisites to the Major

SPCH 200. Speech Communication, 4 units
One of the following as approved by the major adviser:
SPCH 210. Group Discussion, 4 units
SPCH 240. Oral Interpretation, 4 units

The Major

	<i>Units</i>
SPCH 300. Phonetics.....	4
SPCH 305. General Semantics	4
SPCH 312. Speech Composition	4
SPCH 361. Introduction to Communication Disorders.....	4
SPCH 400. Communication Theory	4
Upper division courses in speech as approved by major adviser.....	20
Total.....	40

Speech Communication

DEGREE MINOR IN SPEECH

(26 units, to include at least 18 units in upper division)

Lower Division

SPCH 200. Speech Communication, 4 units

One of the following as approved by minor adviser, 4 units:

SPCH 210. Group Discussion

SPCH 240. Oral Interpretation

Upper Division

SPCH 300. Phonetics or SPCH 467. Structural Linguistics and Phonology, 4 units

SPCH 305. General Semantics, 4 units

SPCH 312. Speech Composition, 4 units

Six units as approved by minor adviser to constitute a concentration in general speech or communication science.

TEACHING 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. Secondary credential candidate must complete 9 units in courses in speech as postbaccalaureate work and receive approval of speech as to subject matter competence.
3. 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 requirements for area specialization in communication science.
- 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 education in Communication Science and Pathology and related areas to include *either*:
 - (1) 45 quarter (30 semester) units of upper division and/or graduate course work
 - OR*
 - (2) A master's degree in speech and satisfactory completion of an Oral Communication Skills Examination.
- d. Admission to credentials program on recommendation of the Credentials Admission Committee.

2. Specialized Preparation

- a. 90 quarter units shall include undergraduate and graduate preparation in the development and disorders of speech, hearing and language, and cognate fields and the clinical management of disorders of communication. Courses to be selected from SPCH 300, 360, 361, 364, 365, 400, 461, 463, 464, 466, 467, 470, 500, 560, 561, 562, 563, 564, 565, 570, 571, 598, 641, and 642; PSYC 304, 313, 332, 335, 370 and 379.

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 requirements 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 40 undergraduate quarter units in speech including core course requirements for completion of the B.A. degree with concentration in communication science and cognate fields, to include the following:
 - Speech 300. Phonetics
 - Speech 360. Language Behavior and Development
 - Speech 361. Introduction to Communication Disorders
 - Speech 364. Speech and Hearing Science
 - Speech 400. Communication Theory
 - Speech 460. Diagnostic Methods in Communication Disorders
 - Speech 461. Communication Disorders I (Language)
 - Speech 462. Communication Disorders II (Speech)
 - Speech 463. Audiology
 - Psychology 335. Intro to Study of Abnormal Behavior
5. Satisfactory completion of a qualifying examination in communication pathology administered by the department after the completion of one quarter in course work beyond the baccalaureate degree.

Continuation in the Program

The student is formally admitted to the program after completion of one quarter 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 with concentration in Communication Pathology is awarded after completion of the following requirements:

1. 45 quarter 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 15 units) are applicable upon advisement.
2. A grade point average of 3.0 or better earned in graduate level course work.
3. Satisfactory completion of an acceptable thesis.
4. Satisfactory completion of a comprehensive written and oral examination covering SPCH 597, 599 and related course work.
5. Reading knowledge of an appropriate foreign language is recommended.

SPEECH Lower Division

SPCH 200. Speech Communication (4)

Fundamentals of oral communication with emphasis on the nature of logical discourse. Theory and practice of oral communication applied through preparation, presentation, and criticism of speeches. Required for General Education.

Speech Communication

SPCH 210. Group Discussion (4)

Organization and conduct of group discussion. Participation in small group discussions. Emphasis on gathering and presenting information, problem solving and decision making in the group setting.

SPCH 211. Argumentation and Debate (4)

Theory of argumentation as applicable to formal debate. Classroom practice in competition debate. (Formerly 311)

SPCH 240. Oral Interpretation (4)

Fundamentals of theory; techniques and practices in communicating from the printed page.

SPCH 292. Forensics Workshop I (1-2)

Preparation for and participation in intercollegiate forensics competition. Opportunity for participation in various on-campus and community speech activities. SPCH 292 and 392 may be repeated for a total of twelve units. (Formerly 310)

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.

Upper Division

SPCH 300. Phonetics (4)

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 305. General Semantics (4)

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 312. Speech Composition (4)

Advanced study of fundamentals of oral communication as applied to public address. Emphasis on research and analysis of significant current problems, invention and arrangement of persuasive appeals, and effective oral presentation. Prerequisite: SPCH 200 is recommended.

SPCH 340. Oral Interpretation of Children's Literature (4)

Application of principles of oral communication to interpretation of children's literature. Types of children's literature, with emphasis on criteria for selection of literature for oral interpretation. Prerequisite: Consent of instructor; SPCH 240 is recommended.

SPCH 341. Oral Interpretation of Literature (4)

Application of principles of oral communication as they pertain to interpretation of poetry, prose, descriptive and dramatic literature. Prerequisite: Consent of instructor; SPCH 240 is recommended.

SPCH 342. Special Forms of Oral Interpretation (4)

Study of special and experimental forms of oral interpretation, individual and group. Performance experience with various forms. Prerequisite: SPCH 240 or consent of instructor.

SPCH 360. Language and Speech Development (4)

Patterning and development of normal speech and language in children considered from neurological, psychological and semantic standpoints; functional analysis of verbal behavior. Relationship of speech and language learning to perception, cognition, bilingualism and language change. An introduction to the correction of speech and language disorders as they relate to the development of language skills of the child.

SPCH 361. Introduction to Communication Disorders (4)

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 settings. Guided observations. Prerequisite: Concurrent enrollment in SPCH 300 or consent of instructor.

SPCH 364. Speech and Hearing Science (4)

Anatomical and physiological characteristics of normal speech and hearing mechanisms, and their relationship to the fundamental acoustics of speech. Physiology and neurology of the speaking act. Prerequisite: SPCH 300 or consent of instructor.

SPCH 365. Introduction to Psychoacoustics (3)

Background and research relating to acoustics and the psychology of hearing. Survey of methods and techniques of measurements employed in hearing science.

SPCH 392. Forensics Workshop II (1-2)

Preparation for and participation in intercollegiate forensics competition. Opportunity for participation in various on-campus and community speech activities. SPCH 292 and 392 may be repeated for a total of 12 units. Prerequisite: SPCH 292 or consent of instructor. (Formerly 311).

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: SPCH 305 or 360 or consent of instructor.

SPCH 410. Group Communication (4)

Principles and practice of group discussion, conference development and leadership in democracy. Small group theory as it relates to group problem solving in education, industry, and community affairs. Prerequisite: SPCH 210 or consent of instructor.

SPCH 412. Theory of Persuasion (4)

Theory of argument: evidence, reasoning, and processes of motivation. Systematic evaluation of issues, organization and preparation of materials intended to influence group opinion and action. Prerequisite: Consent of instructor; SPCH 200 is recommended.

SPCH 414. Rhetorical Theory (4)

Rhetorical theory from classical to modern times. Influence of Aristotelian principles on development of rhetorical thought. Significant movements in development of rhetorical theory in France, Great Britain, and United States. Prerequisite: Senior standing or consent of instructor.

SPCH 440. Reader's Theatre (4)

Cutting, arranging, and performing all forms of literature in the theatrical setting. (Formerly DRAM 440) Prerequisite: Consent of instructor.

SPCH 460. Diagnostic Methods in Communication Disorders (4)

Principles and procedures in diagnosis of communication disorders. Case history taking, administration of diagnostic tests, interviews, reporting, and parent-teacher counseling. Concurrent enrollment in SPCH 470 for one unit is required. Prerequisites: SPCH 360, 361,

Speech Communication

or equivalent.

SPCH 461. Communication Disorders I (Language) (3)

Symposia on disorders related to the symbolizing processes. Relationship to the communication problems of the multiply handicapped child. Practicum in clinical diagnostics. Students are required to register concurrently in SPCH 470 for one unit. Prerequisite: SPCH 361 or consent of instructor.

SPCH 462. Communication Disorders II (Speech) (3)

Continuation of SPCH 461. Symposia on disorders related to functional and organic causes; relationship to the speech and language problems of the multiply handicapped child. Presented by members of the staff. Practicum required. Students are required to register concurrently in SPCH 470 for one unit. Prerequisite: SPCH 361 or consent of instructor.

SPCH 463. Audiology (4)

Anatomy and pathologies of hearing mechanism. Acoustics and puretone testing techniques; theory and practice in group puretone screening tests; development and administration of hearing conservation programs; interpretation of hearing test results; basis for referral and follow-up procedures, and practicum in audiometrics. Students are required to register concurrently in SPCH 471 for one unit. Prerequisite: SPCH 361 or consent of instructor.

SPCH 464. Language Development of the Hard of Hearing (4)

Theories of hearing. Interrelationship between hearing and pathology of the hearing mechanism; linguistic variables in the development of language of the deaf and hard of hearing. Acoustical, psychological and linguistic procedures in rehabilitation. Guided observations required. Concurrent enrollment in SPCH 471 for one unit is required. Prerequisite: SPCH 300 or consent of instructor.

SPCH 466. Speech Reading and Auditory Training (4)

Basic principles of speech and language development by observation of visible aspects of oral communication. Techniques of speech reading, auditory training, and speech improvement with impaired hearing. Concurrent enrollment in SPCH 471 for one unit is required. Prerequisite: SPCH 464 recommended.

SPCH 467. Structural Linguistics (4)

Study of the structure of language systems from the standpoint of the phonemic, morphemic and syntactical levels of organization; practice in the construction of grammatical models based upon structural and transformational approaches to linguistic analysis, comparison of the structures of principal English, Germanic and Romanic language dialects. Prerequisite: SPCH 300, SPAN 468, FREN 468, or consent of instructor.

SPCH 470. Clinical Practice: Speech and Language Disorders (1-3)

Supervised work with representative cases in articulation, stuttering, aphasia voice disorders, delayed speech and language, cleft palate, voice and cerebral palsy speech disorders. Internship is in both on-campus and off-campus settings. May be repeated for a total of 9 quarter units. Prerequisite: Admission to clinical program.

SPCH 471. Clinical Practice: Hearing Disorders (1-3)

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 is in both on-campus and off-campus settings. May be repeated for a total of 9 quarter units. Prerequisite: Admission to clinical program.

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. Senior Colloquium in Speech and Communication Science (4)

Synthesis of philosophies of oral communication represented by analyses of research. Prerequisite: 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 9 units. Prerequisite: Consent of instructor.

SPCH 500. Psycholinguistics (5)

Study of the process of communication as the sciences of encoding and decoding messages in the production and reception of oral language. Prerequisite: SPCH 400 or consent of instructor.

SPCH 560. Seminar: Aphasia and Symbolic Disorders (4)

Etiology, diagnosis, and therapy of aphasia. Problems related to the treatment of aphasia and related symbolic disorders. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 561. Seminar: Stuttering (4)

Theories and research in stuttering and neurological disorders. Guided observations, class discussions and evaluations. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 562. Seminar: Cleft Palate Speech (4)

Etiology, surgical and therapeutic procedures, parental counseling. Guided observation, discussion and evaluation. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 563. Seminar: Developmental Communication Disorders (4)

Diagnosis and treatment of developmental communication disorders including delayed speech and language; articulation, and related problems of learning secondary language skills of reading, spelling and writing. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 564. Seminar: Clinical Audiology (5)

Advanced procedures for the measurement of hearing loss; diagnosis of hearing disorders; theory and practice of hearing aid design and fitting in aural rehabilitation. Concurrent enrollment in SPCH 571 for one unit is required. Prerequisite: Consent of instructor.

Graduate

SPCH 500. Psycholinguistics (5)

Study of the process of communication as the sciences of encoding and decoding messages in the production and reception of oral language. Prerequisite: SPCH 400 or consent of instructor.

SPCH 560. Seminar: Aphasia and Symbolic Disorders (4)

Etiology, diagnosis, and therapy of aphasia. Problems related to the treatment of aphasia and related symbolic disorders. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 561. Seminar: Stuttering (4)

Theories and research in stuttering and neurological disorders. Guided observations, class discussions and evaluations. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

Speech Communication

SPCH 562. Seminar: Cleft Palate Speech (4)

Etiology, surgical and therapeutic procedures, parental counseling. Guided observation, discussion and evaluation. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 563. Seminar: Developmental Communication Disorders (4)

Diagnosis and treatment of developmental communication disorders including delayed speech and language; articulation; and related problems of learning secondary language skills of reading, spelling and writing. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 564. Seminar: Clinical Audiology (5)

Advanced procedures for the measurement of hearing loss; diagnosis of hearing disorders; theory and practice of hearing aid design and fitting in aural rehabilitation. Concurrent enrollment in SPCH 571 for one unit is required. Prerequisite: Consent of instructor.

SPCH 565. Seminar: Voice Disorders (4)

Etiology and treatment of specific disorders of pitch, quality and intensity; techniques for analysis of deviancy. Therapeutic observation of laryngectomized and dysphonia cases conducted in clinical and hospital environment. Concurrent enrollment in SPCH 570 for one unit is required. Prerequisite: Consent of instructor.

SPCH 570. Advanced Clinical Practice: Speech and Language Disorders (1-3)

Supervised work with representative advanced cases in stuttering, aphasia and voice disorders. 15 contact hours are required for each quarter unit of credit earned. May be repeated for a total of 9 units. (Formerly 660) Prerequisite: Admission to clinical program.

SPCH 571. Advanced Clinical Practice: Hearing Disorders (1-3)

Supervised work with representative cases of hearing disorders. Includes auditory training, lipreading, language development for the hard of hearing. 15 contact hours required for each quarter unit earned. May be repeated for a total of 9 units. (Formerly 661) Prerequisite: Admission to clinical program.

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 (5)

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 and PSYC 304 or demonstrated competency in fundamental psychological statistics.

SPCH 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.

SPCH 599. Thesis (4-8)

Thesis research. Prerequisite: Special permission.

SPCH 641. Clinical Practice in Communication Disorders in Public Schools I (3)

Supervised screening and identification of communication disorders in the public schools setting, preparation of case studies so identified, keeping of records, and observation of public school therapy in process. Prerequisite: SPCH 300, 360, 361, 461, 462, 463, and 45 clinical clock hours in Speech 470, or 570 and 571.

Speech Communication

SPCH 642. Clinical Practice in Communication Disorders in Public Schools II (Continuation of SPCH 641) (6)

Supervised therapy of communication disorders in the public school setting. Prerequisite: SPCH 641. 15 contact hours required for each quarter unit earned. A maximum of 90 contact hours may be earned for 6 quarter units of credit.

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
- Aamodt, 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
 B.A., 1967, Berea College; M.A., 1968, Ph.D., 1971, University of California, Los Angeles
- *Ahlem, Lloyd H. (1962) Professor of Psychology
 A.B., 1952, M.A., 1955, San Jose State College; Ed.D., 1962, University of Southern California; Certified Psychologist, 1959, State of California
- 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
- Armstrong, Corinne P. (1972) Visiting Lecturer in Anthropology
 B.A., 1964, M.A., 1965, University of California, Los Angeles
- Aubert, Edward J. (1961) Director of Admissions and Records
 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
- Barker, Paul M. (1971) Visiting Lecturer in Anthropology
 A.B., 1933, Wittenberg University; M.S., 1941, Kansas State Teachers College; B.D., 1945, Colgate-Rochester Divinity School
- 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
- Bell, Jo P. (1968) Bibliographer
 B.A., 1964, M.A., 1966, University of Minnesota
- Bennett, Agnes L. (1961) Head Catalog Librarian
 A.B., 1951, Luther College; A.M.L.S., 1952, University of Michigan
- Berg, Michael J. (1970) Assistant Professor of Mathematics
 A.B., 1965, Brandeis University; A.M., 1968; Ph.D., 1970, Dartmouth College
- 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
- Blanche, A. Patrick (1971) Visiting Lecturer in French
 B.S., 1967, Ecole Superieure De Commerce De Paris, France; M.A., 1969, West Virginia University
- Booker, James L. (1970) Assistant Professor of Chemistry
 B.S., 1963; M.S., 1965, Texas Technological College; Ph.D., 1970, University of Washington
- Bowen, James C. (1970) Assistant Professor of Physical Education
 B.A., 1965, University of Northern Iowa; M.A., 1969, State University of Iowa

* Leave of absence 9-1-70 to 9-1-72

Faculty

- Bowers, Donald W. (1971) Assistant Professor of Sociology
 B.A., 1967, M.A., 1969, University of Utah
- Brewer, Joseph E. Associate Professor of English
 B.A., 1947, University of Akron; M.A., 1948, University of Cincinnati; Ph.D., 1954, Case Western Reserve University
- Brown, Judith A. (1969) ‡ Assistant Professor of Biological Sciences
 B.A., 1966, Whittier College; M.S., 1969, Northwestern University
- Bruggman, Joseph E. (1960) Professor of Music
 B.A., 1941, San Jose State College; M.A., 1947, Ed.D., 1949, Columbia University
- Caldwell, John C. (1970) Head Technical Services Librarian
 B.S., 1950, St. Vincent College; M.A., 1951, University of Pennsylvania, M.S.L.S., 1954, Drexel Institute of Technology
- Camajani, Giovanni (1964) Professor of Music
 B.S., 1937, M.A., 1942, Ph.D., 1945, New York University, Fellow, 1945, Trinity College, London
- Camarata, Martin L. (1964)* Associate Professor of Art
 B.S., 1956, New York State University at Buffalo; M.A., 1957, New York University
- Canby, Joel (1970) Professor of Anthropology
 B.A., 1941, Colorado College; A.M., 1948, Ph.D., 1949, Harvard University
- Carroll, John E. (1971) Assistant Professor of English
 B.A., 1965, M.A., 1967, Ph.D., 1970, University of New Mexico
- Caswell, John E. (1960) Professor of History
 B.A., 1934, M.A., 1937, University of Oregon; Ph.D., 1952, Stanford University
- Chang, Shang-Wang (1969) Assistant Professor of Mathematics
 B.E. (Engineering), 1947, Tohoku University, Japan; M.S., 1961, Kansas State Teachers College, Ph.D., 1969, Iowa State University
- Chapin, Wayne R. (1970) Professor of Business Administration
 B.B.A., 1958, M.B.A., 1959, University of Texas at Austin; D.B.A., 1965, University of Southern California; C.P.A., 1958, State of Texas
- Chow, Tai-Low (1969) Assistant Professor of Physics
 B.S., 1958, National Taiwan University, M.S., 1963, Case Western Reserve University, Ph.D., 1970, University of Rochester
- Christofferson, Jay P. (1970) Assistant Professor of Biological Sciences
 B.S., 1961, University of Utah; M.S., 1965, Ph.D., 1970, University of Hawaii
- Cole, James C. (1964) † Professor of Education
 A.B., 1947, M.A., 1948, Stanford University; Ed.D., 1956, Teachers College Columbia University
- Colescott, Robert H. (1970) Professor of Art
 A.B., 1949, M.A., 1952, University of California, Berkeley
- Conant, Richard D. (1969) Associate Professor of Physical Education
 A.B., 1955, Occidental College; M.S., 1956, University of California, Los Angeles, Ph.D., 1969, University of Oregon
- Corbin, Joseph W. (1968) Assistant Vice President for Academic Affairs
 Associate Professor of Education
 B.S., 1960, Geneva College, M.Ed., 1961, University of Pittsburgh; Ed.D., 1967, University of the Pacific
- Corum, Richard G. (1969) Assistant Professor of English
 B.A., 1965, M.A., 1966, University of California, Berkeley
- Coulter, R. Scott (1970) ‡ Associate Professor of Music
 B.M., 1949, M.M., 1952, University of Pacific

‡ Leave of absence 9-1-72 to 9-1-73.

* Sabbatical leave, Spring Quarter, 1973

† Sabbatical leave, 1972-73 academic year

‡ Leave of absence 9-1-72 to 9-1-73

Faculty

- Credell, Edward R. (1967) *** Associate Professor of Education
A.B., 1949, Fresno State College; M.S., 1956, M.Ed., 1960, University of Southern California; Ph.D., 1967, Northwestern University
- Crist, William D. (1969) Assistant Professor of Economics
B.S., 1960; M.A., 1962, University of Nebraska
- Crowley, Gerard J. (1960) Executive Dean; Professor of Management
A.B., 1942, Loyola College; Ed.M., 1951, Boston University
- D'Amato, Leonard P. (1971) Assistant Professor of Mathematics
B.E.S., 1966, Ph.D., 1971, State University of New York at Stony Brook
- Day, William W. (1970) Dean, School of Professional Studies
Professor of Education
B.A., 1956, M.S., 1960, University of Wyoming; Ed.D., 1964, University of Nebraska
- Dean, Britten (1967) ** Associate Professor of History
A.B., 1957, Brown University, M.A., 1962, Ph.D., 1969, Columbia University
- Dempsey, Thomas K. (1971) Assistant Professor of Psychology
A.B., 1966, State University of New York; M.A., 1969, Ph.D., 1971, University of Louisville
- Desiderio, Anthony R. (1971) Professor of Music
B.M., 1946, M.M., 1947, University of Michigan; D.M.A., 1966, University of Southern California
- Dinse, Noble T. (1970) Assistant Professor of Drama
B.S., 1968, M.A.T., 1970, Portland State University
- Donini, Antonio (1966) Associate Professor of Sociology
A.B., 1941, Institute of Classical Literature and Humanities, M.A., 1945, San Miguel; M.S.Sc., 1957, Ph.D., 1960, Gregorian University, Rome, Italy
- Durbin, Thomas E. (1970) Assistant Professor of Anthropology
B.A., 1964, University of California, Berkeley; M.A., 1966, Ph.D., 1970, University of California, Los Angeles
- Dyche, Chester W. (1970) Associate Professor of Mathematics
B.A., 1952, Linfield College; M.A., 1957, Oregon State University
- Eichensehr, Frank C. (1969) Assistant Professor of Psychology
B.S., 1964, Ohio State University; M.A., 1968, University of Minnesota
- Entin, Kenneth (1971) Assistant Professor of Political Science
B.A., 1966, City College of New York; M.A., 1967, Ph.D., 1971, New York University
- Erickson, Edward C. (1970) Assistant Professor of Economics
B.A., 1965, M.A., 1966, University of California, Riverside; Ph.D., 1970, University of Southern California
- Farrar, Charles R. (1960) Professor of Education
B.A., 1949, M.A., 1950, Humboldt State College; Ed.D., 1963, Stanford University
- Farnsworth, Richard B. (1967) Director of Continuing Education
Lecturer in Education
B.A., 1935, University of Montana; M.A., 1942, Stanford University
- Feldman, Louis A. (1968) Associate Professor of Mathematics
B.S., 1963, University of Michigan; M.A., 1965, Ph.D., 1969, University of California, Berkeley
- Finley, T. Peter (1970) Assistant Professor of English
B.A., 1958, B.A., 1964, University of Washington
- Fogel, Ira L. (1970) Assistant Professor of Anthropology and Geography
B.S., 1960, M.A., 1962, University of Chicago

*** Leave of absence 10-5-70 for limited term service in Office of the Chancellor

** Leave of absence Fall Quarter 1972

Faculty

- Fuller, Michael C. (1971) Assistant Professor of French
B.A., 1964, University of Idaho; M.A., 1966, Ph.D., 1971, University of Washington
- Galloway, R. Dean (1960) College Librarian
A.B., 1947, Humboldt State College; M.S. 1950, University of Southern California
- Ghiglieri, Sylvia M. (1961) Associate Professor of Music
B.M., 1954, Dominican College; Diploma, Music Academy of the West at Santa Barbara, 1954; Diploma Conservatoire de la Musique at Fontainebleau, France, 1955; M.M., 1960, University of the Pacific
- Glenday, David (1969) Associate Professor of Education
A.B., 1950, State University of New York; M.A., 1951, Ed.D., 1961, Teachers College, Columbia University
- Goldman, Arnold L. (1969) Assistant Professor of English
B.A., 1954, University of Connecticut; M.A., 1958, University of Minnesota
- Goldsmith, W. Mack (1966) Associate Professor of Psychology
A.B., 1957, Ripon College; Ph.D., 1966, Cornell University
- Goodwin, James M. (1968) Assistant Professor of Physics
B.S., 1958, Pennsylvania State University; M.S., 1964, University of Washington; Ph.D., 1968, University of Washington
- Gotelli, David M. (1970) Assistant Professor of Biological Sciences
B.A., 1964, University of California, Berkeley; Ph.D., 1969, University of Washington
- Gowin, Lawrence E. (1970) Associate Professor of Education
A.B., 1949, San Francisco State College; M.A., 1951; Ed.D., 1955, University of California, Berkeley
- Grant, Curtis R. (1966) Associate Professor of History
A.B., 1960, Stanford University; M.A., 1961, University of California, Berkeley; Ph.D., 1968, Stanford University
- Graves, Jack A. (1969) Associate Professor of Education
B.A., 1953, Arizona State University; M.A., 1961, Ed.D., 1968, University of California, Berkeley
- Green, Gary B. (1970) Assistant Professor of Mathematics
B.S., 1964, University of Idaho; M.S., 1966, Michigan State University; Ph.D., 1970, Pennsylvania State University
- Greene, Barbara P. (1971) Assistant Professor of Political Science
B.A., 1952, Centre College; Ph.D., 1971, Indiana University
- Grillo, Steve J. (1965) Professor of Botany
B.S., 1951, University of Denver; M.S., 1952, University of Wyoming; Ph.D., 1956, Oregon State College
- Habašhi, Zaki I. (1965)† Associate Professor of Physical Education
B.S., 1944, Higher Institute of Physical Education, Cairo, U.A.R.; M.A., 1957, University of Wyoming; L.L.B., 1962, University of Alexandria, U.A.R.; Ed.D., 1961, University of Colorado
- Hackwell, Glenn A. (1961)* Professor of Biological Sciences
B.S., 1957, M.S., 1958, Brigham Young University; Ph.D., 1967, Oregon State University
- Hamilton, Hobart G. (1968) Associate Professor of Chemistry
B.S., 1961, University of Texas; M.S., 1963, Ph.D., 1967, New Mexico State University
- Hanny, James K. (1966) Associate Professor of Physical Education
B.A., 1949; M.A., 1957, College of the Pacific
- Hanson, James C. (1960) Associate Professor of Biological Sciences
B.A., 1955, M.A., 1957, University of the Pacific; Ph.D., 1967, Oregon State University

† Sabbatical leave, 1972-73 academic year.

* Sabbatical leave, Spring Quarter 1972

Faculty

- Hayes, William H. (1971) Dean, School of Arts and Humanities
Professor of Philosophy
B.A., 1947, Columbia College, Columbia University; M.A., 1952, Ph.D., 1967, University of California, Berkeley
- Henning, Laura H. (1972) Reference Librarian
A.B., 1970, University of California, Berkeley; M.L.S., 1971, University of Oregon
- Hinkson, Jimmy W. (1970) Associate Professor of Chemistry
B.S., 1956, M.S., 1958, Brigham Young University; Ph.D., 1962, Indiana University
- Ho, Hsiu-hwang (1969) Assistant Professor of Philosophy
B.A., 1961, M.A., 1965, National Taiwan University; Ph.D., 1969, Michigan State University
- Holder, Frank B. (1965) Associate Professor of History
B.A., 1949, M.A., 1951; Ph.D., 1962, University of California, Berkeley
- Holt, Lewis E. (1971) Associate Professor of Psychology
B.A., 1960, M.A., 1967, Ph.D., 1969, University of California, Berkeley
- Hood, Bruce D. (1966) Associate Professor of Drama
B.F.A., 1959, University of New Mexico; M.A., 1966, San Francisco State College
- Hughes, Steven W. (1971) Assistant Professor of Political Science
B.A., 1966, Whittier College; Ph.D., 1971, University of North Carolina
- Hultgren, Glen O. (1968) Assistant Professor of Chemistry
B.S., 1958, University of California, Berkeley; Ph.D., 1966, California Institute of Technology
- Hurst, Algin C. (1970) Director of Ethnic Studies
Assistant Professor of Education
B.S., 1955, Hampton Institute; M.A., 1965, San Francisco State College
- Iwahashi, Kenneth K. (1971) Instructor in Business Administration
B.A., 1969, University of California, Berkeley; M.B.A., 1971, University of Oregon
- James, Ralph L. (1970) Assistant Professor of Mathematics
B.S., 1963, University of Washington; M.S., 1965, Ph.D., 1970, Oregon State University
- Javaher, James N. (1961) * Professor of Mathematics
L.L.B., 1946, University of Tehran; A.B., 1950, San Jose State College; M.A., 1952, University of California, Berkeley; B.S., 1954, Stanford University; Doctorat d'Université, Faculté des Sciences, 1960, University of Paris, Sorbonne
- Jenkins, David O. (1970) Professor of Business Administration
B.B.A., 1952, Loyola University of Los Angeles; M.A., 1955, The Catholic University of America; C.P.A., 1958, State of California; D.B.A., 1963, University of Southern California
- Jensen, James P. (1961) Associate Professor of English
B.A., 1953, M.A., 1957, Ph.D., 1964, University of Washington
- John, Walter, Jr. (1971) Professor of Physics
B.S., 1950, California Institute of Technology; Ph.D., 1955, University of California, Berkeley
- Johnson, Lola V. (1960) Associate Professor of English
B.A., 1956; M.A., 1959, University of the Pacific
- Jones, Richard V. (1966) Associate Professor of Education
B.A., 1956, M.A., 1956, Stanford University; Ed.D., 1966, University of California, Berkeley
- Kern, John R. (1970) Assistant Professor of History
B.A., 1961, Swarthmore College; M.A., 1967, University of Wisconsin
- Kottke, Frederick E. (1963) Professor of Economics
B.S., 1952, Pepperdine College; M.A., 1957, Ph.D., 1960, University of Southern California

* Sabbatical leave, Spring Quarter 1972.

Faculty

- Lambright, Robert W. (1968) Professor of Marketing
B.A., 1952, M.B.A., 1954, D.B.A., 1966, University of Washington at Seattle
- Lee, Yin-Po (1970) Assistant Professor of Economics
B.A., 1955, National Taiwan University; Ph.D., 1970, Southern Illinois University
- Leo, Louis J. (1969) Dean of Student Services
B.A., 1966, University of Michigan; J.D., 1969, University of Michigan Law School
- Levine, Edward M. (1971) Associate Professor of Art
B.A., 1957, Yale University; M.A., 1964, New York University
- Lucas, Richard S. (1969) Assistant Professor of Speech
B.A., 1966, M.A., 1968, Sacramento State College
- Mack, Gerhard G. (1970) Assistant Professor of German
A.B., 1965, California State College, Los Angeles; M.A., 1967, Ph.D., 1971, University of Southern California
- Magnelia, Paul F. (1966) Associate Professor of Political Science
B.A., 1955, Washington University; M.A., 1960, University of the Americas; Ph.D., 1967, University of Geneva
- Maria, Narendra L. (1968) Professor of Mathematics
B.A., 1948, M.A., 1949, Punjab University, India; Ph.D., 1968, University of California, Berkeley
- Marr, Phebe Ann (1970) Associate Professor of History
B.A., 1953, Barnard College; M.A., 1956, Radcliffe Graduate School; Ph.D., 1967, Harvard University
- Mason, William J. (1970) Vice President for Academic Affairs
Professor of Economics
B.S., 1950, University of California, Berkeley; M.A., 1954, San Francisco State College; Ph.D., 1958, State University of Iowa
- Mayol, Perpetuo S. (1968) Assistant Professor of Biological Sciences
B.S.A., 1957, University of the Philippines; M.S., 1965, Oklahoma State University; Ph.D., 1968, Purdue University
- McClintock, William F. (1963) Director of Academic Advising
Professor of Education
A.B., 1937, Occidental College; M.A., 1949, Ph.D., 1957, Claremont Graduate School
- McDearmon, James R. (1970) Associate Professor of Speech Pathology
B.A., 1940, The University of California, Berkeley; M.A., 1950, University of Pacific; Ph.D., 1960, University of Denver
- McDermott, Douglas (1970) Professor of Drama
A.B., 1958, Pomona College; M.A., 1960, University of North Carolina; Ph.D., 1963, State University of Iowa
- McManus, Betty D. (1965) Test Coordinator
B.A., 1948, University of Miami, M.Ed., 1960, Xavier University
- Mendes, Richard G. (1970) Assistant Professor of Political Science
B.A., 1966, Wabash College; M.A., 1967, Ph.D., 1971, Michigan State University
- Moriconi, R. J. (1968) Associate Professor of Education
A.B., 1955, M.A., 1957, Stanford University; Ed.D., 1967, University of Florida
- Morris, William M. (1971) Assistant Professor of Physical Education
A.B., 1962, M.A., 1964, Chico State College; Ed.D., 1969, University of Utah
- Napton, Lewis K. (1971) Associate Professor of Anthropology
B.S., 1959, Montana State University; M.A., 1965, University of Montana; Ph.D., 1970, University of California, Berkeley
- Nelson, Wayne E. (1970) Assistant Professor of Physical Education
B.S., 1951, M.S., 1957, University of Wisconsin; Ed.D., 1970, University of New Mexico
- Nickerson, Melvin R. (1966) Coordinator of Audio Visual Services
A.B., 1956; A.M., 1960, University of the Pacific; Ph.D., 1966, University of Michigan

Faculty

- Norton, Max C. (1961) Professor of Speech
 B.A., 1951, M.A., 1955, University of the Pacific; Ph.D., 1962, University of Denver
- Novack, Joseph A. (1971) Associate Professor of Sociology
 B.S., 1964, Wisconsin State University; M.A., 1969, Ph.D., 1971, Louisiana State University
- O'Brien, Audrey V. (1966) ‡ Reference Librarian
 B.A., 1945, Hofstra University; M.S., 1965, Long Island University
- Oppenheim, Samuel A. (1971) Assistant Professor of History
 B.A., 1962, University of Arizona; A.M. 1964, Harvard University; Ph.D., 1972, Indiana University
- Pandell, Alexander J. (1970) Assistant Professor of Chemistry
 B.S., 1964, San Francisco State College; Ph.D., 1968, Stanford University
- Parker, J. Carlyle (1963) Assistant College Librarian
 A.B., 1957, Brigham Young University; M.L.S., 1958, University of California, Berkeley
- Parton, Ralf (1963) Associate Professor of Art
 Diploma, 1953, Albright Art School; B.S., 1954, New York State University College at Buffalo; M.A., 1955, Columbia University
- Peters, G. Thomas (1971) Assistant Professor of Psychology
 B.A., 1967, San Francisco State College; Ph.D., 1971, University of Minnesota
- Pierce, Wayne S. (1971) Assistant Professor of Biological Sciences
 A.B., 1964, Humboldt State College; M.S., 1967, Ph.D., 1971, Washington State University
- Pipho, Armin P. (1971) Assistant Professor of Physical Education
 B.A., 1960, Luther College; M.A., 1963, University of Iowa; Ph.D., 1971, University of Oregon
- Piskoti, James (1969) Assistant Professor of Art
 B.S., 1967, University of Michigan; M.F.A., 1969, Yale University
- Pitman, Leon S. (1969) Assistant Professor of Geography
 B.S., 1965, Brigham Young University; M.A., 1966, University of Oklahoma
- Platt, James H. (1966) Professor of Speech Pathology and Audiology
 B.A., 1940, Bowling Green State University; M.A., 1946, State University of Iowa; Ph.D., 1954, University of Denver
- Polidoro, Lewis G. (1971) Associate Professor of Audiology
 B.S., 1952, Detroit Institute of Technology; B.S., 1959, M.Ed., 1961, Wayne State University; Ed.D., 1970, George Peabody College
- Prescott, Richard (1970) Coordinator of Student Teaching Placement
 Visiting Lecturer in Education
 A.B., 1938, University of Chicago; M.A., 1958, University of Pacific
- Pugh, Edward L. (1971) Associate Professor of Mathematics
 B.E.E., 1956, University of Santa Clara; M.S., 1962, San Diego State College; Ph.D., 1970, University of California, Los Angeles
- Quinley, C. W., Jr. (1962) Registrar
 A.B., 1950, San Jose State College
- Rader, Marion C. (1971) Instructor of Drama
 B.A., 1968, M.A., 1971, Sacramento State College
- Rao, Cherukuri U. (1970) Lecturer in Business Administration
 B.Com., 1954, M.Com., 1956, Andhra University; M.B.A., 1966, Atlanta University; Ph.D., 1972, University of North Carolina
- Rasmussen, John Peter (1962) ** Professor of History
 B.A., 1955, Fresno State College; M.A., 1959; Ph.D., 1962, Stanford University

‡ Leave of absence 10-18-71 to 10-18-72.

** Sabbatical leave, Fall Quarter 1972.

Faculty

- Rau, Catherine D. (1965) Professor of Philosophy
A.B., 1925, M.A., 1939; Ph.D., 1945, University of California, Berkeley
- Remick, Helen W. (1971) Assistant Professor of Psychology
B.A., 1968, Ph.D., 1971, University of California, Davis
- Renning, H. Dieter (1970) Associate Professor of Economics
Dr. rer. pol. (Doctor of Economics), 1961, University of Freiburg, Germany
- Reuben, Paul P. (1971) Associate Professor of English
B.A., 1961, Patna College, India; M.A., 1963, Patna University, India; Ph.D., 1970, Bowling Green State University
- Richardson, Lowell G. (1964) Associate Professor of Foreign Language
B.A., 1941, M.A., 1947, University of Wisconsin; 1967, Ph.D., Universidad Inter-America, Saltillo, Mexico
- Roe, Pamela (1971) Assistant Professor of Biological Sciences
B.A., 1965, University of Texas; M.S., 1967, Ph.D., 1971, University of Washington
- Rose, Gladys R. (1971) Assistant Professor of Physical Education
B.A., 1965, Fresno State College; M.A., 1970, San Jose State College
- Ruechelle, Randall C. (1964) Professor of Speech
A.B., 1942, M.A., 1944, University of Chicago; Ph.D., 1953, University of Southern California
- Rushdoony, Haig A. (1961) ** Professor of Education
A.B., 1949, M.A., 1953, San Francisco State College; Ed.D., 1961, University of California, Berkeley
- Santos, Robert L. (1970) Catalog Librarian
B.S., 1969, Stanislaus State College; M.A., 1970, University of Southern California
- Schuetze, Carl J. (1970) Lecturer in Business Administration
B.S., 1958, M.S., 1960, University of Illinois, Urbana
- Schwarcz, Ervin H. (1971) Professor of Physics
B.S., 1945, Ohio State University; M.S., 1948, Ph.D., 1955, University of Michigan
- Seban, Martha M. (1971) Instructor of Physical Education
B.S., 1967, M.S., 1971, California State College at Hayward
- Sebok, Richard (1970) Associate Dean of Student Services
B.A., 1960, Millikin University; M.Ed., 1965, University of Illinois
- Setterá, George E. (1971) Assistant Professor of English
B.S., 1964, Portland State University; Ph.D., 1971, University of Oregon
- Shaw, Gary C. (1969) Assistant Professor of Political Science
B.A., 1966, Utah State University; M.A., 1967, Ph.D., 1970, Michigan State University
- Sherman, Stanley E. (1969) Assistant Professor of Psychology
B.A., 1956, University of California, Berkeley; M.A., 1966, San Jose State College; Ph.D., 1969, University of Washington; Certified Clinical Psychologist, 1970, State of California
- Shrable, V. Kenneth (1970) Dean, School of Behavioral and Social Sciences
Associate Professor of Psychology
B.D., 1957, Fuller Seminary; A.B., 1950, Harding College; M.A., 1961, Ph.D., 1965, University of California, Berkeley
- Smith, Priscilla R. (1968) Associate Professor of Education
A.B., 1941, John R. Stetson University; M.Ed., 1955, National College of Education; Ed.D., 1963, University of Denver
- Smith, Robert R. (1969) Assistant Professor of History
A.B., 1960, Wayne State University; M.A., 1963, Ph.D., 1970, University of California, Los Angeles

** Sabbatical leave, Fall Quarter 1972

Faculty

- Smurr, J. W., (1967) Professor of History
 B.A., 1950; M.A., 1951, University of Montana; Ph.D., 1960, Indiana University
- Southam, James L. (1970) Assistant Professor of Mathematics
 B.S., 1964, M.S., 1965, Southern Oregon College; Ph.D., 1970, Oregon State University
- Spanier, Douglas A. (1969) Associate Professor of Psychology
 B.A., 1961, Western Washington State College; M.A., 1965, Ph.D., 1968, University of Nebraska
- Stenzel, David Bentheim (1961) Professor of History
 B.S., 1951, Georgetown University; Diploma, 1950, University of Vienna; M.A., 1954, Ph.D., 1957, University of California, Berkeley
- Steven, James M. (1970) Assistant Professor of Art
 B.F.A., 1962, M.F.A., 1965, Art Institute of Chicago
- Stull, Harriet C. (1967) Professor of Sociology
 B.A., 1935, University of Iowa; M.A., 1937, Colorado College of Education; Ph.D., 1947, Cornell University
- Swain, Lorna M. (1961) Professor of Education
 A.B., 1937, University of California, Berkeley; M.A., 1954, Humboldt State College; Ed.D., 1960, Stanford University
- Tandy, Keith A. (1970) Assistant Professor of English
 A.B., 1958, Morningside College; A.M., 1962, Columbia University
- Tarquino, Laura T. (1970) Associate Professor of Spanish
 M.A., 1963, University of Texas; Ph.D., 1968, Stanford University
- Taylor, Douglas H. (1969) Associate Professor of English
 B.A., 1960, Whitman College; M.A., 1963, University of Washington; Ph.D., 1967; University of California, Davis
- Thompson, Evan M. (1965) Dean, School of Natural Sciences
 Associate Professor of Chemistry
 B.A., 1960; Ph.D., 1964, Brigham Young University
- Thompson, Lloyd R. (1968) Associate Professor of Education
 B.S., 1952, University of Minnesota; M.A., 1957, Long Beach State College; M.Ed., 1959, Ed.D., 1966, University of Southern California
- Tordoff, Walter, III (1970) Assistant Professor of Biological Sciences
 B.A., 1965, University of Massachusetts; M.S., 1967, Ph.D., 1971, Colorado State University
- Tripi, Frank J. (1971) Assistant Professor of Sociology
 B.A., 1961, M.A., 1963, California State College, Los Angeles; Ph.D., 1971, University of California, Los Angeles
- Tullis, Garner H. (1969) Assistant Professor of Fine Art
 B.F.A., 1964, University of Pennsylvania; M.A., 1967, Stanford University
- Tuman, Vladimir S. (1965) † Professor of Physics
 B.S., 1948, Birmingham University of England; D.I.C., 1949, Imperial College of London; Ph.D., 1964, Stanford University
- VanderMolen, Ronald Jay (1969) Assistant Professor of History
 B.A., 1961, Calvin College; M.A., 1962, DePaul University; Ph.D., 1969, Michigan State
- Wade, Jere D. (1969) Assistant Professor of Drama
 B.A., 1958, M.A., 1966, University of California, Davis; Ph.D., 1972, University of Oregon
- Watling, Thomas C. (1967) Director of Housing and Placement
 B.A., 1949; M.Ed., 1955, Drury College; Ph.D., 1967, University of Denver
- Wædon, Jerry L. (1971) Assistant Professor of Speech
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† Sabbatical leave, 1972-73 academic year

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- Wellbaum, Sam (1970)Assistant Professor of Speech
B.A., 1948, University of California, Los Angeles; M.A., 1962, Ph.D., 1970, University of Southern California
- Williams, Daniel F. (1971)Assistant Professor of Biological Sciences
B.A., 1966, Central Washington State College; M.S., 1968, Ph.D., 1971, University of New Mexico
- Williams, Jack W. (1969) Assistant Professor of English
B.A., 1962; M.A., 1966, University of Colorado
- Wisler, Gene C. (1963) Professor of Music
A.B., 1947, San Jose State College; M.A., 1950, University of Minnesota; Ed.D., 1956, University of Oregon
- Wold, John T. (1970) Assistant Professor of Political Science
B.A., 1965, California Lutheran College; M.A., 1968, Ph.D., 1972, The Johns Hopkins University
- Worthley, William J. (1971)Assistant Professor of Speech Pathology
B.S., 1960, University of Illinois; M.A., 1962, University of San Francisco; M.S., 1968, Ph.D., 1970, University of Oregon
- Yasui, Roy Y. (1970) Associate Professor of Education
B.Ed., 1964, University of Alberta; M.S., 1965, Ph.D., 1967, University of Oregon
- Young, Kenneth G. (1961) Professor of Accounting
C.P.A., 1944, University of Illinois; B.S.C., 1948, Loyola University; C.P.A., 1948, State of California; M.B.A., 1951, University of California, Berkeley
- Yu, George H. (1965) Assistant Professor of Foreign Language
B.A., 1924, University L'Aurore, Shanghai, China; M.A., 1928, Franco-Chinese University, Peking, China; Ph.D., 1935, University of Lyons, France; Ph.D., 1939, University of Warsaw, Poland

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Bowers, Ida I ^{thesis working on} Ph.D. Geographer

Carson, Carol P (miss) ^{completed} Ph.D. Assoc Prof Anthropology

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Elliott, Arletha (Lee) Ann (Dr.) Psych Dept

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Olson, Bruce T (Dr.) Assoc Prof psychology

Shut, Ross Carter (Mr.) Assoc Prof music

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director of choral activities

White, Lynn C (Dr.) Assoc Prof Sociology

Young, Franklin A (Dr.) Asst Prof. Anthropology

Washington, Aella (Miss) Assoc Prof ethnic studies

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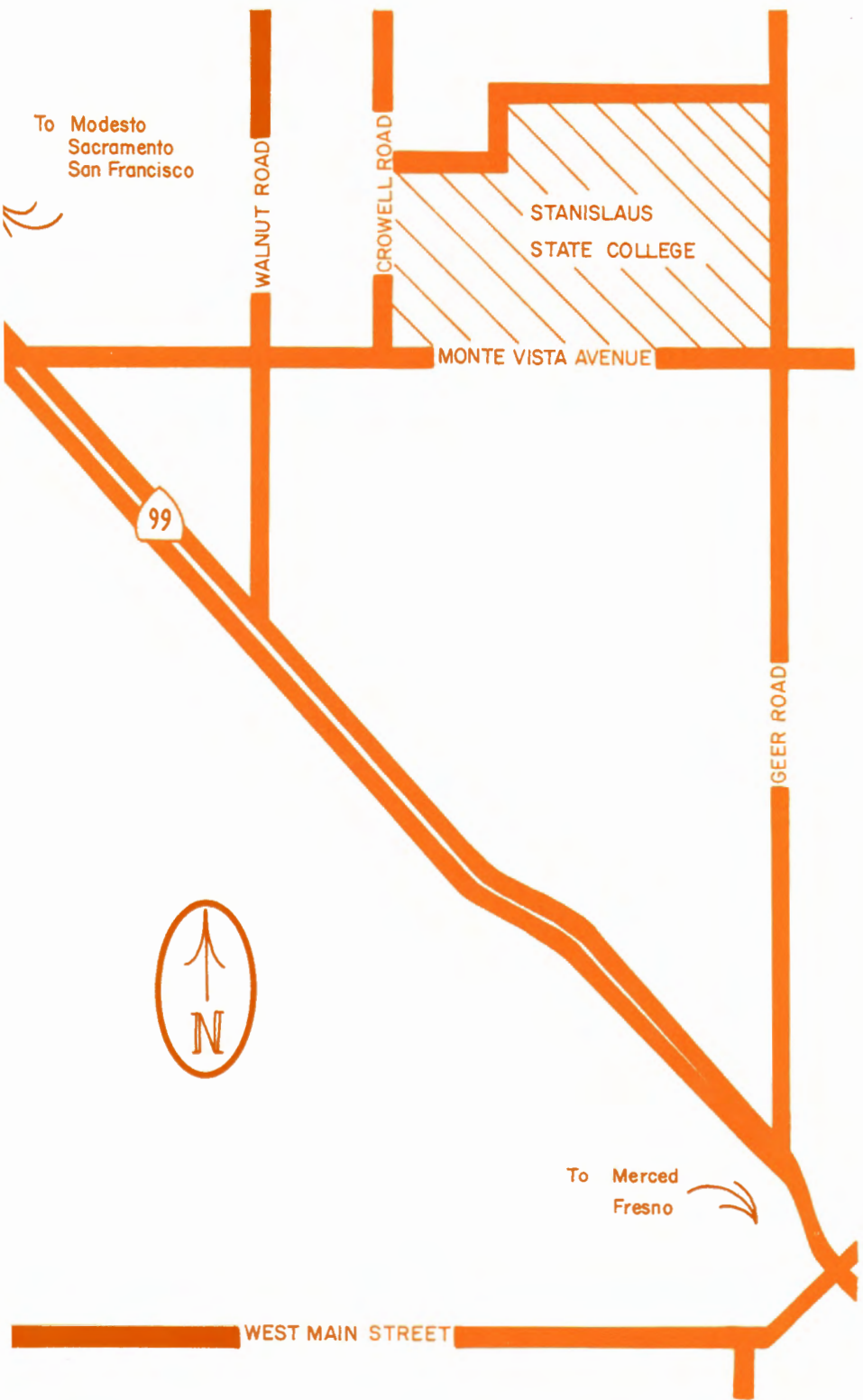
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