

COMPLIMENTARY COPY



**STANISLAUS
STATE
COLLEGE**

70
CATALOG
71

TURLOCK, CALIFORNIA

By mail from Kiva Bookstore, Stanislaus State College,
800 Monte Vista Avenue, Turlock, California 95380

Catalog.....	\$1.00
State Tax05
Postage and handling.....	.25
	<hr/>
Total	\$1.30

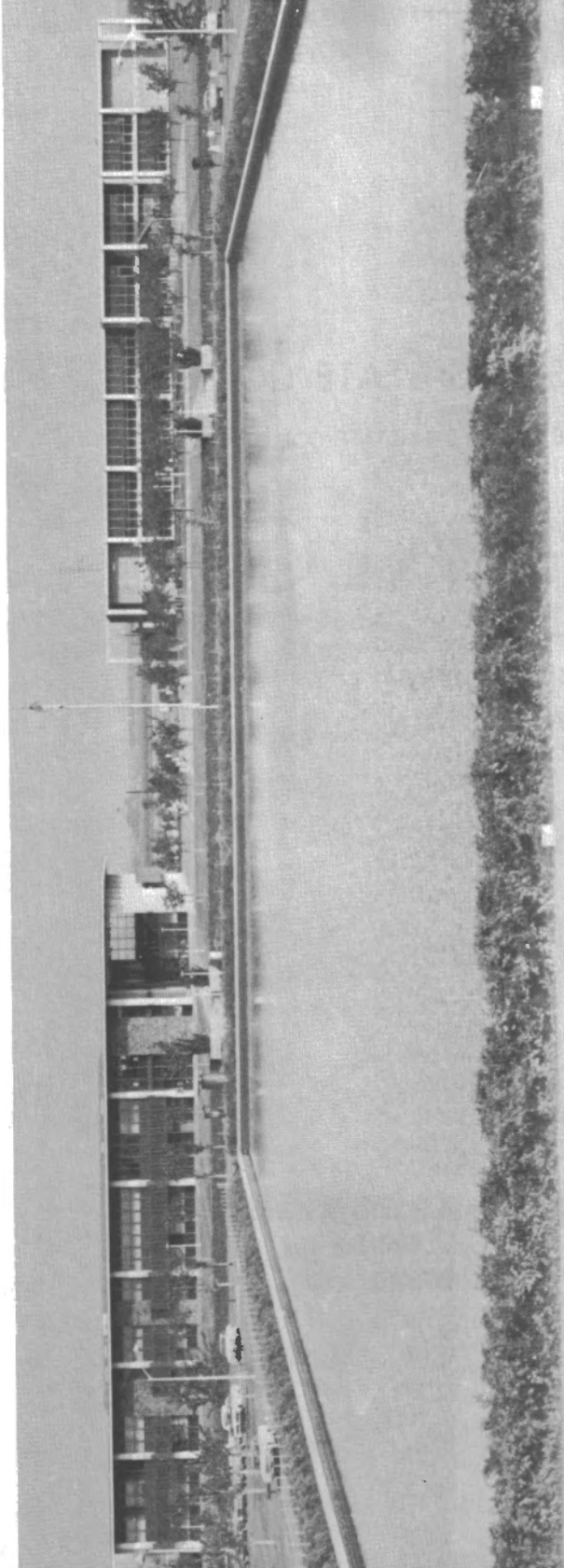
STANISLAUS STATE COLLEGE

THE CALIFORNIA STATE COLLEGES

CATALOG

1970-71

**800 Monte Vista Avenue
Turlock, California
95380**



STANISLAUS STATE COLLEGE



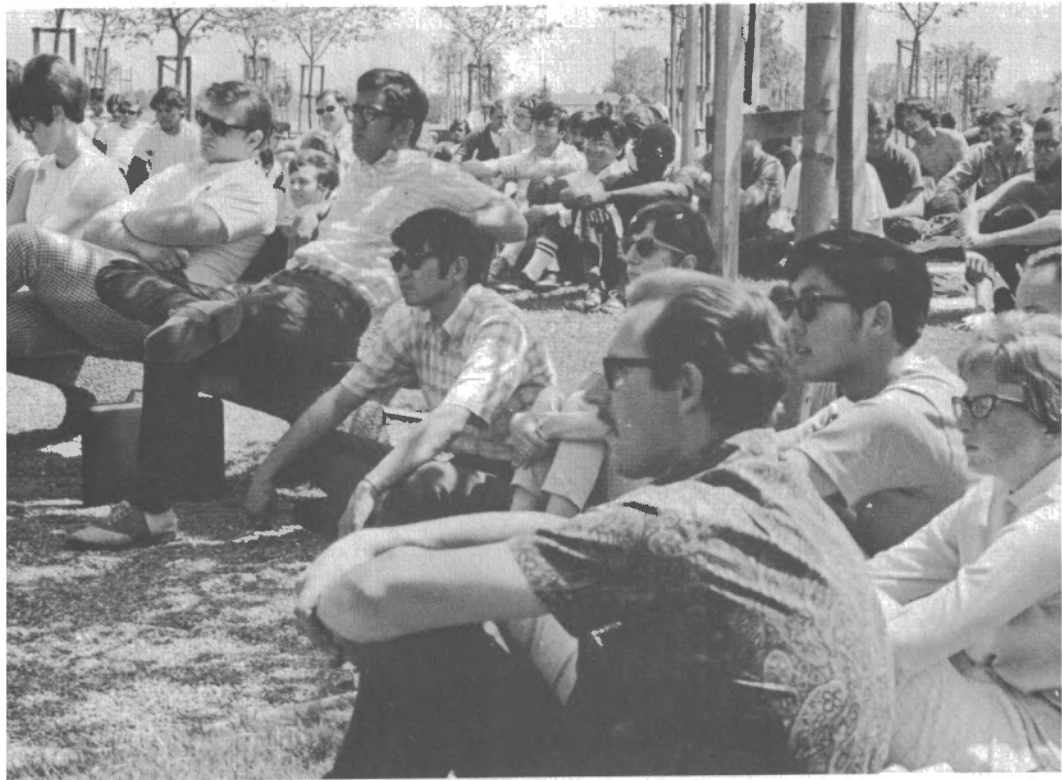


TABLE OF CONTENTS

	Page
Academic Calendar	7
Trustees of the California State Colleges	11
Office of the Chancellor	12
California State Colleges	13
Administration of the College	15
General Information	16
History of the College	16
The Academic Program	16
The College Facilities	17
Accreditation	17
Degree and Credential Programs	17
Quarter System	18
Library	18
Summer Session and Extension	19
International Programs	19
Admission to the College	20
Requirements	20
Admission Procedure	25
Evaluation and Acceptance of Transfer Credit	28
Registration	30
Academic Advisement	30
Credential Programs	31
Academic Standards	33
Policies and Procedures	35
Fees and Refunds	40
Student Affairs	42
Counseling	43
Housing	43
International Students	43
Placement	43
Student Financial Assistance	44
Student Health	46
Testing	46
Veterans Assistance	47
Selective Service	48
Student Activities	48
Student Conduct and Responsibility	48
Alumni	49
General Requirement for Degrees	49
Requirements for the Bachelor of Arts Degree	50
Requirements for an Additional Baccalaureate Degree	55
Requirements for the Master of Arts Degree	56
Announcement of Courses	61
Course Numbering System	62

TABLE OF CONTENTS—Continued

	Page
Anthropology	63
Biological Sciences	67
Biology	68
Botany	70
Entomology	71
Zoology	71
Business Administration	73
Chemistry	81
Drama	85
Economics	89
Education	93
English	113
Fine Art	122
Foreign Languages	129
Chinese	131
French	131
German	133
Spanish	134
Geography	136
History	138
Mathematics	148
Music	154
Philosophy	163
Physical Education and Health	166
Physical Sciences	172
Astronomy	173
Geology	174
Physics	175
Political Science	180
Psychology	185
Social Sciences	191
Sociology	193
Communications Arts and Sciences	197
Faculty	205
Index	214

ACADEMIC CALENDAR

SUMMER SESSION 1970

- May 15, Friday.....Due date for filing applications for summer session
1970 registration
- May 15, Friday.....Due date for filing applications for financial aid in
summer session 1970
- June 19, Friday.....End of Regular Registration Period (refer to Sum-
mer Session Bulletin)
- June 22-July 31.....Six-week session
- August 3-August 14.....Two-week session

FALL QUARTER 1970

- January 1, Thursday.....Period for accepting admission applications for fall
quarter 1970 begins
- April 1, Wednesday.....Due date for filing applications for financial aid in
the 1970-71 academic year
- June 5, Friday.....Registration (refer to Class Schedule)
- September 18, Friday.....Completion of regular registration (refer to Class
Schedule)
- September 18, Friday.....Last day to register without late registration fee
- September 18-22, Friday
through Tuesday.....Student Orientation Program
- September 21, Monday.....Instruction begins
- September 25, Friday.....First day to add or drop a course
- October 2, Friday.....Last day of late registration
- October 2, Friday.....Last day to add a course
- October 2, Friday.....Last day to apply for fall 1970 graduation
- October 5, Monday.....Last day to file application for partial refund of fees
from dropping courses or withdrawing from the
College
- October 14, Wednesday.....Last day to drop a course without a grade
- October 14, Wednesday.....Applications due for spring and summer 1971
graduation
- October 15, Thursday.....Beginning of academic advising for winter quarter
- November 1-30.....Filing period for fall 1971 admission applications
- November 10, Tuesday.....Last day to submit approved thesis for fall 1970
graduation
- November 25, Wednesday.....Last day to drop a course
- November 25, Wednesday.....End of academic advising for winter quarter
- November 26-30, Thursday
through Sunday.....Thanksgiving holiday
- November 30, Monday.....Classes meet on Friday schedule
- December 1, Tuesday.....Classes meet on Thursday schedule
- December 1, Tuesday.....Last day of classes for fall quarter
- December 2, Wednesday.....Registration for winter quarter (refer to Class
Schedule)

Academic Calendar

- December 2, Wednesday.....Last day to register for winter quarter without late registration fee
- December 3-4, Thursday
through FridayReading Period *
- December 7-10, Monday
through ThursdayFinal examinations for fall quarter
- December 10, Thursday.....Fall quarter ends
- December 25-28, Friday
through MondayChristmas holiday

WINTER QUARTER 1971

- September 15, Tuesday.....Period for accepting registration applications for winter quarter 1971 begins
- November 16, Monday.....Due date for filing applications for financial aid in winter quarter 1971
- December 2, Wednesday.....Registration for winter quarter (refer to Class Schedule)
- December 2, Wednesday.....Last day to register for winter quarter without late registration fee
- December 30, Wednesday.....First day of late registration
- January 1, Friday.....Legal holiday (New Year's Day)
- January 4, Monday.....Instruction begins
- January 8, Friday.....First day to add or drop a course
- January 15, Friday.....Last day of late registration
- January 15, Friday.....Last day to add a course
- January 15, Friday.....Last day to apply for winter 1971 graduation
- January 15, Friday.....Beginning of academic advising for spring quarter
- January 18, Monday.....Last day to file application for partial refund of fees from dropping or withdrawing from the College
- January 27, Wednesday.....Last day to drop a course without a grade
- January 27, Wednesday.....Applications due for fall 1971 graduation
- February 12, Friday.....Legal holiday (Lincoln's Birthday)
- February 15, Monday.....Legal holiday (Washington's Birthday)
- February 23, Tuesday.....Last day to submit approved thesis for Winter 1971 graduation
- March 2, Tuesday.....Registration for spring quarter (refer to Class Schedule) No classes to be held
- March 2, Tuesday.....Last day to register for spring quarter without late registration fee
- March 10, Wednesday.....Last day to drop a course
- March 17, Wednesday.....Classes meet on Friday schedule
- March 17, Wednesday.....Last day of classes for winter quarter
- March 18-23, Thursday
through TuesdayFinal examinations for winter quarter
- March 23, Tuesday.....Winter quarter ends

* Classes are not scheduled to meet during the Reading Period. 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 the Reading Period.

Academic Calendar

SPRING QUARTER 1971

- December 15, Tuesday.....Period for accepting admission applications for spring quarter 1971 begins
- February 15, MondayDue date for filing applications for financial aid in spring quarter 1971
- February 23, Tuesday.....End of academic advising for spring quarter
- March 2, Tuesday.....Registration (refer to Class Schedule)
- March 2, Tuesday.....Last day to register without late registration fee
- March 26, Friday.....First day of late registration
- March 29, Monday.....Instruction begins
- April 2, Friday.....First day to add or drop a course
- April 9, Friday.....Last day of late registration
- April 9, Friday.....Last day to add a course
- April 9, Friday.....Last day to apply for spring 1971 and summer 1971 graduation
- April 12, Monday.....Last day to file application for partial refund of fees from dropping courses or withdrawing from the College
- April 15, Thursday.....Beginning of academic advising for fall quarter
- April 21, Wednesday.....Last day to drop a course without a grade
- April 21, Wednesday.....Applications due for winter 1972 graduation
- May 12, Wednesday.....Last day to submit approved thesis for spring 1971 graduation
- May 28, Friday.....Last day to drop a course
- May 31, Monday.....Legal holiday (Memorial Day)
- May 31, Monday.....End of academic advising for fall quarter
- June 4, Friday.....Last day of classes for spring quarter
- June 7, Monday.....Registration for fall quarter (refer to Class Schedule) No classes to be held
- June 8-11, Tuesday through FridayFinal examinations for spring quarter
- June 12, Saturday.....Commencement
- June 12, Saturday.....Spring quarter ends

SUMMER SESSION 1971 (TENTATIVE)

- May 15, Saturday.....Due date for filing applications for summer session 1971 registration
- May 15, Saturday.....Due date for filing applications for financial aid in summer session 1971
- June 18, Friday.....End of regular registration period (refer to Summer Session Bulletin)
- June 21-July 30.....Six-week session
- August 2-13Two-week session

Academic Calendar

OFFICE HOURS

Regular SessionMonday–Friday, 8 a.m. to 5 p.m.
Summer SessionMonday–Friday, 8 a.m. to 5 p.m.

HEALTH CENTER

Regular SessionMonday–Friday, 8 a.m. to 12 p.m.; 12:30–5 p.m.
Summer SessionMonday–Friday, 8 a.m. to 12 p.m.; 12:30–5 p.m.

LIBRARY HOURS

Regular SessionMonday–Thursday, 8 a.m. to 10 p.m.;
Friday, 8 a.m. to 5 p.m.; Saturday, 9 a.m. to 5 p.m.
Summer Session
Six-week sessionMonday–Thursday, 7:30 a.m. to 7 p.m.;
Friday, 7:30 a.m. to 4:30 p.m.;
Saturday, 9 a.m. to 1 p.m.
Two-week sessionMonday–Friday, 7:30 a.m. to 4:30 p.m.

TRUSTEES OF THE CALIFORNIA STATE COLLEGES

EX OFFICIO TRUSTEES

- Ronald Reagan, B.A. State Capitol, Sacramento 95814
Governor of California and
President of the Trustees
- Ed Reinecke, B.S. State Capitol, Sacramento 95814
Lieutenant Governor of California
- Max Rafferty, A.B., M.A., Ed.D. 721 Capitol Mall, Sacramento 95814
State Superintendent of Public Instruction
- Robert T. Monagan, B.A. State Capitol, Sacramento 95814
Speaker of the Assembly
- Glenn S. Dumke, A.B., M.A., Ph.D., LL.D., L.H.D. 5670 Wilshire Blvd.,
Chancellor of the California State Colleges Los Angeles 90036

APPOINTED TRUSTEES

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

- Charles Luckman, LL.D., A.F.D. (1974)
9220 Sunset Blvd., Los Angeles 90069
- Theodore Meriam, A.B. (1971)
P.O. Box 370, Chico 95926
- Albert J. Ruffo, LL.B., B.S. in E.E. (1971)
675 No. First St., Suite 1200, San Jose 95112
- Mrs. Philip Conley, B.A. (1972)
3729 Huntington Blvd., Fresno 93702
- E. Guy Warren, B.A. (1973)
P.O. Box 59, Hayward 94541
- Daniel H. Ridder, B.A. (1975)
604 Pine Ave., Long Beach 90801
- George D. Hart, A.B. (1975)
111 Sutter St., San Francisco 94104
- James F. Thacher, A.B., LL.B. (1970)
310 Sansome St., San Francisco 94104
- Alec L. Cory, B.A., LL.B. (1973)
530 B St., Suite 1900, San Diego 92101
- William A. Norris, B.A., LL.B. (1972)
609 South Grand Ave., Los Angeles 90017
- Edward O. Lee, B.A. (1974)
610 16th St., Room 420, Oakland 94612
- Earle M. Jorgensen (1970)
10650 So. Alameda, Los Angeles 90054
- Karl L. Wentz, M.S. (1976)
5565 Tesla Road, Livermore 94550

Trustees California State Colleges

Dudley Swim, A.B., M.A. (1976)
Route 2, Box 5000, Carmel Valley Road, Carmel 93924

E. Litton Bivans (1977)
2431 Dallas St., Los Angeles 90031

W. O. Weissich, B.S., J.D. (1977)
1299 4th St., San Rafael 94901

OFFICERS OF THE TRUSTEES

Governor Ronald Reagan
President

Daniel Ridder
Chairman

Mrs. Philip Conley
Vice-Chairman

Chancellor Glenn S. Dumke
Secretary-Treasurer

**OFFICE OF THE CHANCELLOR
of**

THE CALIFORNIA STATE COLLEGES

5670 Wilshire Boulevard
Los Angeles, California 90036
(213) 938-2981

- Glenn S. Dumke.....Chancellor
- H. E. BrakebillExecutive Vice Chancellor
- A. G. Whitesel.....Vice Chancellor, Academic Affairs
-Vice Chancellor, Business Affairs
- C. Mansel Keene.....Assistant Chancellor, Faculty and Staff Affairs

- California State College, Bakersfield
615 California Avenue
Bakersfield, California 93304
Paul F. Romberg, President
(805) 327-9101
- California State College,
Dominguez Hills
809 E. Victoria Street
Dominguez Hills, California 90247
Leo F. Cain, President
(213) 532-4300
- California State College, Fullerton
800 N. State College Boulevard
Fullerton, California 92631
William B. Langsdorf, 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) 433-0951
- California State College, Los Angeles
5151 State College Drive
Los Angeles, California 90032
John A. Greenlee, President
(213) 224-2011
- 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
3801 West Temple Avenue
Pomona, California 91766
Robert C. Kramer, President
(213) 964-6424
- 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
Robert E. Hill, President
(916) 345-5011
- Fresno State College
Shaw and Cedar Avenues
Fresno, California 93726
Karl Falk, Acting President
(209) 487-9011
- Humboldt State College
Arcata, California 95521
Cornelius H. Siemens, President
(707) 826-3011
- Sacramento State College
6000 Jay Street
Sacramento, California 95819
Bernard L. Hyink, President
(916) 454-6011
- San Diego State College
5402 College Avenue
San Diego, California 92115
Malcolm A. Love, President
(714) 286-5000
- San Fernando Valley State College
18111 Nordhoff Street
Northridge, California 91324
James W. Cleary, President
(213) 349-1200
- 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
.....Acting President
(408) 294-6414
- Sonoma State College
1801 East Cotati Avenue
Rohnert Park, California 94928
Ambrose R. Nichols, President
(707) 795-2011
- Stanislaus State College
800 Monte Vista Avenue
Turlock, California 95380
Carl Gatlin, President
(209) 634-9101

The 19 California State Colleges, from Humboldt County in the north to San Diego in the south, comprise the largest system of public higher education in the Western hemisphere and one of the largest in the world. Current enrollment exceeds 227,000 full- and part-time students who are served by a faculty that numbers approximately 13,000.

Although San Jose State College, the oldest, was founded over a century ago, the California State Colleges were not drawn together as a system under an independent Board of Trustees until after passage of the Donahoe Higher Education Act by the Legislature in 1960.

Responsibility for the California State Colleges is vested in the Board of Trustees, whose members are appointed by the Governor. The Chancellor is the administrative officer of the Trustees. Together, the Trustees and the Chancellor set broad policy, while delegating responsibility for implementation to the colleges. The Academic Senate of the California State Colleges, consisting of elected representatives of the faculty at each college, recommends academic policy to the Board of Trustees through the Chancellor.

Each college in the system has its own geographic and curricular character, but all emphasize the liberal arts and sciences. Programs leading to the bachelor's and master's degrees, as well as a limited number of joint doctorates, are master planned to anticipate and accommodate student interest and the educational and professional needs of the State of California. The primary responsibility of the faculty is the instructional process, with increasing recognition of the importance of the role of research as a necessary concomitant to high quality teaching.

The California State Colleges are now in the most dynamic period of their development. Prior to World War II, there were seven State Colleges with a peak total enrollment of 13,000. Since 1947, twelve new colleges have been established and sites have been selected for new campuses in Ventura, San Mateo, and Contra Costa counties. California State College, Bakersfield, will open its doors to students for the first time this year. Enrollment in the system is expected to go beyond 300,000 by 1980.

STANISLAUS STATE COLLEGE

COLLEGE ADMINISTRATION

President.....	Carl Gatlin, Ph.D.
Vice President for Academic Affairs.....	William J. Mason, Ph.D.
Assistant Vice President for Academic Affairs.....	Joseph W. Corbin, Ed.D.
Executive Dean.....	Gerard J. Crowley, Ed.M.
Acting 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

Director of Continuing Education.....	Richard B. Farnsworth, M.A.
Director of Admissions and Relations with Schools	Edward J. Aubert, M.B.A.
Registrar.....	C. W. Quinley, Jr., A.B.
Director of Institutional Research.....	J. Donald Mild, M.S.P.A.
Director of Advising.....	William F. McClintock, Ph.D.
Director of Special Programs.....	Norbert M. Gonzales, M.A.

School and Department Administration

Dean, School of Arts and Humanities	
Chairman, Department of Fine Art.....	Ralf Parton, M.A.
Chairman, Department of Music.....	R. Scott Coulter, M.M.
Chairman, Department of English and Foreign Language	Douglas H. Taylor, Ph.D.
Chairman, Department of Drama.....	Bruce D. Hood, M.A.
Dean, School of Behavioral and Social Sciences	
Chairman, Department of Anthropology, Geography, and Sociology	Alfred W. Bowers, Ph.D.
Chairman, Department of Communication Arts and Sciences	Randall C. Ruechelle, Ph.D.
Chairman, Department of Economics ²	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.
Dean, School of Natural Sciences.....	Evan M. Thompson, Ph.D.
Chairman, Department of Biological Sciences.....	Steve J. Grillos, Ph.D.
Chairman, Department of Chemistry.....	Jimmy W. Hinkson, Ph.D.
Chairman, Department of Mathematics.....	Narendra L. Maria, Ph.D.

² Includes program in Philosophy.

General Information

Chairman (Acting), Department of Physics ³	Ervin H. Schwarcz, 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.....	James C. Cole, Ed.D.
Chairman, Department of Physical Education and Health	Richard D. Conant, Ph.D.

LIBRARY ADMINISTRATION

College Librarian.....	R. Dean Galloway, M.S.
Public Services Librarian.....	J. Carlyle Parker, M.L.S.
Head Catalog Librarian.....	Agnes L. Bennett, A.M.L.S.
Reference Librarian.....	Audrey V. O'Brien, M.S.
Bibliographer.....	Jo P. Bell, M.A.

GENERAL INFORMATION

THE COLLEGE

Stanislaus State College was established by the State Legislature in 1957 and opened in September, 1960 in Turlock, California. One of the 19 California State Colleges, it is located in the richly agricultural San Joaquin Valley approximately 2 hours by car from San Francisco, Yosemite National Park, Sacramento, and the Pacific Coast Beaches.

For the first five years, only juniors and seniors were admitted to the College which was located at the Stanislaus County Fairgrounds. In 1965, however, the first freshman class entered and today there is a rapidly expanding student body of over 2800, including 430 students in the graduate program. Although primarily from the surrounding counties, there are 41 California counties, 18 states, and 11 foreign countries represented. Eight hundred students a year are expected to be added the next several years.

The faculty is an international one with 150 full-time instructors and 27 part-time and is expected to increase at about 40 a year.

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

³ Includes program in Earth and Space Science.

General Information

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 Chinese, 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, and Speech.

THE COLLEGE FACILITIES

The rapidly expanding campus is the first state college to be totally built from a master plan by an independent architectural firm. The beautiful and functional buildings are fully carpeted and completely air-conditioned. The Library Building includes the library as well as the College Bookstore, cafeteria and faculty offices. The Classroom Building has science laboratories, classrooms, speech and radio rooms, and a 150 seat "Little Theatre." Last winter an athletic Field House was added which is surrounded by a football field, an all-weather track, a baseball diamond, and tennis and basketball courts.

By this fall a new Performing Arts Complex will be opened complete with a 300 seat auditorium, studios for painting, lithography and sculpture, a foundry, an art gallery, classrooms, and office space. Construction of a Student Union and Bookstore and a residence hall are also planned to begin soon.

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.

DEGREE AND CREDENTIAL PROGRAMS

The College offers programs leading to the Bachelor of Arts degree and the Master of Arts degree.

General Information

The College offers programs of study leading to the following credentials which are fully accredited by the California State Board of Education:

1. Standard Teaching Credential with a Specialization in Elementary School Teaching.
2. Standard Teaching Credential with a Specialization in Secondary School Teaching.
3. Restricted Credential Authorizing Service as a Speech and Hearing Specialist.

As part of these programs, internship opportunities are available for qualified candidates in elementary and secondary teaching.

For details of credential programs, see the section on Credential Programs and the sections on Education and Communication Arts and Sciences.

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 a new building. It seats 360 readers, and features a 24-station listening room, 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 100,000 volumes and about 1,300 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 4,500 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, reading laboratory kits, are a part of the Curriculum Library. The College Library is one of the twenty Curriculum Materials

General Information

Center Depositories through which it obtains two copies of all curriculum materials published by the county schools of California. A model collection of about 1,700 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

The California State Colleges offer programs of study for a full academic year at a number of distinguished universities abroad. Students study and live under the same conditions as students at the cooperating universities, but remain enrolled in the California State Colleges, where they may apply their work toward degree requirements in accordance with college regulations. The programs, which are voluntary, cooperative and systemwide in nature, are designed as bona fide academic undertakings with clearly defined educational and professional objectives.

For 1970-71, the cooperating Universities are: University of the Andes, Bogota, Colombia; University of Aix-Marseilles, France; Free University of Berlin and University of Heidelberg, Germany; University of Ghana; The Hebrew University of Jerusalem and Tel Aviv University, Israel; University of Florence, Italy; Waseda University, Tokyo, Japan; University of Granada and University of Madrid, Spain; University of Stockholm and Uppsala University, Sweden; and National University, Taiwan.

Students are selected on the basis of academic, linguistic and personal qualifications. The criteria are:

Admission to the College

- a. Upper division or graduate standing by the beginning of the academic year abroad;
- b. Academic achievement;
- c. Proficiency in the language of instruction;
- d. Faculty recommendations.

Programs in Ghana, Israel, Italy, Japan, Sweden and Taiwan do not require previous linguistic preparation; applicants for all other programs must demonstrate adequate facility in the language of instruction at the host university.

Approximate cost to the student during the 1970-71 year, including round trip transportation from San Francisco, room and board for the academic year, and medical insurance, is \$2,300 for Colombia, France, Germany and Spain; \$2,000 for Israel and Taiwan; and \$2,500 for Ghana, Italy, Japan and Sweden.

Application for the 1971-72 academic year should be made early in the fall semester of 1970. Detailed information may be obtained from the Office of International Programs, The California State Colleges, 1600 Holloway Avenue, San Francisco, California 94132, or from the Office of the Dean of Student Services at Stanislaus State College.

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 bachelor's 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*. 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 will be considered for admission under one of the following provisions. Except as noted, submission of the results of the College Entrance Examination Board Scholastic Aptitude Test (SAT) or the American College Test (ACT) 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

Admission to the College

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 science, 2 years
6. Study in speech, music, art, and other subjects contributing to general academic background.

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

Anthropology: Social science, 4 years preferred.

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; foreign language, 2 years (German preferred); chemistry, 1 year; physics, 1 year.

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

Economics: History and/or social science, 4 years preferred; mathematics, 4 years preferred.

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

Fine Art: Drawing, painting, printmaking, and sculpture, as much high school and independent work in these fields as possible.

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

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

Mathematics: Foreign language, 2 years French or German preferred; biology, 1 year; chemistry, 1 year; physics, 1 year; mathematics, 4 years.

Music: Foreign language, 2 years French or 2 years German preferred; music, as much private study as possible and as much participation in both vocal and instrumental music as possible.

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

Admission to the College

Physical Sciences: Foreign language, 2 years (German preferred); chemistry, 1 year; physics, 1 year; mathematics, 4 years.

Physics: Foreign language, 2 years (German preferred); chemistry, 1 year; physics, 1 year; mathematics, 4 years.

Political Science: History and/or social science, 4 years preferred.

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

Social Sciences Interdepartmental Major: History and/or social science, 4 years preferred.

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

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

Speech: Courses in speech and activities in forensics and drama.

California High School Graduates and Residents. An applicant who is a graduate of a California high school or a legal resident for tuition purposes must have a grade point average and total SAT (or composite ACT) score which provides an eligibility index * placing him among the upper one-third of California high school graduates. 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. The table below does not cover every case, but gives several examples of the test score needed with a given grade point average to be eligible for admission.

Grade Point Average	SAT (ACT) Needed
3.21 and above	Eligible with any score
3.10	592 (13)
3.00	672 (15)
2.90	752 (17)
2.80	832 (19)
2.70	912 (21)
2.60	992 (23)
2.50	1072 (25)
2.40	1152 (27)
2.00	1472 (35)
1.99 and below	Not eligible

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.

* The minimum eligibility index is 3072 for the SAT (or 741 for the ACT). It is computed by multiplying grade point average by 800 and adding it to the total SAT score (or by multiplying grade point average by 200 and adding it to 10 times the composite ACT score).

Admission to the College

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 3402 for the SAT (or 826 for the ACT) 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. Such applicants are not required to take the SAT (or ACT). 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 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 junior college or other appropriate institution. Only under the most unusual circumstances will such applicants be permitted to enroll in the College. Permission is granted only by special action.

ADMISSION AS AN UNDERGRADUATE TRANSFER

An applicant who has attempted college work will be considered for admission under one of the following provisions. Undergraduate transfer applicants who would be entering the College with fewer than

Admission to the College

ninety quarter units (sixty semester units) completed are required to submit the results of the Scholastic Aptitude Test (or ACT).

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+).

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

Graduate students may be admitted with unclassified status if they have completed a four-year college course and hold an acceptable baccalaureate degree. Classified status in a graduate program is obtained *only* through formal application to the Office of the Vice President for Academic Affairs for master's degree programs or to the Credentials Secretary for school service credential programs.

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.

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 accepted and it later becomes evident that admission will not be possible, it and any supporting documents will, at the applicant's request, be forwarded 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

Admission to the College

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 request forms are available from the Admissions and Records Office.

ADMISSION PROCEDURE

WHO NEED APPLY

An Application for Admission or Readmission form must be filed by any person who plans to enroll 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 must apply for readmission with graduate standing in order to continue his enrollment. Enrollment in summer session or extension courses does not exempt a person from the above requirements.

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 accepted, these students must pay the same registration fees as other students. (See Auditors.)

Students Seeking Summer Session or Extension Enrollment. Students seeking to enroll only for summer session or extension 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. 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 the admission requirements.

WHEN TO APPLY

Applications for admission for 1970-71 available on request from the Admissions and Records Office, are accepted beginning January 1 for the fall quarter, September 15 for the winter quarter, and December 15 for the spring quarter. Applications for admission or readmission with all transcripts and supporting admission documents are due in the Ad-

Admission to the College

missions and Records Office March 1 for the fall quarter, November 15 for the winter quarter and February 15 for the spring quarter.

It is possible that control of enrollment on a first-come, first-serve basis within enrollment quotas will be necessary because of budgetary limitations imposed on the California State Colleges. For this reason all applicants for admission are urged to apply as early as possible.

The regular period for filing fall 1971 applications for admission will be November 1 to 30, 1970.

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 applied to (1) all persons not regularly enrolled at the College during any of the three quarters immediately preceding, and (2) former students who subsequently registered in another college for residence, summer, extension, or correspondence courses. Students seeking summer session or extension registration only and those seeking only to audit courses without credit are exempt from this requirement.

TRANSCRIPTS REQUIRED

An 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.

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 at the time of application 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 record showing the final grades for that term.

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

Graduate Students. An applicant who holds a baccalaureate degree from an accredited institution and who is not seeking a degree from the College needs only to verify his baccalaureate degree to the Admissions and Records Office by filing an official transcript from the institution at which his degree was earned. A graduate who is seeking

Admission to the College

admission to a master's degree or credential program must *also* request that complete official transcripts be sent directly to the Office of the Vice President for Academic Affairs or Credentials Secretary, as appropriate, from each college (other than SSC) and university at which he registered.

Former Students. Former students of the College who are returning after graduation or an absence of one or more quarters are required to submit official and complete transcripts covering attendance at any other college since the date of last enrollment at the College. A former graduate student who is not planning to complete the College's degree or credential requirements need not submit additional transcripts.

Summer Session and Extension Registrants. A student seeking to enroll for summer session or extension is not required to file official transcripts unless he plans to complete the College's requirements for a degree or credential.

ADMISSION EXAMINATION

Students who will be entering the College with fewer than ninety quarter units (sixty semester units) completed at *regionally* accredited colleges are required to take the College Entrance Examination Board Scholastic Aptitude Test (SAT). All other undergraduate applicants, particularly transfers who have *mediocre* college grade point averages, are urged to take this test if they do not file the results of a recent college entrance aptitude examination with the Admissions and Records Office. Test results will be used as a basis for counseling and, when required, for determining eligibility for admission. Although the SAT is preferred the American College Test (ACT) is accepted as a substitute examination.

The Scholastic Aptitude Test (SAT) may be taken at the College and other testing centers throughout the world on the dates listed below. Applicants for admission should take the SAT not later than March for fall admission, July for winter admission, and January for spring admission. The test fee is \$5.75, payable at the time of application to take the test.

Saturday, May 2, 1970	Saturday, January 9, 1971
Saturday, July 11, 1970	Saturday, March 6, 1971
Saturday, November 7, 1970	Saturday, April 17, 1971
Saturday, December 5, 1970	Saturday, July 10, 1971

Applications and fees should be sent directly to the College Entrance Examination Board, Box 1025, Berkeley, California 94701, in time to be received not later than four weeks and preferably six weeks prior to the test date selected. Application forms to take the test may be secured from high school and college counseling offices and the College En-

Admission to the College

trance Examination Board. Applicants are expected to request the College Board to release SAT score reports directly to the College.

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

HEALTH HISTORY STATEMENT AND EXAMINATION

A complete physical examination by the student's private physician is required for the following categories of admitted students: 1) new students enrolling for more than 6 units; 2) former students of the College enrolling for more than 6 units who were not regularly enrolled at the College during any of the three preceding quarters. This physical examination *must* be sent to the College Health Center by the physician. All other admitted students must submit a health history statement. Appropriate forms will be provided all admitted students.

STATEMENT OF RESIDENCE

A Statement of Residence must be submitted by a student (1) who enrolls for the first time in a regular term at the College, (2) whose residence status has changed since his last enrollment, and (3) who was not regularly enrolled at the College during any of the three quarters immediately preceding.

EVALUATION AND ACCEPTANCE OF CREDIT

The Admissions and Records Office will evaluate previous college work in terms of its relationship to the requirements of the College. Each student seeking a degree will be issued an Evaluation of Credit which will serve as a basis for determining the remaining requirements for the student's specific objective. The evaluation remains valid as long as the student matriculates at the date specified, pursues the objective declared, and remains in continuous enrollment. The student will not be obligated to meet additional graduation requirements unless such requirements become mandatory as a result of changes in the *California Administrative Code*.

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

While a student may follow the specific catalog year degree requirements on which his Evaluation of Credit is based, he will be held responsible for complying with all changes in other regulations, policies, and procedures which may appear in subsequent catalogs.

ADVANCED PLACEMENT AND CREDIT

The College participates in the Advanced Placement Program of the College Entrance Examination Board. Advanced placement in sequential courses and/or unit and course credit may be awarded to entering students for scores of 3, 4 and 5 on a CEEB Advanced Placement examination.

Course credit earned through the College's on-campus Advanced Placement Program for High School Students or from early entrance programs at other colleges will be recognized by the College the same as is regular credit, provided this credit is not applied toward high school graduation. (See Admission as a Freshman.)

TRANSFER OF CREDIT FROM A JUNIOR COLLEGE

Junior college credit is allowed up to a maximum of 105 quarter (70 semester) units. No upper division credit may be allowed from a junior college, nor may credit be allowed for professional courses in education or courses not appropriate in purpose, scope, and depth to a baccalaureate degree.

CREDIT FROM NON-ACCREDITED COLLEGES

Courses from institutions of higher learning which are not accredited to offer work leading to the baccalaureate degree by a regional accrediting agency recognized by the U.S. Office of Education and courses from those which are accredited as a "specialized institution" may be accepted for credit toward advanced standing and fulfillment of graduation requirements only if appropriate in purpose, scope and depth to a baccalaureate degree. Credit allowed from these institutions will be designated as provisional. Regular credit may be granted upon adviser recommendation, department endorsement, and completion of 36 units at the College with a 2.0 (C) grade point average or better.

A student with a degree from such an institution may have his educational experience recognized by the College as equivalent to the completion of a baccalaureate degree from a regionally accredited institution upon adviser recommendation, department endorsement, and completion of 36 units at the College with a grade point average of 2.0 (C) or better.

CREDIT FOR EXTENSION AND CORRESPONDENCE COURSES

The maximum credit for correspondence and extension courses which may be allowed toward the bachelor's degree is 36 quarter units, of which not more than 18 may be transferred from other colleges.

WORKSHOP CREDIT

Workshop credit does not substitute for course credit in a credential sequence and will not be applied toward the general education, major, or minor requirements of the College. Such credit may be applied toward a bachelor's degree only as elective units.

Admission to the College

CREDIT FOR MILITARY SERVICE

Undergraduate students who have been in military service may receive credit toward a baccalaureate degree. Courses taken at military service schools if appropriate in purpose, scope, and depth to a baccalaureate degree may also yield credit. Military experience will be evaluated only upon request. Separation papers or form DD 295 verifying such experience must be filed with the Admissions and Records Office before credit will be allowed.

REGISTRATION

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

A *Class Schedule* listing courses offered and the procedure for registration is available before registration for each quarter. At registration, every student is required to file an Official Program card with the Admissions and Records Office. Registration by mail or proxy is not permitted unless specifically authorized by the Registrar. Late registrants will find themselves handicapped in arranging their programs and must pay a \$5.00 late registration fee, as required by State law.

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

ACADEMIC ADVISEMENT

The Academic Advising Office directs the academic advising program at the College. Such advising is primarily the responsibility of faculty members in the specific academic areas. Upon admission a student is referred to an adviser in his declared major field of study or to a general adviser if he is undeclared or is without a Stanislaus State College degree objective. An undeclared major must declare a degree major or specific other educational objectives prior to his junior year. Assignment or reassignment of advisers is made through the academic departments on official declaration or change of major. (See Declaration or Change of Major or Minor.)

Although the adviser assists the student in planning his entire educational program the student is considered to be responsible for meeting all course prerequisites and all requirements for his degree or credential. The student is encouraged to consult his adviser at any time as the need arises. Specific days for registration advising are designated each quarter in the Academic Calendar to provide a time for a new or continuing student who needs to consult his adviser for assistance in determining his program of courses for the approaching term. If a student is uncertain as to a choice of major and/or its related vocational choice,

he may request from his adviser a referral to the Counseling and Testing Center.

A student is prepared for an advising conference only after he has studied applicable catalog requirements, reviewed course offerings in the *Class Schedule*, and prepared a Trial Study List. Materials a student must take to the advising conference include the prepared Trial Study List, the Evaluation of Credit form (if issued), transcript(s) and catalog(s) of former college(s), Stanislaus State College grade reports, and a program planning form (if issued).

CREENTIAL PROGRAMS

The College is accredited by the California State Board of Education for programs leading to the following credentials:

1. Standard Teaching Credential with a Specialization in Elementary School Teaching.
2. Standard Teaching Credential with a Specialization in Secondary School Teaching.
3. Restricted Credential Authorizing Service as a Speech and Hearing Specialist.

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

Coordination of credential programs is a college-wide function under the direction of the Director of Academic Advising. Applications for admission to a credential program, assignments to a credential adviser, and institutional recommendations for life credentials are all coordinated through the Credentials Secretary.

ADMISSION TO A CREDENTIAL PROGRAM

The student who plans to apply for admission to a credential program needs to become familiar with the eligibility requirements as stated in the College catalog which is current at the time he expects to be admitted to a credential program. Admission to the College does not imply admission to a credential program. To apply for admission to a credential program, a student must be eligible for admission to the College, must not be on academic probation, and must have an accumulative grade point average of 2.25 (C+) or a 2.50 grade point average in his most recent 45 quarter units of course work. Any deviation from this grade point standard will be considered by the Director only when the student files an official petition form (CAP-4) presenting compensating factors and supporting verification.

Preliminary registration with the Credentials Secretary is made by the student no later than the second week of the quarter prior to seeking enrollment in his first foundations course(s). At that time, a Credentials

Credential Programs

Admissions Program (CAP) folder is initiated. This folder includes the following information that is to be completed by the student prior to eligibility for enrollment:

1. Application for admission to program.
2. Official transcripts of all college work except SSC.
3. Autobiography emphasizing college interests and activities with children or young people.
4. Two letters of recommendation.
5. Fingerprint cards (2).
6. Speech and hearing clearance (CAP 2).

Conditional admission to a credential program is granted when the student satisfactorily completes the folder no later than the end of the fifth week. A credential adviser is then assigned for programming. After advisement, a conditional admission number and card are issued to the student for admittance to the first foundations course(s).

Admission to a credential program remains conditional until the following steps are completed:

1. Residency and admission requirements in the current catalog are satisfied.
2. A grade of "C" or better has been received in the first foundations course(s).
3. A statement of recommendation is obtained by the student from his academic adviser (CAP-3).
4. A health examination and TB clearance are filed with the Credentials Secretary.
5. The Academic Standard and Readmission Committee has acted favorably on the candidates under standards set forth in the *California Administrative Code, Title 5, Education*. Section 41101 of this code requires that each teacher candidate must be evaluated in terms of academic aptitude, scholarship, professional aptitude, physical fitness, fundamental skills, personality and character, and many-sided interests.

Admission to a credential program then becomes official and a credential card is issued to the student. This official admission is prerequisite to the following: (1) all courses which follow the first one(s) in which the student enrolls; (2) placement in field work experiences; (3) recommendation by the College for issuance of a credential; and (4) referral to and by the College professional placement service.

CONTINUANCE IN A CREDENTIAL PROGRAM

Retention in a teaching credential program is based upon continuous satisfactory student performance as evaluated by the Academic Standard and Readmission Committee. A grade point average of 2.50 in required courses must be maintained while in program. The CAP file and all required records are also subject to final review prior to qualifying for credential recommendations 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
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
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 departmentally approved for credit grading.

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 during the first week of class.

Academic Standards

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:
 - Freshman-Sophomore (less than 90 quarter units completed) 23 grade point deficiency.
 - Junior (90-134½ quarter units completed) 15 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 readmission until after two quarters of nonattendance at Stanislaus State College. The summer session does not count as a quarter.

Policies and Procedures

After completion of the period of disqualification and after fulfillment of any other requirements stipulated, a student may apply for reinstatement to the Vice President for Academic Affairs.

To be readmitted, a student must provide before the specified deadline dates listed in the official college catalog objective evidence in writing that future academic performances will be satisfactory.

Students whose petitions for readmission are approved will be readmitted on probation 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."

SCHOLARSHIP STANDARDS FOR GRADUATE STUDENTS

A graduate student becomes disqualified (1) if the postgraduate grade point average at Stanislaus State College falls below 2.0, (2) or if the overall postgraduate grade point average falls below 2.0.

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.

AUDITORS

Admitted students may register in courses as auditors without credit with permission of the instructor provided there is room. An auditor

* The student may also be subject to expulsion, suspension and/or probation for other causes. See pages 48-49 in Student Services section of this catalog.

Policies and Procedures

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 without a grade, unless he merits a WS grade. 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. Enrollment forms are available at the rack across from the Admissions and Records Office.

OFFICIAL PROGRAM LIMITS

A student electing during a fall, winter, or spring quarter to carry a course load in excess of 18 units, including audit, incomplete courses, and concurrent enrollment courses, must submit a petition approved by his major adviser and the Dean of the School at the time of registration. When courses in the 500 series are included, a program normally may not exceed three courses or twelve units. Students with outside responsibilities are advised to reduce their study loads proportionately. Excess unit petition forms are available at the Admissions and Records Office forms rack.

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 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 forms rack. Students who wish to secure unit credit toward a degree under this plan must register at a regular registration period for the course to be completed by examination. The letter grade earned 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.

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. These courses are numbered 498 and 598 (and 698 in professional fields) 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 an approved Request for Course by Individual Study form. 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. 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 MAJOR OR MINOR

A student who selects or changes his major after admission must file a Declaration or Change of Major or Minor form with the Admissions and Records Office. This request form must be endorsed by his current major adviser, and department head of his new major. The requirement and procedure are similar for selection or change of a minor. 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. 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 Request for Program Change or Withdrawal form is filed in the Admissions and Records Office on or before the last day to drop a course without a grade, as shown in the Academic Calendar.
2. After the last day to drop a course without a grade, a student who officially drops a course in which he is doing C work or better, as

Policies and Procedures

judged by his instructor, will receive a grade of WS; if his work is D or F, he will receive a grade of WU, which is equivalent to an F.

3. 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 Request for Program Change or Withdrawal form 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 be absent for an academic year may for valid reasons 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.

WITHDRAWAL FROM COLLEGE

A student may withdraw from the College by filing an approved Request for Program Change or Withdrawal form 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.

Students who file requests for withdrawal after the last day to drop a course without a grade, as shown in the Academic Calendar, will receive WS or WU grades. The WU grade is equivalent to an F. (See Grading System.) A student who takes unauthorized leave may receive a final grade of F in each course for which he was registered. A student registered for only one course may not withdraw after the last day to drop a course; all other 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. 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 pro-

longed illness or any emergency which necessitates an extension of time to remove the grade, the student may petition the Academic Standards Committee through his instructor. Students may not be permitted to graduate until all incomplete grades are removed.

STUDENT CLASSIFICATIONS

Class level:

Freshman.....	0-44½ acceptable quarter units
Sophomore.....	45-89½ acceptable quarter units
Junior.....	90-134½ acceptable quarter units
Senior.....	135-or more acceptable 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 mailed to a student after the conclusion of each quarter and summer session. A student who desires his grades mailed to a different address than that indicated on his address card at the time of registration must notify the Admissions and Records Office one week prior to the end of the term.

CHANGE OF ADDRESS

A student who changes his local or permanent mailing address after admission or registration should immediately notify the Admissions and Records Office. This information is needed in order to insure that registration packets, grades, correspondence, and other such material reach the student without unnecessary delay.

Fees and Refunds

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 student is entitled to one free transcript; a fee of \$1.00 for each subsequent 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, if 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.

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.

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	
Regular Students (over 6 units).....	\$36.00
Limited Students (1 to 6 units).....	36.00
Associated Student's Fees	
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.

Fees and Refunds

Student Union Fees

Regular Students—Each Quarter	\$4.00
Limited Students—Each Quarter	2.00
Summer Session	2.00
Post Session50
Health Facility Fee (effective fall 1970—nonrefundable)	2.00

OTHER FEES AND CHARGES (in addition to registration fees)

Nonresident tuition—(maximum \$370.00 per quarter) subject to change	
Per unit, as follows:	
For the first 14 units (per quarter)	\$25.00
For the 15th unit and over (maximum)	370.00
Foreign Nonresident tuition (maximum \$200.00 per quarter)	
Per unit, as follows:	
For the first 14 units (per quarter)	\$13.50
For the 15th unit and over (maximum)	200.00
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
Change of Program	1.00
Transcript of Record (No charge for first copy)	1.00
Failure to meet administratively required appointment or time limit	2.00
Music Studio lessons—per lesson	10.00
Replacement of equipment or materials lost or damaged	Cost of Item
Library books or materials lost or damaged	Cost plus 1.00
Summer Session—per unit	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
Limited students, per quarter	4.00
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, two-wheeled vehicle, per quarter	1.00
Alternate vehicle (auto) in addition to fee for first 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.

Student Services

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 Material and Service Fee less \$10.00. Upon changing from Regular to Limited status, the State will refund the difference between the two applicable Material and Service Fee less \$5.00.

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.

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.

Upon withdrawal from college, the student body fee and student union fee charged will be refunded up to the deadline if the student body card is received with the application. Upon changing from regular to limited status, the refund of the difference will be refunded.

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

STUDENT SERVICES

The Student Services Office is oriented toward providing aid to the student body where needed. By providing orientation, personal and group counseling, vocational and aptitude testing, educational and job placement, financial aids, foreign student advisement, housing information, and health services, the Student Services personnel help students meet their basic concerns and by doing so hope to make their life at the College more rewarding.

COUNSELING

The Counseling Office provides a variety of services related to student problems. This office is able to assist students in personal counseling, group counseling, achievement level counseling, and in suggesting efficient study methods.

The College has a working relationship with the Emanuel Medical Health Center to provide personal, in depth counseling as needed. For information about counseling service consult the Office of the Dean of Student Services.

HOUSING

The College maintains a current listing of off-campus rooms, apartments and houses. These accommodations are neither inspected nor supervised by the College. Immediately adjacent to the campus is a privately owned co-educational dormitory and an apartment complex. Students, along with their parents, are expected to take responsibility for assessing desirability and adequacy of available accommodations. Students interested in locating housing are encouraged to contact the Student Housing Office at the College as early as possible prior to enrollment so that maximum assistance can be provided. No charge is made for housing locator service.

INTERNATIONAL STUDENTS

Special services for international students are coordinated by the Foreign Student Advisor. These services include advisement relating to visa status, employment, housing, academic procedures and requirements, finances, social standards and customs, and opportunities offered by the College and the community.

The International Club is a chartered campus organization whose objective is to help develop community awareness of, and interaction with, international cultures and affairs through educational and social programs. The College maintains a close liaison with the Citizens Committee for International Students of Turlock. Details regarding the International Student Program may be obtained in the Office of the Foreign Student Advisor.

PLACEMENT

The College provides placement services to assist students and alumni in securing full-time or part-time employment. Placement services include: career guidance; counseling on techniques for applying for a position; assistance with the preparation of placement packets and the forwarding of them to prospective employers; listing of available positions; and arranging interviews.

Student Services

STUDENT FINANCIAL ASSISTANCE

Scholarships. A number of scholarships and awards are offered each year to enrolled students on the basis of financial need, scholastic attainment, character, and professional promise. Some scholarships are limited to a particular field of study. These funds, in general, are administered by the Financial Aid Office.

College Student Loan Fund. These loans are generally available on an emergency or short-term basis and are not meant to completely cover expenses. Each student would be expected to enroll with enough funds to cover all normal expenses for the quarter. Loans are usually limited to \$75.00 and repayment is expected in 30-45 days.

National Defense Student Loan. Stanislaus State College participates in the Federal Loan Program provided by Title II of the National Defense Education Act of 1958. The program was established to provide low-interest loans to deserving students with financial need. Undergraduates may borrow a maximum of \$1,000.00 a year to a total of \$5,000.00 and graduates may borrow \$2,500.00 a year to a total of \$10,000.00. Cancellation of the loan is possible for those students entering the education profession.

Inquiries should be directed to the Financial Aid Office.

Federal Insured Student Loan. Undergraduate and graduate students may borrow up to \$1,500.00 a year from a commercial lending institution. If the adjusted family income is less than \$15,000.00 a year, the Federal Government will pay the interest while the borrower is a full-time student. The student assumes 7% interest on the unpaid principal upon graduation. Detailed information and applications are available from participating lending institutions or the Financial Aid Office.

Work-Study Program. Stanislaus State College participates in the Federal Work-Study Program as provided for in the Economic Opportunities Act of 1964. Students in need of part-time employment who are from low income families may qualify for jobs. Participants may work an average of 15 hours a week while classes are in session and 40 hours a week otherwise. Inquiries should be directed to the Financial Aid Office.

Law-Enforcement Education Grant and Loan Program. The law-enforcement education grant program makes available payments for tuition and fees not exceeding \$200 per quarter to full-time employees of publicly-funded law enforcement agencies who are full-time or part-time students in a graduate or undergraduate program leading to a certificate or degree in an area related to law enforcement. The

Student Services

loan portion makes available ten-year seven percent loans up to \$1800 per academic year to full-time students enrolled in undergraduate or graduate programs leading to a degree in an area directly related to law enforcement. The loans may be cancelled after four years of full-time employment in a public, local, State or Federal law enforcement agency.

Waivers of Non-Resident Fees. Certain non-resident and foreign visa students may be eligible for a reduction in tuition fees. Please refer to the Financial Aid Office for details.

Other Sources of Student Aid. More detailed information on work opportunities, loans and scholarships together with specifically funded loans and scholarships for which a student may apply can be obtained by securing a copy of the Financial Aid Program Announcement from the Financial Aid Office, Stanislaus State College, Turlock, California 95380.

The following scholarship and loans are administered by Stanislaus State College:

American Assyrian Civic Club of Turlock
Beta Delta Subchapter of Alpha Delta Kappa—Teachers Honorary
California Congress of Parents and Teachers Elementary Education
California Retired Teachers Association—Laura Settle
Edwin O. and Mae M. Jones Memorial
Epsilon Nu of Delta Kappa Gamma
Faculty Women's Club of Stanislaus State College
Fine Art Club of Stanislaus State College
Fred C. Beyer Memorial
J. Burton Vasche Memorial
Los Compañeros Club of Stanislaus State College
Merced Venture Club
Newman Club of Stanislaus State College
Rotary Club of Turlock
Soroptimist Club of Turlock
Terry Ouellette Memorial
Turlock Refrigeration Company
Walter A. Fisher Memorial
White Scholarship and Loan
William Chad Art Loan Fund

There are available many other aid plans which are not administered through the Financial Aids Office. Information regarding these can be obtained by writing to the NEA Research Division, 1201 Sixteenth Street, N.W., Washington, D.C., for "Guide to Sources of Information on Scholarships" and to North American Educational Computer Services, Inc., Princeton, New Jersey 08450.

Student Services

STUDENT HEALTH

The objective of Student Health Services is to assist the student in maintaining an optimum state of health, so that he may realize to the fullest the opportunities afforded by the College.

HEALTH EXAMINATIONS

A complete physical examination by the student's private physician is required for the following categories of admitted students: 1) new students enrolling for more than 6 units; 2) former students of the College enrolling for more than 6 units who were not regularly enrolled during any of the 3 preceding quarters. This physical examination form *must* be sent to the College Health Center by the physician. 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.

The College maintains a Health Center in Room 117A of the Classroom Building, which makes available emergency first aid services to all students. The Health Center is open Monday through Friday between 8:00 a.m.-12 noon and 1:00 p.m.-5:00 p.m.

COLLEGE MEDICAL SERVICES

Students requiring emergency health or medical services are referred to a doctor chosen by the student. This basic out-patient emergency service is provided by the College for students carrying more than 6 quarter units. It should be noted that his basic out-patient health service is an emergency service only.

VOLUNTARY HEALTH INSURANCE PLAN

In order to provide for hospital/surgical services a supplemental insurance plan is available for all regular students at a nominal cost. Foreign students are required to carry this supplemental coverage or furnish satisfactory proof of adequate coverage. All students not covered by some form of hospital/surgical insurance are urged to enroll in the voluntary supplemental insurance plan. Information is available at the College Health Center or in the Student Services Office.

TESTING

The Testing Office administers, scores and interprets tests for admission to the College and also provides consultative services to instructional faculty, academic advisors, counselors and administrators.

GRADUATE RECORD EXAMINATIONS

The College is a testing center for the Graduate Record Examinations (GRE) of the National Program for Graduate School Selection. The GRE are required by a number of colleges throughout the United States for admission to postbaccalaureate degree programs. These examinations include a basic graduate aptitude test and advanced tests in the following subject fields: Anthropology, Biology, Business, Chemistry, Economics, Education, Engineering, French, Geography, Geology, History, Literature in English, Mathematics, Music, Philosophy, Physical Education, Physics, Political Science, Psychology, Sociology, Spanish and Speech.

The Graduate Record Examinations will be administered on a national basis in the following months during 1970 and 1971:

October 24, 1970	February 27, 1971*
December 12, 1970	April 24, 1971
January 16, 1971	June 19, 1971

Students must register with the Educational Testing Service by mail to take the GRE and must observe the registration closing dates listed above. Registration forms, Bulletins of Information for Candidates, and information concerning the Graduate Record Examinations are available at the Student Services Office or by letter from the Educational Testing Service, 1947 Center Street, Berkeley, California 94701.

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 14 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

* Not given at Stanislaus State College that month.

Student Services

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.

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. This form need only be requested once each academic year and is used to certify admission to the College, satisfactory progress, and completion or termination of a degree 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.

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

STUDENT ACTIVITIES

Student activities are financed and organized by the Associated Students and various campus organizations. These activities cover a myriad of subjects and interests and provide many opportunities for active participation. The Student Services Office assists and advises in these activities and works closely with the student government in its relations with the administration and faculty.

The following are presently the chartered organizations on campus: Biology Club, Business Club, Campus Christian Fellowship, Circle K Club, Collegium Musicum, Fine Art Club, Forensics, French Club, Help Our Polluted Earth, International Club, Literary Art Guild, Literary Society, Los Compañeros, Minority Student Alliance, Newman Club, Pi Kappa Delta, Psychology Club, Ski Club, Students for Unruh, Theatre Society, Tri Tau Club, Young Americans for Freedom, and Young Socialist Alliance.

STUDENT CONDUCT AND RESPONSIBILITY

The College assumes that students are mature individuals who have a serious purpose in attending college and that they will assume responsibility for their personal behavior according to acceptable standards of conduct and good taste. In return for the broad freedom granted to students as individuals and as organized groups, the individual student assumes certain obligations to obey established law and regulations, to

General Requirements for Degrees

conduct social and other activities in a manner compatible with the purposes of the College, and to pursue courses of study with sincerity and diligence.

This assumption on behalf of students and their organizations continues until individuals by their actions create situations requiring that measures be taken possibly leading to (a) loss of privileges, (b) disciplinary probation, (c) official censure, (d) suspension, or (e) expulsion from the College.

Actions warranting such measures will include the violation of rules and regulations governing student conduct as duly promulgated by authorized officials of the California State College System and of Stanislaus State College and those violations of public law punishable under the provisions of pertinent Codes of the State of California. (*Student Conduct Policy* adopted 5/23/67)

According to present procedures, these problems are either resolved through informal discussion with the Dean of Student Services or referred to the Student Disciplinary Panel.

ALUMNI

The SSC Alumni Association is a young but increasingly dynamic one of over 1700 members. Dedicated to the following purposes, the Association through its moral and financial support helps to provide that sought after margin of excellence:

1. To assist the College in developing its human and material resources, with the objective of achieving the highest standards of academic excellence.
2. To encourage creativity and research in all areas.
3. To provide avenues by which the alumnus may contribute to the advancement of knowledge.
4. To maintain and strengthen bonds between the alumnus and the College to the mutual benefit of both through the stimulation of continual intellectual growth.
5. To promote the mutual welfare of all members.

Inquiries concerning the Alumni Association should be directed to the College Relations Office.

GENERAL REQUIREMENTS FOR DEGREES

The College grants the Bachelor of Arts degree and the Master of Arts degree.

Election of Regulations. A matriculated student who has been in continuous enrollment pursuing the same objective may elect to meet

General Requirements for Degrees

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.

Faculty Approval. After approval of the major adviser and the department concerned, a favorable vote of the faculty 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 THE BACHELOR OF ARTS DEGREE

To qualify for a Bachelor of Arts 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.

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. This program has been developed by the faculty to provide breadth and depth of education through a variety of intellectual and creative experiences outside a student's major. This pro-

General Requirements for Degrees

gram will stress the interrelatedness of the major fields of knowledge and will form the foundation for specializations. Courses which are taken to fulfill General Education requirements will not also be counted toward fulfillment of major requirements. The College accepts certification of general education-breadth requirements by another accredited institution according to regulations of the *California Administrative Code*.

Natural Sciences

Three courses required, including at least one from each of the following groups and at least one laboratory course:

1. BIOL 101. Principles of Biology, 5 units
ZOO 102. Principles of Zoology, 5 units
BOTY 103. Principles of Botany, 5 units
BIOL 263. Conservation of Natural Resources, 3 units
ENTO 300. Principles of Entomology, 5 units
BIOL 332. Genetics, 3 units (4 units with lab)
BIOL 381. Evolution, 3 units
2. CHEM 100. Fundamentals of Chemistry, 4 units
CHEM 101. Principles of Chemistry I, 5 units
CHEM 102. Principles of Chemistry II, 5 units
PHYS 100. Introduction to Natural Sciences, 5 units
PHYS 101. Mechanics and Heat, 5 units
PHYS 102. Electricity and Optics, 5 units
ASTR 200. Descriptive Astronomy, 4 units (5 units with lab)
GEOL 200. Principles of Geology I, 4 units
GEOL 201. Principles of Geology II, 4 units

Social Sciences

1. One of the following courses covering United States history: *
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: * †
PSCI 202. American Government, 4 units
3. Two courses from one of the following groups:
 - a. ANTH 205. Introduction to Human Origins, 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. Principles of Economics I, 4 units
ECON 251. Principles of Economics II, 4 units
ECON 310. European Economic History, 4 units
 - c. GEOG 200. Introduction to Geography, 4 units
GEOG 201. Principles of Physical Geography, 4 units
GEOG 202. Principles of Cultural Geography, 4 units
 - d. HIST 101. Western Civilization I, 4 units
HIST 102. Western Civilization II, 4 units
HIST 361. Colonial America, 4 units

* Students may satisfy subject requirements in United States History and Constitution, California State and Local Government, and in oral expression by passing examinations in these fields.

† HIST 474, Constitutional History of the United States, 4 units, will fulfill the U.S. Constitution portion of this requirement.

General Requirements for Degrees

- e. PSCI 222. Modern Isms, 4 units
 - PSCI 331. International Relations, 4 units
 - f. SOCL 201. Introduction to 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:

- 1. ENGL 201. Introduction to Literature I, 4 units
- ENGL 202. Introduction to Literature II, 4 units
- PHIL 101. Classics of Philosophy I, 4 units
- PHIL 102. Classics of Philosophy II, 4 units
- PHIL 103. Classics of Philosophy III, 4 units
- 2. ART 100. Introduction to Art, 4 units
- ART 101. Anatomical Drawing, 4 units
- ART 102. Pictorial Perspective, 4 units
- ART 340. Art History I, 4 units
- ART 341. Art History II, 4 units
- ART 342. Art History III, 4 units
- DRAM 200. Expression for the Performing Artist, 4 units
- DRAM 220. Introduction to Theatre, 4 units
- DRAM 230. Theatre Workshop I, 2 units
- DRAM 421. History of the Theatre I, 4 units
- DRAM 422. History of the Theatre II, 4 units
- MUS 100. Introduction to Music, 4 units
- MUS 241. Chorus, 1 unit *
- MUS 242. Choral Ensemble, 1 unit *
- MUS 243. Instrumental Ensemble, 1 unit *
- MUS 244. Concert Band, 1 unit *

Basic Subjects

1. The following sequence in English composition courses:

- ENGL 100. Freshman Composition, 4 units
- ENGL 200. Sophomore Composition, 4 units

2. One basic course in oral expression: †

- SPCH 200. Speech Communication, 4 units

Additional Courses

1. One health course ‡

- HLTH 101. Healthful Living, 2 units

2. Three quarters (two semesters) of physical education activity courses: †

- 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. These courses must be selected from those listed above under the categories. Natural Sciences, Social Sciences or

* Course must be taken 3 consecutive quarters to be applicable.

† Students may satisfy subject requirements in United States History and Constitution, California State and Local Government, and in oral expression by passing examinations in these fields.

‡ 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 the Vice President for Academic Affairs in lieu of the required health course.
- 2. A student may be exempted by the Vice President for Academic Affairs from the physical education requirements if the student is over 25 years of age. Appropriate units in other fields may be substituted in order to meet the requirements of graduation.

General Requirements for Degrees

Humanities, or from the list below. Only courses outside the major field of study are applicable.

- BIOL 363. Ecology, 4 units
- CHEM 103. Principles of Chemistry III, 5 units
- CHIN 101. Elementary Chinese I, 4 units
- CHIN 102. Elementary Chinese II, 4 units
- CHIN 103. Elementary Chinese III, 4 units
- CHIN 201. Intermediate Chinese I, 4 units
- CHIN 202. Intermediate Chinese II, 4 units
- CHIN 203. Intermediate Chinese III, 4 units
- EDUC 200. Introduction to Education, 2 units
- FREN 101. Elementary French I, 4 units
- FREN 102. Elementary French II, 4 units
- FREN 103. Elementary French III, 4 units
- FREN 201. Intermediate French I, 4 units
- FREN 202. Intermediate French II, 4 units
- FREN 203. Intermediate French III, 4 units
- FREN 311. Composition and Conversation, 4 units
- FREN 312. Advanced Oral and Written Composition, 4 units
- GERM 101. Elementary German I, 4 units
- GERM 102. Elementary German II, 4 units
- GERM 103. Elementary German III, 4 units
- GERM 201. Intermediate German I, 4 units
- GERM 202. Intermediate German II, 4 units
- GERM 203. Intermediate German III, 4 units
- MATH 100. Math for Liberal Arts Students, 5 units
- MATH 105. Intermediate Algebra, 4 units
- MATH 110. College Algebra and Trigonometry, 4 units
- MATH 210. Finite Mathematics, 4 units
- MUS 301. History and Literature I, 3 units
- MUS 302. History and Literature II, 3 units
- MUS 303. History and Literature III, 3 units
- PHIL 110. Deductive Logic, 4 units
- PHIL 111. Inductive Logic, 4 units
- PHYS 103. Modern Physics, 5 units
- SPAN 101. Elementary Spanish I, 4 units
- SPAN 102. Elementary Spanish II, 4 units
- SPAN 103. Elementary Spanish III, 4 units
- SPAN 201. Intermediate Spanish I, 4 units
- SPAN 202. Intermediate Spanish II, 4 units
- SPAN 203. Intermediate Spanish III, 4 units
- SPAN 311. Composition and Conversation, 4 units
- SPAN 312. Advanced Style and Syntax, 4 units

General Education Program Total—70 quarter (47 semester) units

NOTE: 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 fulfilled or when all requirements in one of the categories of Natural Sciences, Social Sciences, Humanities or Basic Skills has been fulfilled.

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.

General Requirements for Degrees

The College offers programs leading to the Bachelor of Arts degree with a major in the following areas:

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	

NOTE: Students seeking teaching credentials are advised to select a subject 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 bachelor's 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.

MINOR

Completion of a minor is a requirement for a Bachelor of Arts 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 departments 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 by a student.

General Requirements for Degrees

A minor for the Bachelor of Arts degree, if required, may be selected from the listing below:

Anthropology	Fine Art	Physical Sciences
Biological Sciences	French	Physics
Business Administration	History	Political Science
Chemistry	Mathematics	Psychology
Drama	Music	Sociology
Economics	Philosophy	Spanish
English	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 Bachelor of Arts degree.

ALL COLLEGE REGULATIONS

Compliance with all regulations prescribed by the College is a requirement for graduation with a Bachelor of Arts 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 academic department and is certified only through the Admissions and Records Office.

General Requirements for Degrees

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE *

ADVANCEMENT TO CLASSIFIED GRADUATE STANDING

In addition to obtaining admission to the College through the Admissions and Records Office a graduate student who expects to have his course work counted toward a master's degree must formally apply to the Office of the Vice President for Academic Affairs for admission to classified graduate standing in a specific master's degree program offered by the College.

Students must comply with departmental requirements relating to submission of scores from Graduate Record Examinations. Departments have the right to require additional written or oral comprehensive examinations before admitting a student to classified graduate standing.

A student may be admitted to classified graduate standing provided he has 1) an overall college grade point average of 3.0 (B) or a superior score on the Graduate Record Aptitude Examination, and the approval of the department chairman; or 2) a 3.0 (B) grade point average in his major or superior score on the Graduate Record Subject Examination, and the recommendation of his department chairman and the approval of the Graduate Dean, or 3) academic ability to succeed in a graduate program as evidenced by achievement in a program of course work at the College which has been approved by a faculty graduate adviser.

Program requirements for the master's degree presuppose substantial undergraduate preparation. Students lacking in such preparation may find it necessary to exceed minimal unit requirements for the degree.

Not more than 15 quarter (10 semester) units of course work in unclassified graduate standing may be applied toward unit credit in a master's degree in the College, of which no more than 9 quarter (6 semester) units may be transfer units.

ADVANCEMENT TO MASTER'S DEGREE CANDIDACY

After admission to classified graduate standing a student may begin study toward Master's Degree Candidacy.

To be advanced to candidacy a student is required to complete all applicable course work with at least a 3.0 (B) grade point average and secure recommendation to candidacy by a departmental committee. After advancement to candidacy a student must then complete a thesis, project, or comprehensive examination which is satisfactory to his departmental committee and approved by the Graduate Dean.

PROGRAM REQUIREMENTS

A program of studies for a master's degree is specified within an approved field of concentration for each student. Requirements for the degree include a minimum of 45 postbaccalaureate units with a 3.0 (B)

* Master of Arts programs are offered in Education, English, History and Speech. Specific requirements will be found in the catalog sections for the departments concerned.

General Requirements for Degrees

grade point average to be completed within a seven-year period just preceding the granting of the degree. Outdated credits must be replaced with credits earned within a seven year period. No course with a grade below C is applicable towards a master's degree. When a course is repeated, the two grades shall be averaged to determine the grade point average applicable toward the degree.

Only graduate courses (500 series) and such upper division courses as are recommended by the faculty in the departments and approved by the Graduate Dean are acceptable in the unit requirements. Only in exceptional cases and with departmental recommendation and approval of the Graduate Dean may professional courses (600 series) be applied toward unit requirements in a master's degree program.

The program must include the following:

1. At least 36 units completed in residence at the College.
2. A minimum of 23 units in courses completed after admission to classified graduate standing.
3. At least 22½ units in courses in the 500 series.
4. A minimum of 27 units completed in the major field.
5. The successful completion of a thesis, project, or comprehensive examination.

A program of studies shall not include more than 9 quarter (6 semester) units of credit in student teaching or extension courses, and no more than 9 units of thesis or project credit.

After a program of studies has been recommended by a student's adviser and approved by the department faculty and the Graduate Dean, it may be changed with recommendation of department faculty and approval of the Graduate Dean.

In order to receive a master's degree a student must have achieved grasp of his field of study and must have demonstrated competence in independent study and research to the satisfaction of his graduate committee.

The student must comply with department time requirements as well as with all other requirements for satisfactory completion of the thesis or project.

THESIS, PROJECT, OR COMPREHENSIVE EXAMINATION

Requirements for the master's degree include the successful completion of a thesis or project, or at departmental option, a comprehensive examination.

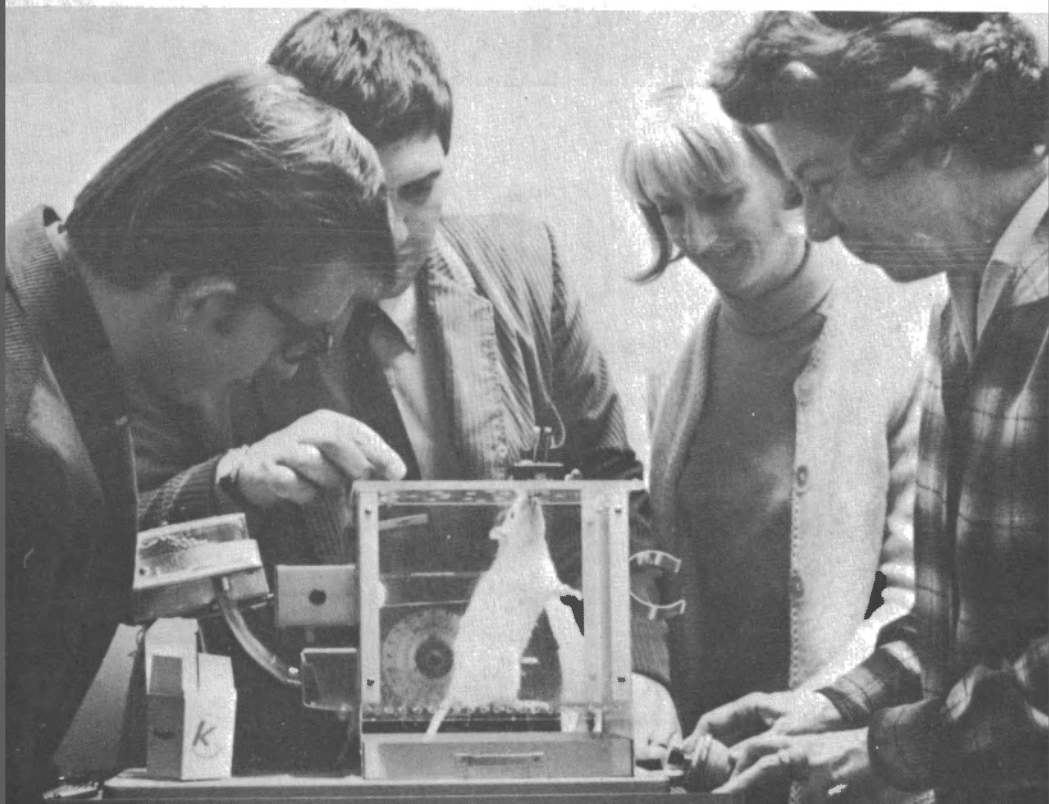
To be eligible to enroll for thesis or project credit, a student must have (1) been advanced to candidacy for the degree, (2) maintained at least a 3.0 (B) grade point average in his program of studies, (3) selected a thesis or project committee consisting of a chairman and at least two other members designated by the department concerned, and (4) filed

General Requirements for Degrees

with the Graduate Dean a prospectus for a thesis or project which has been approved by the department.

The final approved copy of the thesis must be submitted to the Office of the Vice President for Academic Affairs not less than 30 days prior to the end of the quarter that one plans to graduate.

The comprehensive examination may be either written or oral or both, at the discretion of the department. The department will select an examination committee consisting of a chairman and at least two other members who will be responsible for determining the type of examination, its content, the administration of it, and certifying the results to the Graduate Dean. The comprehensive examination carries no unit credit.





ANNOUNCEMENT OF COURSES

COURSE NUMBERING SYSTEM

DEPARTMENTAL REQUIREMENTS

COURSE DESCRIPTIONS

COURSE NUMBERING SYSTEM

COURSE LEVEL IDENTIFICATION

- 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.

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 692Workshops
- 494, 594 and 694Field Work
- 495 and 595Selected Topics
- 496Senior Seminars
- 498, 598 and 698.....Individual Study
- 499 and 599Thesis

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

Alfred W. Bowers, Ph.D., Professor, Chairman

Joel Canby, Ph.D., Professor

Melvin H. Aamodt, Ph.D., Associate Professor

Ira L. Fogel, M.A., Assistant Professor

The Department of Anthropology-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 36 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 (any combination of 12 units)

ANTH 205	Introduction to Human Origins, 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
SOCL 201	Introduction to Sociology, 4 units

The Major

A minimum of 36 upper division units distributed as follows:

Non-Western Cultures, The American Indian	8
Theoretical Anthropology and Special Fields	8
Archeology, Physical Anthropology	8
Additional upper division units	12
<hr/>	
Total	36

DEGREE MINOR IN ANTHROPOLOGY

Twenty-four units approved by the minor adviser are required, including at least 16 units in upper division courses.

Anthropology

TEACHING CREDENTIALS

Major in social sciences for elementary and secondary credentials, see Social Sciences.

Minor in anthropology for elementary and secondary credentials must complete the following *

1. Complete requirements for degree minor in anthropology; plus additional courses in the field of the minor to 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 Human Origins (4)

Studies in the history of human biological and cultural development, fossil man, and racial distinctions. (Formerly 211)

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 of 300 and 400 level courses. (Formerly 201)

ANTH 207. Primitive Social Systems (4)

An introduction to the study of primitive social systems. Training in methods employed in studying the little societies. Detailed investigations into the patterns of social integration of about 20 societies. Prerequisite: ANTH 206.

ANTH 208. Introduction to Physical Anthropology (4)

Human biology and physical anthropology; the relation of man and the animals; anthropometry, the criteria of race, current racial theories.

Upper Division

NON-WESTERN CULTURES

ANTH 305. Non-Western Cultures (4)

A consideration in detail of several diverse cultures drawn from representative Old World and Oceanic areas. (Formerly 300) Prerequisite: ANTH 206 or 207.

ANTH 306. Peoples of East Asia and Oceania (4)

Investigation of the rise of civilizations of East Asia and the settlement of the islands of the Pacific. Prerequisite: ANTH 305.

ANTH 307. Peoples of 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 305.

ANTH 308. African Political and Social Systems (4)

Study of traditional African political and social organization and changes during the colonial period. The influence of the traditional political and social systems on one African nation examined in detail. Prerequisite: ANTH 307 or consent of instructor.

ANTH 309. Native African Art and Literature (4)

A survey of the art, music and literature of Africa. Consideration given to the composition of the art forms as well as to their social functions. Several cultures

* See Education. Before electing to pursue this minor the student seeking a secondary credential should consult a credential adviser as to possibilities of student teaching and professional placement.

studied in detail to show the interrelationship of the various art forms with the total culture. Prerequisite: ANTH 307 or consent of instructor.

THE AMERICAN INDIAN

ANTH 335. The 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 which developed in the New World. (Formerly 330) Prerequisite: ANTH 206 or ANTH 207.

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.

THEORETICAL ANTHROPOLOGY AND SPECIAL FIELDS

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 402. Ecological Anthropology (4)

Survey of theories, methods, and applications of the ecological perspective to cultural and physical attributes of human populations. Prerequisites: 8 units of upper division credit in anthropology or consent of instructor.

ANTH 411. Community Studies (4)

Theory and methods in the study of primitive and contemporary communities in their cultural context. Prerequisite: ANTH 206 and one upper division course in cultural anthropology or consent of instructor.

ANTH 412. Contemporary Civilizations I (4)

The application of anthropological concepts and methods to the study of contemporary North and Latin American Indian societies, their place in Modern American Life and the character of contemporary Indian communities. Prerequisites: 12 units of upper division courses in Non-Western cultures or The American Indian.

ANTH 413. Contemporary Civilizations II (4)

An anthropological analysis of special problems in contemporary civilizations of the Old World, especially southern Asia and Africa. Comparison of cultural changes in America with other contemporary societies. Prerequisites: 12 units of upper division courses in Non-Western cultures or the American Indian. Planned primarily for seniors.

ANTH 421. Cultural Change (4)

Cultural stability and change; with reference to geographical base, innovation, invention, and technology. Prerequisite: ANTH 206 and one upper division course in cultural anthropology or consent of instructor.

Anthropology

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.

ANTH 495. Selected Topics in Anthropology (Topic to be specified in the 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 will be expected to report on an individual project. (Formerly 491) Prerequisite: Consent of instructor.

ANTH 498. Individual Study (1-5)

For student 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.

ARCHEOLOGY

ANTH 325. Methods and Theories in Archeology (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.

ANTH 326. Old World Archeology (4)

Survey of major developments in Old World prehistory, methods of archeological analysis, and geological and biological backgrounds of paleolithic man. (Formerly 301) Prerequisite: ANTH 325.

ANTH 327. New World Archeology (4)

Early man in North America and development of prehistoric cultures in the New World north of the Mexican high culture area. Prerequisite: ANTH 325.

ANTH 355. Field Researches in Archeological Methods (4)

Techniques of prospecting and scientific excavations, with special emphasis on methods of collection, excavating, and recording of specimens and data under carefully controlled field conditions. Student should have significant understanding of archeology. Prerequisite: ANTH 325 recommended.

PHYSICAL ANTHROPOLOGY

ANTH 345. Human Evolution and Fossil Man (4)

The evolutionary processes leading to the development of man and the manlike forms from primate ancestors; fossil men and the origin of modern man. 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. Living Races of Man (4)

The processes of racial differentiation in man, and the criteria of significant differences among human stocks; influence of culture in race formation, analysis of blood groups, race mixture, constitution, growth, and nutrition. Prerequisite: ANTH 208

Biological Sciences

Steve J. Grillos, Ph.D., Professor, Chairman
Glenn A. Hackwell, Ph.D., Associate Professor
James C. Hanson, Ph.D., Associate Professor
Bobby J. Neal, Ph.D., Assistant Professor
Judith A. Brown, M.S., Assistant Professor
Jay P. Christofferson, M.S., Assistant Professor
David M. Gotelli, Ph.D., Assistant Professor
Perpetuo S. Mayol, Ph.D., Assistant Professor
Walter Tordoff III, M.S., 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:

- BIOL 101. Principles of Biology, 5 units
- ZOOL 102. Principles of Zoology, 5 units
- BOTY 103. Principles of Botany, 5 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.

* 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

The Major	Units
BIOL 332. Genetics	3
BIOL 351. Cellular and Molecular Biology	3
BIOL 363. Ecology	4
BIOL 496. Seminar in Biology.....	4
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	50

DEGREE MINOR IN BIOLOGICAL SCIENCES

(31 units, to include at least 16 units in upper division)

Lower Division

- BIOL 101. Principles of Biology, 5 units
- ZOOL 102. Principles of Zoology, 5 units
- BOTY 103. Principles of Botany, 5 units

Upper Division

Courses as approved by minor adviser, 16 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)

Basic biological phenomena common to all living organisms. Cellular and molecular levels of organization, genetics and the mechanisms of heredity in organic evolution, and reproduction and development from the molecular to gross structural levels. (Lecture, 4 hours; laboratory, 3 hours) No prerequisites.

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) Prerequisite: None.

† A maximum of 14 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

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; CHEM 101, 102, and 103 are recommended.

BIOL 332. Genetics (3)

Mechanisms of inheritance and relationships of heredity to fundamental biological problems, as well as application to practical problems including those of human society. (Lecture, 3 hours) Prerequisite: One course in college level biology 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) Prerequisite: One year college level biology or equivalent; CHEM 101, 102, 103 are recommended.

BIOL 353. Principles of Microbiology (4)

Structure, classification, physiology, distribution, and life histories of micro-organism. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: BIOL 101 or BOTY 103, or equivalent.

BIOL 363. Ecology (4)

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

BIOL 365. Aquatic Biology (4)

The biota of fresh water, with emphasis upon the ecology, identification, physiology and behavior of aquatic organisms below the vertebrates. (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 494. History and Philosophy of Biology (3)

Rise and development of biological theories and laws. (Lecture, 3 hours) Prerequisite: One year 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.

Biological Sciences

BIOL 496. Seminar in Biology (2)

Presentations and discussions of selected biological phenomena through study of biological literature. (Discussion, 2 hour) 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.

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 103. Principles of Botany (5)

Basic botanical principles common to the plant kingdom. Principles of plant biology and the major types and groups of plants; physiology, anatomy, ecology, classification, and evolution of plants. (Lecture, 4 hours; laboratory, 3 hours; field trips) Prerequisite: BIOL 101 or equivalent.

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 103 or equivalent.

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 103 or equivalent.

BOTY 315. Introductory Mycology (4)

Survey of fungi with emphasis on form, structure, heredity, development and identification. (Lecture, 3 hours; laboratory, 3 hours; field trips) Prerequisites: BOTY 103 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 103 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 103 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 103 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: Two years of botany or consent of instructor.

ENTOMOLOGY

Upper Division

ENTO 300. Principles of Entomology (5)

Classification, life history, structure, 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: ZOOL 102 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: ENTO 300 or consent of instructor.

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: One quarter college level entomology or consent of instructor.

ZOOLOGY

Lower Division

ZOOL 102. Principles of Zoology (5)

Introduction to basic zoological principles common to the animal kingdom. Principles of animal biology and an account of major types and groups of animals. Physiology, anatomy, ecology, classification and evolution of animals. (Lecture, 4 hours; laboratory, 3 hours; field trips) Prerequisite: BIOL 101 or equivalent.

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) Prerequisites: ZOOL 102 or equivalent.

ZOOL 313. Vertebrate Embryology (5)

Comparative study of microanatomy and development of several representative vertebrate forms. (Lecture 3 hours; laboratory, 6 hours) Prerequisite: ZOOL 102 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 102 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.

Biological Sciences

ZOOL 323. Physiology (5)

Principles of functional anatomy and physiology of organ systems with special reference to human physiology. (Lecture, 3 hours; laboratory, 6 hours) Prerequisites: ZOOL 102 or equivalent; ZOOL 312 recommended.

ZOOL 423. Comparative Animal Physiology I (4)

Comparative study of physiology of organ systems among major animal groups, with special reference to osmotic balance, inorganic ions, feeding and digestion, and excretion. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: ZOOL 102 or equivalent. One full year of organic chemistry is recommended.

ZOOL 424. Comparative Animal Physiology II (4)

Continuation of ZOOL 423. Comparative study of physiology of organ systems among major animal groups, with special reference to respiration, chemoreception, circulation, and metabolism. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: ZOOL 423.

ZOOL 442. Invertebrate Zoology I (4)

Structure, classification, distribution, and life histories of invertebrates. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: Two years of college level biology or equivalent.

ZOOL 443. Invertebrate Zoology II (4)

Continuation of ZOOL 442. Structure, classification, distribution, and life histories of invertebrates. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: ZOOL 442.

ZOOL 444. General Parasitology (4)

Parasitism, with emphasis on parasites of man. (Lecture, 2 hours; laboratory, 6 hours) Prerequisite: ZOOL 443 or consent of instructor.

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, evolution, and life histories of amphibians and reptiles. (Lecture, 3 hours; laboratory, 3 hours or 1 field trip per week) Prerequisite: Two years of zoology or consent of instructor.

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: Two years of zoology or consent of instructor.

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: Two years of zoology or consent of instructor.

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

Development of a selected branch of zoology. Topics vary each term, thus may be repeated for credit. Prerequisite: Two years of zoology or 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, M.B.A., Lecturer

The program currently offered by the department leads to the degree Bachelor of Arts, Business Administration. This program is designed to provide (1) professional preparation for those students planning to seek careers in the business community; (2) a firm educational foundation for those students planning to undertake graduate study in business administration.

THE BACHELOR OF ARTS, BUSINESS ADMINISTRATION

DEGREE OBJECTIVES

The program leading to the Bachelor of Arts, Business Administration is designed to give each student:

1. A broad, liberal education.
2. A basic understanding of the operation of a business enterprise.
3. An understanding of the environment in which business exists, and of which it is a part.
4. Proficiency in analyzing, evaluating, and synthesizing managerial decisions.
5. A degree of specialized training in a selected area of concentration.

PROGRAM STRUCTURE

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

The prerequisites to the major, which overlap the General Education program, provide the essential ingredients in the foundation upon which the major is later constructed. Students should schedule these courses during their freshman and sophomore years.

The business administration core, which comprises about two-thirds of the major, is a closely coordinated sequence of courses which introduces the student to the broad field of business administration, develops his knowledge of the basic organizational and economic concepts which underlie the operation of all business enterprises, and develops effective ways of thinking about complex situations encountered in business administration. Except for the integrating course in Business Policy, which must be taken as the last course in the major, students should schedule most courses in the core during their junior year.

The area of concentration, which comprises about one-third of the major, provides the opportunity for a limited amount of specialized

Business Administration

study in a selected area of interest. Permissible areas of concentration currently available are Accounting, Administration, Finance, and Marketing. Coursework in the area of concentration is, for the most part, restricted to the senior year.

Completion of a minor is not required.

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.

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

The major in business administration is essentially an upper division program. During the freshman and sophomore years the specified prerequisites to the major, several of which are included in the General Education program, should be completed.

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.

Elective courses should be chosen in the following areas: behavioral sciences, economics, English, and mathematics.

DEGREE MAJOR IN BUSINESS ADMINISTRATION

Prerequisites to the Major

- BUS 200. Introduction to Computers, 4 units
- BUS 201. Computer Programming, 3 units
- BUS 211. Principles of Financial Accounting, 5 units
- ENGL 100. Freshman Composition, 4 units
- ENGL 200. Sophomore Composition, 4 units
- ECON. 250, 251. Principles of Economics I-II, 8 units
- MATH 160. Statistics, 4 units, (or ECON 320. Quantitative Analysis, 4 units)
- MATH 210. Finite Mathematics, 4 units
- PSYC 201. Introduction to Psychology, 4 units

Business Administration

SOCL 201. Introduction to Sociology, 4 units
Completion of General Education requirements in history and government.

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 311. Intermediate Accounting I, 4 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 312. Intermediate Accounting II, 4 units
- BUS 314. Cost Analysis, 5 units
- BUS 411. Advanced Accounting, 5 units

One of the following as approved by the major advisor:

- BUS 317. Legal Factors in Business, 4 units
- BUS 412. Auditing, 5 units
- BUS 414. Income Tax Accounting, 5 units
- BUS 415. Seminar in Accounting Theory, 4 units

Administration

Administration is the process of establishing and maintaining a viable co-alignment of available resources and of streams of institutionalized action in a dynamic and interacting environment. The administrative process involves both adaptive and directive action. Administrators are employed in all of the functional fields and at all levels in organizations.

Careers in administration may be found in all types of organizations—not just the business organization.

Course requirements are as follows:

- BUS 433. Production and Operations Administration, 4 units
- BUS 434. Program Administration, 4 units
- BUS 436. Human Problems in Administration, 4 units

Business Administration

One of the following as approved by the major advisor:

BUS 431. Personnel Administration, 4 units

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

Finance

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

Professional careers in finance are to be found in the financial administration of industrial, commercial, utility, and government enterprises as well as in financial institutions such as commercial banks, brokerage houses, and investment companies.

Course requirements are as follows:

ECON 332. Money and Banking, 4 units

BUS 421. Investments, 4 units

BUS 424. Financial Institutions, 4 units

BUS 414. Income Tax Accounting, 5 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 442. Marketing Research, 4 units

BUS 443. Sales Management, 4 units

BUS 449. Problems in Marketing Strategy, 4 units

One of the following as approved by the major advisor:

BUS 444. Industrial Marketing, 4 units

BUS 445. Retailing, 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

BUS 313. Managerial Accounting, 5 units

BUS 322. Business Finance, 5 units

BUS 330. Administrative Organizations, 4 units

BUS 341. Basic Marketing, 4 units

ECON 315. National Income Analysis, 4 units

TEACHING CREDENTIALS

The major and the minor in business administration do not constitute appropriate preparation for prospective teachers of business. A new business education program designed specifically for prospective teachers of business is now under study by the faculty. It is hoped that this program can be inaugurated within the next two years.

Business Administration

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 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: MATH 105 or 2 years of high school algebra.

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 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 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 160 or ECON 320; MATH 210.

BUS 303. Business and Its Environment (4)

Continuing interaction and adaptation of business and its legal, political, and social environment. Prerequisites: ECON 250, 251; ENGL 200; and completion of General Education requirements in U.S. History and Government.

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. (Formerly 316) Prerequisites: BUS 211, 300.

BUS 317. Legal Factors in Business (4)

Law of business; emphasis on laws relating to personal property, bailments, negotiable instruments, partnerships, corporation, real property and insurance. Prerequisite: BUS 303.

Business Administration

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, 311 or 313; ECON 315, 331.

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: BUS 303; PSYC 201; ENGL 200; SOCL 201 recommended.

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 340. Marketing in the Economy (4)

Functions, institutions, and problems of producers, middlemen, and consumers examined from the viewpoint of their role and contribution to the U.S. economy. Prerequisites: ECON 250, 251; PSYC 201; ENGL 200; SOCL 201 recommended.

BUS 341. Basic Marketing (4)

Marketing process with emphasis on the management point of view. Consideration is given to 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: ECON 250, 251; PSYC 201; ENGL 200; SOCL 201 recommended.

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. (Formerly 301) Prerequisite: Consent of instructor.

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; completion or concurrent enrollment in all other courses required for the Business Administration major.

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.

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.

Business Administration

BUS 414. Income Tax Accounting (5)

History and philosophy of federal income tax law and regulations and procedures for determining income tax liability of individuals and business firms. Prerequisite: BUS 211.

BUS 415. Seminar in Accounting Theory (4)

History and development of accounting theory; accounting standards, conventions and principles. Current problems in accounting, including a survey of current accounting literature. Prerequisite: Completion of or concurrent enrollment in all accounting 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. (Formerly 318) Prerequisites: BUS 201, 313 or 314, 322, 331 and 341.

BUS 421. Investments (4)

Analysis of classes of securities and fundamental criteria involved in the construction and management of various types of securities portfolios. (Field trips) Prerequisite: BUS 322 or ECON 332.

BUS 424. 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) (Formerly 324) Prerequisites: BUS 322 or ECON 332.

BUS 431. 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. Prerequisite: BUS 331.

BUS 432. Labor Management Relations (4)

Relationships with unionized employees. Role of the labor union. Union management agreements—negotiation and administration; impact of public policy. Prerequisites: BUS 431 and ECON 410.

BUS 433. 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) Prerequisites: BUS 300, 331; ECON 331.

BUS 434. 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) Prerequisites: BUS 300, 331.

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.

Business Administration

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 330, 418, and 433 or 434.

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 or consent of instructor.

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 or consent of instructor.

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, and/or consent of instructor.

BUS 495. Selected Topics in Business Administration (Topic to be specified in Class Schedule) (1-5)

Innovative course of study. May be repeated for credit. Prerequisite: Consent of instructor.

BUS 498. Individual Study (1-5)

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

Chemistry

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

The Department of Chemistry offers a program for students seeking a Bachelor of Arts degree. Additional electives in mathematics and physics are provided for those who wish to pursue a greater concentration in chemistry to prepare for advanced study or industrial employment. The Bachelor of Arts, Chemistry, will prepare students for careers in chemistry or teaching. Those who are interested in medicine, dentistry, veterinary medicine and pharmacy may elect a degree in chemistry and qualify for entrance into the professional school of their choice.

REQUIREMENTS FOR THE BACHELOR OF ARTS, CHEMISTRY

Chemistry 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 41 upper division units including course requirements as specified for the major.
4. Completion of a minor is not required.

DEGREE MAJOR 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, 4 units

Required courses in supporting fields*:

PHYS 221. Intermediate Physics I, 5 units
PHYS 222. Intermediate Physics II, 5 units
PHYS 223. Intermediate Physics III, 5 units
MATH 119. Calculus with Analytic Geometry, 4 units
MATH 120, 221. Calculus I-II, 8 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 two of the following courses as approved by major adviser:

CHEM 427. Advanced Organic Chemistry

* Students planning to attend graduate school or work in industry should complete MATH 222 and 223 and one year of German.

Chemistry

The Major—Continued

CHEM 467. Advanced Physical Chemistry	
CHEM 480. Introduction to Biochemistry	
CHEM 495. Selected Topics in Chemistry	
CHEM 498. Individual Study	
PHYS 372. Modern Physics	
MATH 321. Differential Equations I	6-8
Total	41-43

DEGREE MINOR IN CHEMISTRY

Consists of 24 units in chemistry as approved by the minor adviser, to include at least 12 units in upper division.

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 211. Analytical Chemistry I (4)

Principles and practice of chemical analysis. (Lecture, 2 hours; laboratory, 6 hours) (Formerly 300) Prerequisite: CHEM 103.

Upper Division

CHEM 321. Organic Chemistry I—Lecture (3)

Principles, basic techniques, and syntheses. Aliphatic and aromatic compounds. (Lecture, 3 hours) Concurrent enrollment in CHEM 324 required. (Formerly 327) Prerequisite: CHEM 103.

CHEM 322. Organic Chemistry II—Lecture (3)

Continuation of CHEM 321. (Lecture, 3 hours) Concurrent enrollment in CHEM 325 required. (Formerly 328) Prerequisite: CHEM 321.

CHEM 323. Organic Chemistry III—Lecture (3)

Continuation of CHEM 322. Heterocycles and natural products. (Lecture, 3 hours) Prerequisite: CHEM 322.

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

Syntheses, identification of unknowns, and laboratory techniques. Concurrent enrollment in CHEM 321 required. (Laboratory, 3 or 6 hours) (Formerly 327) Prerequisite: CHEM 103.

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

Continuation of CHEM 324. (Laboratory, 3 or 6 hours) Concurrent enrollment in CHEM 322 required. (Formerly 328) Prerequisite: CHEM 324.

CHEM 326. Organic Chemistry III—Laboratory (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) (Formerly 301) 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 221 and PHYS 223.

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: 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 467. Advanced Physical Chemistry (3)

Theory of Valence, Molecular spectra, statistical thermodynamics, photo-chemistry, solid state chemistry. Prerequisite: CHEM 463.

CHEM 480. Introduction to Biochemistry (4)

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

Chemistry

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, M.A., Assistant Professor
 Noble T. Dinse, M.A.T., 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 41-44 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, but is recommended for secondary credential candidates.

DEGREE MAJOR IN DRAMA

Prerequisites to the Major

- DRAM 200. Expression for the Performing Arts, 4 units
 DRAM 220. Introduction to Theatre, 4 units.
 DRAM 230. Theatre Workshop I, 4 units

The Major

	<i>Units</i>
DRAM 300. Acting	4
DRAM 310. Stagecraft	4
DRAM 340. Methods of Theatrical Production	4
DRAM 341. Dramatic Theory and Criticism	4
DRAM 421. Theatre History I	4
DRAM 422. Theatre History II	4
DRAM 423. Modern Theatre	4
DRAM 430. Theatre Workshop II	4
DRAM 460. Theory of Directing.....	4
DRAM 461. Practicum—Directing	1-4
One of the following as recommended by the major advisor:	
DRAM 303. Stage Lighting	
DRAM 306. Costuming and Makeup	
DRAM 311. Scene Design	4
Total	41-44

Drama

The Major—Continued

Units

Elective Courses

Elective courses available for strengthening major courses, or substitution for required courses on approval of major adviser 12

- DRAM 250. Pantomime and Movement, 4 units
- DRAM 400. Advanced Acting, 4 units
- DRAM 424. History of Cinema, 4 units
- DRAM 425. American Theatre, 4 units
- DRAM 440. Reader's 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. Courses to be selected from DRAM 220, 230, 300, 310, 340, 421, 422, 460, 461; SPCH 240, 340, 341.

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.

Upper Division

DRAM 300. Acting (4)

Study and practice in the theories and techniques of developing and projecting a character. Prerequisite: Consent of instructor.

DRAM 303. Stage Lighting (4)

Theory and practice of theatrical stage lighting; design of effects and operation of current devices.

DRAM 306. Costuming and Makeup (4)

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

† See Education.

DRAM 310. Stagecraft (4)

Principles and practice in the techniques of building, painting and mounting stage scenery and properties.

DRAM 311. Scene Design (4)

Practice in the techniques of creating effective theatrical scenery. Beginning drawing or two-dimensional design is recommended. Prerequisite: Consent of instructor.

DRAM 322. Creative Drama for Children (3)

Methods of developing original dramatizations with children; creating plays from children's literature. Introduction to the basic principles of socio-drama. Two lectures and one demonstration workshop weekly. Prerequisite: Consent of instructor.

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 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 421. History of Theatre, 500 B.C.—1650 A.D. (4)

Historical analysis of the theatre from its primitive origins to 17th century France.

DRAM 422. History of Theatre, 1650 to Present Day (4)

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

DRAM 423. The Modern Theatre (4)

Analysis of modern theatre from Ibsen to the present day; influences, trends, current activities.

DRAM 424. History of Cinema (4)

Study of the cinema and its dynamics, and investigation of its impact upon contemporary culture. Prerequisite: Consent of instructor.

DRAM 425. American Theatre (4)

A comprehensive survey of the drama 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 440. Reader's Theatre (4)

Cutting, arranging, and performing all forms of literature in the theatrical setting. Prerequisite: Consent of instructor.

Drama

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 (1-4)

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

Economics

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

The Division of Arts and Sciences offers the degree Bachelor of Arts, Economics. The objectives of the major in economics are: (1) to provide a concentration in economics as the central core of a liberal oriented education; (2) to provide the major with courses in advanced theories and principles of production, distribution, exchange, and consumption, thus enabling the major to enter graduate study at leading universities; (3) to provide an expanded 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 micro-theory 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.

Economics

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 postbaccalaureate work and receive approval of Economics as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTIONS

Lower Division General Courses

ECON 250. Principles of Economics I (4)

Macroeconomics; scope, method, economic resources, monetary system, income determination, 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.

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.

MONEY AND BANKING

ECON 332. Money and Banking I (4)

Relationship of money and credit to production and exchange; monetary policies for full employment and economic stability. Prerequisite: Economic principles or consent of instructor.

ECON 333. Money and Banking II (4)

Development of banking; the Federal Reserve System; bank supervision and regulation; noncommercial financial institutions; international banking mechanisms. 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.

Economics

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, X^2 square tests, and poisson distribution. Prerequisite: ECON 320 or consent of instructor.

ECON 330. Economic Fluctuations (4)

Measurement of economic fluctuations; theories of economic cycles; economic forecasting. 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

James C. Cole, Ed.D., Professor, Chairman
Charles R. Farrar, Ed.D., Professor
†Haig A. Rushdoony, Ed.D., Professor
Richard V. Jones, Ed.D., Associate Professor
Priscilla R. Smith, Ed.D., Associate Professor
Lorna M. Swain, Ed.D., Associate Professor
Edward R. Credell, Ph.D., Associate Professor
David Glenday, Ed.D., Associate Professor
Jack A. Graves, Ed.D., Associate Professor
R. J. Moriconi, Ed.D., Assistant Professor
Lloyd R. Thompson, Ed.D., Assistant Professor

The College, in addition to curricula in the liberal arts, offers professional programs in the Department of Education to prepare candidates for elementary and secondary school teaching certification. Course work in school supervision and counseling and guidance is also available. Those students interested in credential programs should make application to the Credentials Secretary in the Office of Academic Advising. Graduate programs leading toward a Master of Arts in Education with concentrations in elementary or secondary curriculum or supervision 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 Communication Arts and Sciences 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. Prior to undertaking course work in professional education leading to a credential, it is assumed that the student will have acquired a broad base of liberal arts academic preparation, including a major and a minor in selected fields of academic study. Professional courses which satisfy credential requirements are listed in the section under each credential. All of these courses are presently accepted by the California State Board of Education in fulfillment of certification regulations.*

The credentials which are offered through the College Department of Education and which are accredited by the California State Board of Education are:

† On sabbatical leave Spring 1971.

* 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.

Education

1. Standard Teaching Credential with a Specialization in Elementary School Teaching.
2. Standard Teaching Credential with a Specialization in Secondary School Teaching.

The student who plans to apply for admission to a credential program in elementary or secondary school teaching first needs to be familiar with admission procedures as listed in the catalog section on Credential Programs. After advisement, he will be scheduled for one of the following credential programs.

THE ELEMENTARY CREDENTIAL PROGRAM

Advisers: Credell, Graves, Rushdoony, Smith, Thompson

A candidate for admission to the elementary credential program must complete the requirements as outlined in the catalog section on Credential Programs.

MINIMAL REQUIREMENTS FOR ADMISSION TO STUDENT TEACHING

1. One quarter of college residence (12 units) to include at least one approved Education credential course.*
2. Admission to Elementary Credential Program.
3. Successful completion of EDUC 411, 412, and one approved curriculum course with a grade of "C" or better in each.
4. Maintenance of a 2.50 grade point average in professional education courses.
5. Medical clearances (physical examination and tuberculosis test) on file with the Credentials Secretary.
6. Completion of application form by deadline due date.

APPLICATION SCHEDULE FOR STUDENT TEACHING AND INTERNSHIP

Application must be on file with the Education Department in accordance with the following schedule:

- | 1. For student teaching beginning in: | Deadline Due Dates |
|--|--|
| a. Fall Quarter..... | May 1 (those in attendance during spring quarter)
July 1 (new summer session SSC enrollees) |
| b. Winter Quarter..... | November 1 |
| c. Spring Quarter..... | February 1 |
| 2. For internship teaching beginning in: | |
| a. Fall Quarter..... | January 15 |
| b. Winter and Spring Quarters..... | No internships begin |

* A qualified graduate student entering in the fall quarter may petition for student teaching to be completed in two quarters.

TYPES OF ELEMENTARY CREDENTIAL PROGRAMS

A candidate for the elementary teaching credential may pursue one of the following: I—the regular five-year pattern; II—the partial, four-year pattern; and III—the Internship Program in Elementary Teaching.

In the regular five-year program, Plan I, eligible students may complete requirements for a Standard Teaching Credential with a Specialization in Elementary Teaching, issued for life. In the partial, four-year program, Plan II, eligible students may complete student teaching as undergraduates, fulfilling fifth year requirements for the Standard Teaching Credential while teaching. In the Internship Program in elementary teaching, Plan III, eligible students may enter the internship program which includes full-time teaching while receiving college credit under college supervision during the post-baccalaureate year and may receive the Standard Teaching Credential with a Specialization in Elementary Teaching upon successfully completing the internship program.

I. The Regular Five-Year Pattern

Candidates admitted to the Elementary Program are to complete successfully:*

1. A baccalaureate degree from an accredited institution.
2. An academic major. Those offered at Stanislaus State College include the following:‡ (Note: All units referred to are quarter units.)
3. An academic minor only where required.

Single Subject

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

4. General education requirements are 67½ quarter units of General Education, with course work in five of the six areas including the English and composition requirement in the humanities area.
 - a. Humanities (English, speech, philosophy)
 - b. Social Sciences (anthropology, economics, geography, history, political science, psychology, and sociology)
 - c. Natural Sciences (biological and physical sciences)
 - d. Mathematics
 - e. Fine Arts (music, art, and drama)
 - f. Foreign Languages

The humanities must include either four quarters of English course work including a course in advanced English composition *or* three quarters of English course work, and in addition, the passing of a special examination in advanced English composition. ENGL 300—Junior Composition.

The requirements on the provisions and principles of the United States Constitution must be completed for the issuance of this credential. This require-

* These requirements are deemed minimal; an adviser may require additional academic or professional work of a candidate as individual needs may require.

‡ For graduate students from other accredited institutions, the California State Board of Education accepts majors in addition to those listed above. All majors except physical education qualify the elementary credential holder to teach all subjects in the self-contained classroom. See Credentials Office for further clarification of physical education major.

Education

ment may be met either by the completion of two semester (three quarters) hours in course work on the United States Constitution or by passing an examination given by an approved institution on the provisions and principles of the Constitution. Course work offered to meet this requirement will apply as credit in the social sciences area.

5. MATH 100 or 600.
6. Foundations: EDUC 411 and EDUC 412.
7. EDUC 425 and by advisement at least three of the following: EDUC 426, 427, 428, and 429 (all five are recommended).
8. Student Teaching: EDUC 441, 442, 443.
9. Other courses by advisement.
10. A total of forty-five (45) approved upper division or graduate units taken after the baccalaureate degree.

Upon satisfactory completion of these requirements, a candidate who applies is recommended by the Academic Standard and Readmission Committee for the Standard Teaching Credential with a Specialization in Elementary Teaching.

II. The Partial Four-Year Pattern *

Candidates admitted to the Elementary Program are to complete successfully: †

1. General Education requirements. (Section 3 in the foregoing.)
2. Requirements for major.
3. A minor where required or a signed waiver of minor.
4. Baccalaureate degree.
5. Prerequisites to student teaching, as follows:
 - EDUC 411. Social Foundations of Education (4)
 - EDUC 412. Psychological Foundations of Education (4)One of the following as approved by a credential adviser:
 - EDUC 425. Reading in Elementary Schools ‡ (4)
 - EDUC 426. Social Studies in Elementary Schools (4)
 - EDUC 427. Language Arts in Elementary Schools (4)
 - EDUC 428. Mathematics in Elementary Schools (4)
 - EDUC 429. Science in Elementary Schools (4)
6. Student Teaching I (EDUC 441) and one additional course from Requirement 5.
7. Student Teaching II (EDUC 442) and two additional courses from Requirement 5.
8. Student Teaching III (EDUC 443).

Upon satisfactory completion of these requirements, a candidate applies directly to the Bureau of Teacher Education and Certification, State Department of Education, and will receive a Standard Teaching Credential with a Specialization in Elementary Teaching issued on Partial Fulfillment of Requirements. Other requirements for a Life Credential are to be completed within seven years of the date of first employment under this credential.

* Sometimes referred to as a "Four Plus One" program because the credential involves a four year baccalaureate degree for initial certification; an additional 45 quarter units (one year) is to be completed within the ensuing seven years.

† These requirements are deemed minimal; an adviser may require additional academic or professional work of a candidate as individual needs may require.

‡ This course must be taken prior to Student Teaching III (EDUC 443).

III. The Internship Program

The college offers an Internship Program in elementary teaching. This program makes available to selected and highly qualified teacher candidates with a baccalaureate degree, an alternate program for completing requirements for a Standard Teaching Credential with a Specialization in Elementary Teaching. Interns are fully salaried in college-designated districts and are supervised by the school district and the college.

REQUIREMENTS AND PROCEDURES FOR THE ONE-YEAR INSTITUTIONAL INTERNSHIP PROGRAM

Students seeking admission to the Internship Program must first gain admission to the Elementary Credential Program by completing the following:

- a. A minimum of 12 units in residence at Stanislaus State College.
- b. EDUC 411, 412, and 425.
- c. Minimum GPA of 2.7 earned in residence work and in required professional studies.
- d. Declaration of intent to be a candidate for elementary internship.

When the foregoing are completed, successful candidates are advanced to Unclassified Internship Status.

Unclassified Internship Status

Students who have been advanced to Unclassified Internship Status must complete the following:

- a. Student Teaching I (EDUC 441 for six units) and at least one of the following as approved by a credential adviser:
 - EDUC 421. Principles of Elementary Education (4)
 - EDUC 426. Social Studies in Elementary Schools (4)
 - EDUC 427. Language Arts in Elementary Schools (4)
 - EDUC 428. Mathematics in Elementary Schools (4)
 - EDUC 429. Science in Elementary Schools (4)
- b. Maintenance of a minimum grade point average of 2.7.
- c. Recommendation for Classified Status by Elementary Credential Screening Committee.
- d. Admission to Classified Status by Academic Standard and Readmission Committee.

Upon satisfactory completion of the foregoing, successful candidates may be advanced to Classified Internship Status.

Classified Internship Status

Students who have been advanced to the Classified Internship Status must complete the following:

- a. A baccalaureate degree and an academic major from an accredited institution.
- b. The General Education requirements as specified for the regular five year pattern.
- c. A college approved one-year internship arrangement for a salaried full-time elementary (K-6) teaching position.
- d. Final College concurrence with school district's placement of intern.
- e. At least one additional course from EDUC 421, 426, 427, 428, or 429.
- f. An application for internship certification.

Intern candidates successfully completing the foregoing are ready to begin the internship year.

Education

The Internship Year

Intern teachers must complete the following during the Internship Year to qualify for a Standard Credential:

- a. A minimum of twelve (12) units of internship teaching, and six (6) units of internship seminar:
 1. First Quarter
 - EDUC 641. Internship Teaching in Elementary School I (4-6)
 - EDUC 651. Elementary Internship Seminar I (2)
 2. Second Quarter
 - EDUC 642. Internship Teaching in Elementary School II (4-6)
 - EDUC 652. Elementary Internship Seminar II (2)
 3. Third Quarter
 - EDUC 643. Internship Teaching in Elementary School III (4-6)
 - EDUC 653. Elementary Internship Seminar III (2)
- b. Additional individual requirements, including a fourth curriculum course.
- c. Application for Standard Teaching Credential with a Specialization in Elementary Teaching issued for Life.

REQUIREMENTS AND PROCEDURES FOR THE TWO-YEAR DISTRICT INITIATED INTERNSHIP PROGRAM

In addition to the foregoing College Internship Program, the College cooperates with school districts in the service area of the College in the preparation of teachers through two-year district initiated internship programs; students seeking admission through such programs must apply and be admitted to the Elementary Credential program by completing the following:

- a. Requirements for admission to the College as a graduate student; this requires the completion of a baccalaureate degree from an accredited institution prior to the internship year.
- b. Minimum GPA of 2.7 in previous college work.
- c. Contract as an intern teacher in a cooperating district.
- d. Declaration of intent to be a candidate in a cooperative College and district initiated internship program.

When the foregoing are completed, successful candidates are advanced to Unclassified Internship Status.

Unclassified Internship Status

Students who have been advanced to Unclassified Internship Status must complete the following:

- a. Admission to the College as a post-baccalaureate student.
- b. Admission to the Elementary Credential Program.
- c. Maintenance of a minimum grade point average of 2.7.
- d. Recommendation for Classified Status by the Elementary Credential Screening Committee.
- e. Admission to Classified Status by the Academic Standard and Readmission Committee.

Upon satisfactory completion of the foregoing, successful candidates may be advanced to Classified Internship Status.

Classified Internship Status

Students who have been advanced to the Classified Internship Status must complete the following:

- a. A baccalaureate degree from an accredited institution.
- b. Final College concurrence with a school district's placement of intern.

Education

- c. Completion of summer school requirements specified by the district and/or in the written agreement between the cooperating district and College.
- d. An application for the internship certification through the district or county office.

Intern candidates successfully completing the foregoing are ready to begin the first internship year.

The First Internship Year

Intern teachers must complete the following during the first internship year:

1. First Quarter
 - EDUC 641. Internship Teaching in Elementary School I (4)
 - EDUC 651. Elementary Internship Seminar I (2)
2. Second Quarter
 - EDUC 642. Internship Teaching in Elementary School II (4)
 - EDUC 652. Elementary Internship Seminar II (2)
3. Third Quarter
 - EDUC 643. Internship Teaching in Elementary School III (4)
 - EDUC 653. Elementary Internship Seminar III (2)

Intern candidates successfully completing the foregoing and College requirements for the summer are ready to begin the second internship year.

The Second Internship Year

Intern teachers must obtain a College-approved contract from a cooperating district as a continuing intern teacher and complete the following:

1. First Quarter
 - EDUC 644. Internship Teaching in Elementary School IV (4)
2. Second Quarter
 - EDUC 645. Internship Teaching in Elementary School V (4)
3. Third Quarter
 - EDUC 646. Internship Teaching in Elementary School VI (4)

Additional Requirements

Intern teachers must meet the following requirements to qualify for a Standard Teaching Credential with a Specialization in Elementary Teaching issued for Life.

- a. Professional
 1. Foundations
 - EDUC 411. Social Foundations of Education (4)
 - EDUC 412. Psychological Foundations of Education (4)
 2. Elementary Curriculum
 - EDUC 421. Principles of Elementary Education (4)
 3. Elementary Methods
 - EDUC 425. Reading in Elementary Schools (4)
 - EDUC 426. Social Studies in Elementary Schools (4)
 - EDUC 427. Language Arts in Elementary School (4)
 - EDUC 428. Mathematics in Elementary Schools (4)
- b. Academic
 1. An academic major from an accredited institution.
 2. The General Education requirements as specified for the regular five-year pattern.
- c. Other individual requirements as deemed necessary for professional proficiency by the district or College.
- d. Application for the Life Credential.

Education

THE SECONDARY CREDENTIAL PROGRAM

Advisers: Farrar, Glenday Jones, Moriconi, Swain

A candidate for admission to the secondary credential program must complete the requirements as outlined in the catalog section on Credential Programs.

REQUIREMENTS FOR ADMISSION TO STUDENT TEACHING

1. Admission to the Secondary Credential Program.
2. Recommendation in terms of his subject matter competence by the departments of his major and minor teaching fields.
3. Maintenance of a 2.50 grade point average in professional education courses, and in both teaching major and minor.
4. Satisfactory completion of at least one approved course at this college in the Education Department.

APPLICATION SCHEDULE FOR STUDENT TEACHING AND INTERNSHIP

Application must be on file with the Education Department in accordance with the following schedule:

1. For student teaching beginning in:

	<i>Deadline Due Dates</i>
a. Fall Quarter.....	May 1 (those in attendance during spring quarter)
b. Winter Quarter.....	November 1
c. Spring Quarter.....	No applications accepted
2. For internship teaching beginning in:

a. Fall Quarter.....	January 15
b. Winter and Spring Quarters.....	No internships begin

TYPES OF SECONDARY CREDENTIAL PROGRAMS

A candidate for the Secondary Teaching Credential may apply for one of the following: Plan I—the regular five-year pattern; or Plan II—the Internship Program.‡

I. The Regular Five-Year Pattern

Candidates admitted to the Secondary Program are to complete successfully: †

1. Baccalaureate degree from an accredited institution.
2. General Education requirements are 67½ quarter units of General Education, including course work in four of the six areas including the English and composition requirement in the humanities area.
 - a. Humanities (English, speech, philosophy)
 - b. Social Sciences (anthropology, economics, geography, history, political science, psychology, and sociology)
 - c. Natural Sciences (biological and physical sciences)
 - d. Mathematics
 - e. Fine Arts (music, art, and drama)
 - f. Foreign Languages

‡ The Standard Teaching Credential with a Specialization in Secondary Teaching is also issued on the basis of a partial fulfillment of requirements. Information may be obtained from the College Credentials Office.

† These requirements are deemed minimal; an adviser may require additional academic or professional work of a candidate as individual needs require.

Education

The humanities must include either four quarters of English course work including a course in advanced English composition *or* three quarters of English course work, and in addition, the passing of a special examination in advanced English composition Engl 300—Junior Composition.

The requirements on the provisions and principles of the United States Constitution must be completed for the issuance of this credential. This requirement may be met either by the completion of two semester (three quarters) hours in course work on the United States Constitution or by passing an examination given by an approved institution on the provisions and principles of the Constitution. Course work offered to meet this requirement will apply as credit in the social sciences area.

3. An academic major. For a single subject major, 9 units are to be completed as postbaccalaureate work in courses in the major as recommended by the major department and approved by the credential adviser.‡

Single Subject

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

4. Minor if desired. California credential regulations require no minor if the major is in an academic subject commonly taught in the public high schools. However, employment opportunities are significantly better for students who have completed a minor of sufficient scope as to equip the student with a second teaching field.

Anthropology *	Mathematics
Biology	Music
Chemistry	Philosophy *
Drama	Physics
Economics *	Political Science
English	Psychology *
Fine Art	Sociology *
French	Spanish
History	Speech

5. **Requirements in Professional Education.** The education courses listed below are required to gain College recommendation for the secondary teaching credential. Students may elect certain professional education courses in addition to those listed. The following is a recommended sequence; however, this sequence may be rearranged in consultation with a credential adviser.

Foundations (Normally taken in the last two quarters prior to student teaching)

EDUC 411. Social Foundations of Education (4)

EDUC 412. Psychological Foundations of Education (4)

‡ For graduate students from other accredited institutions, the California State Board of Education accepts additional majors; students holding other degree majors should contact the Credentials Office prior to application to program.

* As these majors and minors are not commonly taught in the secondary schools, students should consult with the Education Department for employment potential.

Education

Curriculum and Instruction

First Quarter

- EDUC 448. Introduction to Secondary Education (6)
- EDUC 671. Student Teaching in Secondary Schools I (4)
- Electives †

Second Quarter

- EDUC 449. Curriculum Planning in Secondary Schools (4)
- EDUC 672. Student Teaching in Secondary Schools II (4)
- Electives †

Third Quarter

- EDUC 673. Student Teaching in Secondary Schools III (6)
- Electives †

6. Recommended Electives in Education, if desired

- EDUC 436. Selection and Use of Instructional Materials (3)
- EDUC 575. Tests, Measurement and Evaluation (3)
- EDUC 576. Exceptional Children and Youth (4)
- EDUC 577. Counseling and Guidance (3)

Other electives may be drawn from 600 level courses, or the 500 level if qualified.

Upon satisfactory completion of these requirements, a candidate who applies is recommended for the Standard Teaching Credential with a Specialization in Secondary Teaching.

II. The Internship Program in Secondary Teaching

The Secondary Internship Program is designed as an alternate to the regular student teaching program for those students who have demonstrated academic competence as well as a high degree of maturity and self-direction. The program provides a fully salaried position in secondary teaching which is carefully supervised by the college and the employing school district, and includes a coordinated program of studies during both the initial teaching year and the preceding and following summer sessions. The requirements for a Standard Teaching Credential with a Specialization in Secondary Teaching will be completed at the end of this program.

REQUIREMENTS AND PROCEDURES FOR THE INTERNSHIP PROGRAM

1. Pre-internship (unclassified internship status)

- a. Completion of all baccalaureate requirements, including the completion of a teaching major and minor and the General Education, English, and Constitution requirements as noted for the Regular Five-Year Pattern.
- b. GPA minimum of 2.7 in teaching major, 2.5 in teaching minor, and 2.5 overall in upper division work.
- c. Completion of screening procedures, including:
 - (1) Application forms
 - (2) Interviews and testing
- d. Acceptance into program by the Academic Standard and Readmission Committee.
- e. Completion of EDUC 471 (Student Teaching in Secondary Schools I) during the spring quarter prior to the internship year or equivalent.

† Electives must include at least 9 quarter units of approved upper division or graduate course work in the teaching major or the teaching minor and total, along with professional course work, no less than 45 quarter units to meet credential requirements.

2. Internship Year (classified internship status)

- a. EDUC 611 (4), 612 (4), 613 (4): Internship Teaching in the Secondary Schools I, II, III. College credit is earned for the successful supervised internship teaching. Interns will be co-supervised by school district and college personnel.
- b. EDUC 614 (5), 615 (5), 616 (5): Secondary Internship Seminar. These classes will meet at Stanislaus State College at times which will not conflict with the teaching schedules of interns. The seminar will deal with the social and psychological foundations of education, secondary curriculum and instruction, use of audio-visual aids, and practical problems of teaching.
- c. A minimum of 18 quarter units of electives, including at least 9 units in the teaching major at the upper division or graduate level. These courses may be taken prior to and following the internship teaching. Candidates will be permitted to take course work during the school year only in individually approved special cases.
- d. Application for Standard Teaching Credential with a Specialization in Secondary Teaching issued for Life.

MASTER OF ARTS IN EDUCATION

The Master of Arts in Education is designed primarily to meet the professional growth needs of experienced teachers who are presently employed in the schools. Course work is offered late afternoons and evenings. Concurrent programming for both advanced degrees and 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 curriculum; and (4) counseling. The program requires each candidate to complete, in addition to a thesis (or three approved masters of arts papers), 45 quarter units made up of: 15 units in Foundations; 6 units in Common Studies; 3 units in an Area of Emphasis Seminar; and the balance in Area of Emphasis and elective course work. See collegewide minimal standards for graduate study.

Foundations Core (15 units; except Counseling):

- EDUC 501. Advanced Studies in Sociology of Education (3)
- EDUC 502. Seminar: History of Education (3) *or*
- EDUC 503. Seminar: Comparative Education (3)
- EDUC 504. Seminar: Philosophies of Education (3)
- EDUC 505. Seminar: Methods of Research in Education (3)
- EDUC 506. Seminar: Applied Theories of Learning (3)
- EDUC 599. Thesis or Project (3)

Common Studies: (6 units)

- EDUC 575. Seminar: Tests, Measurement and Evaluation (3)
- EDUC 577. Seminar: Counseling and Guidance (3)
- EDUC 587. Seminar: New Developments in Education (3)

One area of specialization seminar: (3 units)

- EDUC 521. Seminar in Elementary Education (3)
- EDUC 548. Seminar in Secondary Education (3)
- EDUC 535. Pupil Personnel Services Seminar (3)
- EDUC 583. School Supervision and Administration Seminar (3)

Area of specialization and electives to total 45 units.

Course work in the area of specialization and program electives will be selected from graduate level offerings with the approval of the student's program adviser.

Education

Programming worksheets outlining required and elective course work for each specialization may be obtained at the Department of Education Office.

Candidates will need to provide evidence of successful professional service, achievement of professional skills and knowledge, and academic aptitude in graduate course work before being advanced to classified graduate standing. Complete sets of transcripts, required Graduate Record Examinations scores, and verification of successful teaching experience need to be filed with the College Department of Education before the student seeks programming 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.

FOUNDATIONS

Upper Division

EDUC 411. Social Foundations of Education (4)

Society and education; historical trends, philosophical stances, and social phenomena influencing American public education; sociology of education. (Formerly 311) 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. (Formerly 312). Prerequisite: Consent of credential adviser; EDUC 200 and PSYC 313 recommended.

CURRICULUM AND INSTRUCTION

Upper Division

EDUC 421. Principles of Elementary Education (4)

Introduction to teaching in the modern elementary school. Directed observation is included. Prerequisites: EDUC 411 and 412.

EDUC 425. Reading in Elementary Schools (4)

Teaching reading in grades K-9; concepts and applications of reading skills; including phonics, to the elementary school program. Prerequisites: EDUC 411 and 412.

EDUC 426. Social Studies in Elementary Schools (4)

Teaching social studies in grades K-9; concepts and applications. Planning, materials, methods of teaching. Prerequisites: EDUC 411 and 412.

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. Prerequisites: EDUC 411 and 412.

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. Prerequisites: EDUC 411 and 412; MATH 100 or 600.

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: EDUC 411 and 412.

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

Purposes, materials, activities, and techniques applicable in elementary school health and physical education. Prerequisites: EDUC 411 and 412.

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. Improving Reading in Elementary Schools (3)

Analysis of children's reading problems and needs. Individualizing, grouping, production and use of materials in skill development—including phonics—and correlation of reading with total curriculum of elementary schools, K-9. Prerequisites: EDUC 425, teaching experience, and 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. Prerequisites: EDUC 411 and 412.

EDUC 448. Introduction to Secondary Education (6)

Introduction to teaching in secondary schools (grades 7-12). The objectives of secondary education; foundations of curriculum and planning and development; scope of the instructional program, current trends and practices. Analysis of educational practices appropriate to culturally different groups. Prerequisites: EDUC 411, 412 and concurrent enrollment in student teaching.

EDUC 449. Curriculum Planning in Secondary Schools (4)

Preparation for teaching in major and minor fields: analysis of current trends and practices, review of courses of study, preparation of teaching guides—objectives, scope and sequence of content, learning experiences, instructional materials, evaluation. Prerequisite: EDUC 448, and concurrent enrollment in student teaching.

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.)

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.

STUDENT TEACHING

Upper Division

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

Supervised observation-participation and student teaching in public elementary school settings. A minimum of 20 clock hours of actual classroom teaching—30 hours for those enrolled for 6 units. Includes a weekly two-hour 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: Completion of or concurrent enrollment in two curriculum courses. (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. A minimum of 30 clock hours of actual classroom teaching. Includes a weekly two hour on-campus meeting dealing with professional ethics and activities, use of audio-visual, and student teaching problems. P or F grade is given. (Formerly 440) Prerequisite: EDUC 441, and four curriculum courses (one or two concurrently.)

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

Supervised observation-participation and student teaching in public elementary school settings to complete cumulative minimum 180 clock hours of actual classroom teaching. 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. Prerequisites: EDUC 419 and consent of credential adviser.

EDUC 471. Student Teaching in Secondary Schools I (4)

Supervised observation-participation and student teaching in public secondary school settings. A minimum of 20 clock hours of actual classroom teaching. Includes a two-hour on-campus class each week dealing with methodology, materials of instruction, and problems encountered in student teaching experience. Prerequisites: EDUC 411, 412, concurrent enrollment in EDUC 448, and consent of credential adviser.

Graduate

EDUC 671. Student Teaching in Secondary Schools I (4)

Supervised observation-participation and student teaching in public secondary school settings. A minimum of 20 clock hours of actual classroom teaching. Includes a two-hour on-campus class each week dealing with methodology, materials of instruction, and problems encountered in student teaching experience. P or F grade is given. Prerequisites: EDUC 411 and 412, concurrent enrollment in EDUC 448, and consent of credential adviser.

EDUC 672. Student Teaching in Secondary Schools II (4)

Supervised observation-participation and student teaching in public secondary school settings. A minimum of 40 clock hours of actual classroom teaching. Includes a two-hour on-campus class each week dealing with methodology, instructional materials, and problems encountered during the student teaching experience. P or F grade is given. Prerequisites: EDUC 671, and completion of or concurrent enrollment in EDUC 449.

EDUC 673. Student Teaching in Secondary Schools III (6)

Supervised observation-participation in student teaching in public secondary school settings. A minimum of 60 clock hours of actual classroom teaching in major and minor fields. Includes a weekly two hour on-campus seminar dealing with teaching topics and problems. P or F grade is given. Prerequisite: EDUC 672.

Professional Postgraduate**EDUC 625. Advanced Teaching of Reading (4)**

Intended for both regular and special reading teachers in the elementary school. Emphasis on language and communications, remedial techniques, special grouping arrangements, enrichment reading, and latest developments in the reading field. Prerequisite: EDUC 435 or equivalent.

EDUC 628. Advanced Teaching of Mathematics—Elementary (3)

Emphasis on classroom texts and materials, remedial and enrichment techniques, and latest developments in the mathematical field. Intended for both regular and special mathematics teachers in the elementary school, K-9. Prerequisites: MATH 100 or 600 and EDUC 428 or equivalent.

EDUC 678. Seminar: Teaching in the Modern Secondary School (3)

Examination of the basic theories and general principles underlying modern practices in secondary schools. Includes review of pertinent research studies. Areas of concentration include: organizational structure, curriculum planning, instructional materials, counseling and guidance, and evaluation. The topics to be dealt with will be selected from the foregoing and will change with each offering of the course; therefore, may be repeated for a total of 9 units. Open to experienced teachers; and to students enrolled in EDUC 673, with approval of the instructor.

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)

Concurrent enrollment in EDUC 683 required. Prerequisite: Consent of credential adviser.

Counseling and Pupil Personnel Services (3-6)

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

Education

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

INTERNSHIP PROGRAMS Professional Postgraduate

EDUC 611. Internship Teaching in the Secondary School I (4)

Internship teaching in public secondary school under joint district-college supervision. Prerequisites: California Internship Teaching Certificate and concurrent enrollment in EDUC 614.

EDUC 612. Internship Teaching in the Secondary School II (4)

Internship teaching in public secondary school under joint district-college supervision. Prerequisites: EDUC 611 and concurrent enrollment in EDUC 615.

EDUC 613. Internship Teaching in the Secondary School III (4)

Internship teaching in public secondary school under joint district-college supervision. Prerequisites: EDUC 612 and concurrent enrollment in EDUC 616.

EDUC 614. Secondary Internship Seminar I (5)

Initial study of the purposes, issues, curriculum and instruction in the secondary schools, including the sociological and psychological foundations of education. Analysis of problems related to teaching, the learner and learning theory. Prerequisite: California Internship Credential in Secondary Teaching, concurrent enrollment in EDUC 611.

EDUC 615. Secondary Internship Seminar II (5)

Continued study of the purposes, issues, curriculum and instruction in the secondary schools, including the sociological and psychological foundations of education. Analysis of problems related to teaching, the learner and learning theory. Prerequisites: EDUC 614 and concurrent enrollment in EDUC 612.

EDUC 616. Secondary Internship Seminar III (5)

Study of the purposes, issues, curriculum, and instruction in the secondary school, including sociological and psychological foundations of education. Analysis of problems related to teaching, the learner and learning theory. Prerequisites: EDUC 614, 615 and concurrent enrollment in EDUC 613.

EDUC 641. Internship Teaching in Elementary School I (4 or 6)

Internship teaching in public elementary school under joint district-college supervision. P or F grade is given. Prerequisites: California Internship Teaching Certificate and concurrent enrollment in EDUC 651.

EDUC 642. Internship Teaching in Elementary School II (4 or 6)

Internship teaching in public elementary school under joint district-college supervision. P or F grade is given. Prerequisites: EDUC 641 and concurrent enrollment in EDUC 652.

EDUC 643. Internship Teaching in Elementary School III (4 or 6)

Internship teaching in public elementary school under joint district-college supervision. P or F grade is given. Prerequisites: EDUC 642 and concurrent enrollment in EDUC 653.

EDUC 644. Internship Teaching in Elementary School IV (4)

Internship teaching in public elementary school under joint district-college supervision. Includes regular problem-centered seminar. Prerequisites: California Internship Teaching Certificate and one year of satisfactory internship teaching.

EDUC 645. Internship Teaching in Elementary School V (4)

Internship teaching in public elementary school under joint district-college supervision. Includes regular problem-centered seminar. Prerequisite: EDUC 644.

EDUC 646. Internship Teaching in Elementary School VI (4)

Internship teaching in public elementary school under joint district-college supervision. Includes regular problem-centered seminar. Prerequisite: EDUC 645.

EDUC 651. Internship Seminar I—Elementary (2)

Problems seminar with focus on elementary school classroom planning, organization, deportment and control, use of audio visual aids, and teaching elementary school health and physical education. P or F grade is given. Prerequisites: California Internship Teaching Certificate and concurrent enrollment in EDUC 641.

EDUC 652. Internship Seminar II—Elementary (2)

Problems seminar including selected topics on teaching resources, evaluation, and teaching science and social studies. P or F grade is given. Prerequisites: EDUC 651 and concurrent enrollment in EDUC 642.

EDUC 653. Internship Seminar III—Elementary (2)

Seminar in elementary education curriculum with special attention to problems in teaching the communication arts, emerging curricular trends and problems, and evaluating professional growth. P or F grade is given. Prerequisites: EDUC 652 and concurrent enrollment in EDUC 643.

GRADUATE COURSES

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

EDUC 501. Advanced Studies in Sociology of Education (3)

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

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, teaching experience and consent of the instructor.

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, teaching experience and consent of the instructor.

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. Prerequisites: EDUC 411, teaching experience, and consent of instructor.

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. Prerequisites: EDUC 412, teaching experience, and consent of instructor.

Education

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

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

EDUC 521. Seminar in Elementary Education (3)

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

EDUC 525. Seminar in Reading Curriculum, K-6 (3)

Analysis and evaluation of reading curriculum, K-6, through research and literature. Prerequisites: EDUC 425, 427, teaching experience and consent of graduate adviser or 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: EDUC 479, SOCL 313, or 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 541. Seminar in Social Studies Curriculum, 7-12 (3)

Analysis and evaluation of social studies curriculum; opportunity for depth study in selected aspects of curriculum planning and instruction. Prerequisites: EDUC 449, an appropriate teaching major or minor, teaching experience and consent of the graduate adviser or the instructor.

EDUC 542. Seminar in English Language Arts Curriculum, 7-12 (3)

Analysis and evaluation of the English language arts curriculum; opportunity for depth study in selected aspects of curriculum planning and instruction. Prerequisites: EDUC 449, an appropriate teaching major or minor, teaching experience and consent of the graduate adviser or the instructor.

EDUC 543. Seminar in Mathematics Curriculum, 7-12 (3)

Analysis and evaluation of the mathematics curriculum; opportunity for depth study in selected aspects of curriculum planning and instruction. Prerequisites: EDUC 449, an appropriate teaching major or minor, teaching experience and consent of the graduate adviser or the instructor.

EDUC 544. Seminar in Science Curriculum, 7-12 (3)

Analysis and evaluation of the science curriculum in the secondary schools; opportunity for extensive study in selected aspects of curriculum planning and instruction. Prerequisites: EDUC 449, an appropriate teaching major or minor, teaching experience and consent of the graduate adviser or the 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, 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. (Formerly EDUC 661)

EDUC 562. School Supervision (3)

Techniques and practices used in school supervision; selection, placement and evaluation of school personnel; analysis of personnel administration. Prerequisite: EDUC 561 (Formerly EDUC 648)

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). Prerequisite: EDUC 561.

EDUC 564. Curriculum Planning and Development (3)

Analysis of models in curriculum development; systematic planning for curriculum improvement; behavioral objectives. (Formerly EDUC 645) Prerequisite: EDUC 561.

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. (Formerly 675) Prerequisites: EDUC 411 and 412.

EDUC 576. Exceptional Children and Youth (4)

Physical, intellectual, social, and emotional deviations among children and youth; community resources; educational adjustments. (Formerly 676) Prerequisite: Consent of instructor.

EDUC 577. Seminar: Counseling and Guidance (3)

Introduction to counseling and guidance; theory and techniques. (Formerly 677) Prerequisites: EDUC 411, 412, and consent of credential adviser.

Education

EDUC 578. Advanced Counseling (4)

Counseling practices including commonly-used methods of psychotherapy. Practice in techniques of counseling. See PSYC 578. (Formerly 631) Prerequisite: EDUC 579.

EDUC 579. Counseling Theory (4)

Consideration of the major theories of counseling. Demonstrations, and reviews of current literature. (Formerly EDUC 477) Same as PSYC 379. Prerequisite: 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. (Formerly 680) 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. (Formerly 681) 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. (Formerly 683)

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. (Formerly EDUC 687) Prerequisite: Consent of instructor.

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.

English

Douglas H. Taylor, Ph.D., Associate Professor, Chairman

Ralph Samuelson, Ph.D., Professor

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

Richard D. Bretz, M.A., Assistant Professor

Richard Corum, M.A., Assistant Professor

T. Peter Finley, M.A., Assistant Professor

Arnold L. Goldman, M.A., Assistant Professor

Michael Klein, M.A., Assistant Professor

Jean H. Riddle, M.A., Assistant Professor

Keith A. Tandy, M.A., Assistant Professor

Jack W. Williams, M.A., Assistant Professor

The Department of English offers the degree, Bachelor 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.

English

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

Note: Reading knowledge of an appropriate foreign language is required. To satisfy this requirement two years of college level foreign language study or equivalent or satisfactory performance in a language examination, as determined by the Department of English, may be acceptable.

The Major

Units

ENGL 300. Junior Composition	4
Two courses from the following sequence:	
ENGL 311, 312, 313, 314. English Literature I-II-III-IV	8
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, 333. Literature of the Romantic Period I-II-III	
ENGL 335, 336, 337. Literature of the Victorian Period I-II-III	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 494. 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 postbaccalaureate 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.
4. A reading knowledge of an appropriate foreign language after spring 1971.

Units

Requirements for the Degree

- | | |
|--|------|
| I. Completion of at least 45 units to include the following: | 5 |
| 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) |
| Total | 10 |
| Total | 45 |
| D. Comprehensive examination: | |
| Candidates must pass a written comprehensive examination covering their choice of three of seven subject-areas. | |
| E. Maintenance of continuous registration except for summer sessions. | |
| F. 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.

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

English

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, the time to be divided equally among the candidate's chosen subject-areas.

COURSE DESCRIPTIONS

Lower Division

ENGL 100. Freshman Composition (4)

Directed writing based upon analytical reading and study of essays and short fiction. Required for General Education.

ENGL 200. Sophomore Composition (4)

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

ENGL 201. Introduction to Literature I (4)

Basic theories, approaches, techniques, and terminology in the study of literature with special emphasis on poetry. (Satisfies G. E. requirement for majors.)

ENGL 202. Introduction to Literature II (4)

A continuation of ENGL 201; special emphasis on fiction. Prerequisites: ENGL 201 or consent of major adviser. (Satisfies G. E. requirement for majors.)

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. May be taken in lieu of ENGL 202. Prerequisite: ENGL 201 or consent of major adviser.

ENGL 215. Perspective in Literature (4)

Readings in various literary masterworks with emphasis upon their contemporary relevance. (Satisfies G. E. requirements for non-majors.)

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 333. Literature of the Romantic Period III (4)

Romantic essayists and novelists. 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 337. Literature of the Victorian Period III (4)

Pater, Wilde, the Aesthetes, Housman, et al. 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 361. Advanced Composition-Usage (4)

Grammar, composition, and rhetorical analysis. (Formerly 260) Prerequisites: ENGL 100 and 200 or equivalent and junior standing.

ENGL 362. History of English Drama I (4)

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

English

ENGL 363. History of English 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 English 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.)

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 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 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 482. Types of Dramatic Literature (4)

Dramatic forms with examples drawn from American, English, and European literature. (Formerly 455)

ENGL 483. Modern Drama (4)

American, English, and European dramatic literature from 1890 to the present.

ENGL 494. 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 496)

English

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 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.

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 1600-1800 (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.

English

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)

Fine Art

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

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

The department emphasis is upon the development of the student's creative potential in order to prepare and encourage him to make independent critical judgments.

The fine 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, FINE ART

Fine 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 FINE ART MAJOR

1. No particular pattern of high school art courses is required for admission to the fine art program, but candidates for a major in fine art are expected to have special interest and ability in art as revealed by superior grades in fine art courses.
2. A freshman or lower division transfer will be evaluated for acceptance as a major in fine art during the final quarter of the sophomore year by submitting a portfolio for faculty approval. Students entering as transfers at the upper division level will be evaluated, via portfolio, for acceptance as majors in fine art during the latter part of the first quarter in which they enroll in fine art courses in the College.
3. The Department of Fine Art reserves the right to retain any student art works.
4. All seniors will submit a minimum of ten slides for the department's file.

* On sabbatical leave Spring 1971.

Fine Art

5. 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.
6. All fine 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 Fine 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 fine 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 FINE ART

Foundation Program	<i>Units</i>
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. Modeling	4
	—
	36
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. Metal Sculpture	4
ART 332. Carving	4
	—
Total	72

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

Fine Art

DEGREE MINOR IN FINE ART

(36 units, to include at least 12 upper division units)

Lower Division

- ART 100. Drawing I, 4 units
- ART 110. Foundations of Two-Dimensional Composition, 4 units
- ART 130. Foundations of Three-Dimensional Composition, 4 units
- ART 210. Relief Printing, 4 units
- ART 220. Painting I, 4 units
- ART 230. Modeling, 4 units

Upper Division

Art History, 12 units

TEACHING CREDENTIALS

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

1. Degree major in fine 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 Fine Art as postbaccalaureate work and receive approval of the Department of Fine 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. Pictorial Composition (4)

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

ART 405. Advanced Drawing (4)

Advanced problems in drawing with emphasis upon expression. Prerequisite: All required drawing courses, or signature of advisor. 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 adviser's signature.

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 signature of adviser.

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 signature of adviser.

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 signature of adviser.

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.

Upper Division

ART 321. Painting II (4)

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

ART 323. Painting III (4)

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

ART 395. Art Studio in Mexico (9) Summer Session Only

Various studio experiences will be offered through painting, drawing, sculpture, etc., directly from nature utilizing the cultural and physical environment of Mexico. Beginning and advanced techniques will be offered. Prerequisite: A good background in drawing would be beneficial. A maximum of 9 units may apply toward the electives in each art specialty.

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 signature of adviser.

Fine Art

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

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

ART 595. Selected Topics in Fine Art (Topics to be specified in Class Schedule) (1-5)

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

Postbaccalaureate

ART 695. Art Studio in Mexico (9) Summer Session Only

Various studio experiences will be offered through painting, drawing, sculpture, etc., directly from nature utilizing the cultural and physical environment of Mexico. Beginning and advanced techniques will be offered. Prerequisite: A good background in drawing would be beneficial. A maximum of 9 units may apply toward the electives in each art specialty.

SCULPTURE

Lower Division

ART 230. Modeling (4)

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

Prerequisite: Completion of all freshman foundations courses, or signature of adviser.

Upper Division

ART 331. Metal Sculpture (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 signature of adviser.

ART 332. Carving (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 signature of adviser.

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 signature of adviser.

HISTORY AND CRITICISM

Upper Division

ART 340. Art History I (4)

Analysis and interpretation of the visual arts and their historical development from prehistoric through Roman; concentration upon painting and sculpture. (Formerly 325)

ART 341. Art History II (4)

Analysis and interpretation of the visual arts and their historical development from the Medieval through Rococo; concentration on painting and sculpture. (Formerly 326)

Fine Art

ART 342. Art History III (4)

Analysis and interpretation of the visual arts and their historical development from the French academy to the present; emphasis on painting and sculpture. (Formerly 431)

ART 343. Ancient Greek Art (4)

Analysis of the development of style in the visual arts in Greece from Mycenaean through the Hellenistic Age.

ART 344. Renaissance Art (4)

Analysis of style developments in the visual arts in thirteenth, fourteenth, and fifteenth century Italy and Northern Europe.

ART 345. Contemporary Art (4)

Analysis of development of style trends in the visual arts from post-Impressionism to the present, with emphasis on post-World War I in America.

ART 346. Structure and Meaning in the Visual Arts (4)

The arts in their formal structure; emphasis on analysis of styles and expression.

ART 440. African Art (4)

An analysis of arts of the African continent.

ART 447. Art of the Americas (4)

Significant trends, schools, and styles of art of the Americas from Pre-Colombian through contemporary art forms.

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 fine art major, or consent of instructor.

ART 498. Individual Study (3-4)

For the student capable of independent specialized work in studio and/or history and criticism. Students would normally be senior art majors with one year of study in the department. A written outline of the proposed independent study must be submitted and approved by the instructor whom the student wishes to work under.

GRADUATE

ART 598. Individual Study (3-5)

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.

GENERAL OFFERINGS

(These courses will not apply towards the fine art major or minor)

ART 320. Arts in Contemporary Society (4) Summer Session Only

Character and function of contemporary art in today's society as it relates to individual creativity; critical appreciation of recent trends in visual arts.

ART 350. Ceramics (4)

Basic and advanced methods of constructing handbuilt ceramic forms. Emphasis on designing, decorating, glazing and firing procedures. Open to the general student. May be repeated for a total of 12 units. Prerequisite: One course selected from ART 100, 101, 102 or consent of instructor.

Fine Art

ART 390. Two Dimensional Design (3-4) Summer Session Only

Investigation of design principles as they relate to painting and drawing. Concentration on theories on line, shape, color. Studio experiences using a variety of media.

ART 391. Graphic Design (3-4) Summer Session Only

Investigation of design principles as they relate to the handprinting process. Concentration on printing as an element of design. Linoleum and woodblock studio exercises.

ART 396. The World of Visual Arts (9) Summer Session Only

A survey of the arts and crafts of various countries through visitations of museums, galleries, university art studios, craft shops, archaeological sites, and architecture. May be repeated.

ART EDUCATION

ART 384. Art Experiences in Elementary School (4) Summer Session Only

A variety of two and three dimensional, visual non-verbal experiences as an integral need in the daily lives of children. Emphasis on creativity as a means toward a more valuable school curriculum.

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 486. Art Experiences for Exceptional Child (4) Summer Session Only

Various types of materials, activities, and programs suitable for the exceptional child to realize his creative potentials in the field of art.

POSTBACCALAUREATE

ART 696. The World of Visual Arts (9) Summer Session Only

A survey of the arts and crafts of various countries through visitations of museums, galleries, university art studios, craft shops, archaeological sites, architecture. May be repeated.

Foreign Languages

Richard H. Zakarian, Ph.D., Professor
Lowell G. Richardson, Ph.D., Associate Professor
Laura T. Tarquinio, Ph.D., Associate Professor
Gerhard Mack, M.A., Assistant Professor
George H. Yu, Ph.D., Assistant Professor

The Department of English offers the Bachelor of Arts, French, and the Bachelor of Arts, Spanish, as well as minors in French and Spanish.

The program in foreign languages, French and Spanish, is designed to meet the needs of students who plan to teach foreign languages and literature, and to serve students who need foreign languages to support an academic discipline or profession. A program in German is being developed, and lower division Chinese has been offered experimentally. Additional languages will be added when there is sufficient demand.

Upper division courses are conducted primarily in the foreign tongue. Use of the language laboratory permits the student to improve his conversational skills. Practice in reading and writing is given on an individual basis and in accord with the needs of the student.

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

French and Spanish majors are to:

1. Complete the requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 36 upper division units.
4. Completion of minor is not required but is strongly recommended for secondary candidates.

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

Units

Required course in supporting field:

SPCH 467. Structural Linguistics and Phonology, 4 units

Required courses in major field:

SPAN 311. Composition and Conversation 4

SPAN 312. Advanced Style and Syntax 4

SPAN 341. Literature of Spain I 4

SPAN 342. Literature of Spain II 4

SPAN 468. Spanish Phonetics 4

One course in Spanish American literature or civilization as approved by major adviser 4

Elective courses in field as approved by major adviser 12

Total 36

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

Foreign Languages

DEGREE MINOR IN SPANISH

(36 units, to include at least 12 units in upper division with 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 311. Composition and Conversation, 4 units
 SPAN 312. Advanced Style and Syntax, 4 units
 Course as approved by minor adviser, 4 units

TEACHING CREDENTIALS †

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

1. Degree major in Spanish.
2. Secondary credential candidates must complete 9 units in courses in Spanish 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.

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 311. Composition and Conversation.....	4
FREN 312. Advanced Style and Syntax.....	4
FREN 341. French Literature I.....	4
FREN 432. French Literature II.....	4
FREN 468. French Phonetics	4
One course in French civilization as approved by major adviser.....	4
Elective courses in field as approved by major adviser.....	12
	<hr/>
Total	36

DEGREE MINOR IN FRENCH

(36 units, to include at least 12 units in upper division with 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 311. Composition and Conversation, 4 units
 FREN 312. Advanced Style and Syntax, 4 units
 One of the following as approved by minor adviser, 4 units:
 FREN 341. French Literature I
 FREN 342. French Literature II

† See Education.

TEACHING CREDENTIALS †

Minors in French seeking elementary and secondary credentials must fulfill the following requirements:

1. Degree minor in French.
2. SPCH 467. Structural Linguistics and Phonology is recommended.
3. Secondary credential candidate must receive approval of the minor adviser as to subject matter competence.

COURSE DESCRIPTIONS

CHINESE

Lower Division

CHIN 101. Elementary Chinese I (4)

Introduction to standard Chinese by the audio-lingual method. Elements of the written language are introduced. Prerequisite: None.

CHIN 102. Elementary Chinese II (4)

Continuation of CHIN 101. Prerequisite: CHIN 101.

CHIN 103. Elementary Chinese III (4)

Continuation of CHIN 102. Prerequisite: CHIN 102.

CHIN 201. Intermediate Chinese I (4)

Second year Chinese with continued emphasis on developing audio lingual and reading skills. Prerequisite: CHIN 103 or equivalent.

CHIN 202. Intermediate Chinese II (4)

Continuation of CHIN 201. Prerequisite: CHIN 201 or equivalent.

CHIN 203. Intermediate Chinese III (4)

Continuation of CHIN 202. Prerequisite: CHIN 202 or equivalent.

FRENCH

Lower Division

FREN 101. Elementary French I (4)

Introduction to French language, with emphasis on audio-lingual work in language laboratory. 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)

Continued emphasis on audio-lingual work in the language laboratory with additional assignments in reading current French periodicals and studying patterns of language structure. Prerequisite: FREN 103, or equivalent.

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

† See Education.

‡ 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

FREN 202. Intermediate French II (4)

Continuation of FREN 201. Prerequisite: FREN 201, or equivalent.

FREN 203. Intermediate French III (4)

Continuation of FREN 202. Prerequisite: FREN 202, or equivalent.

Upper Division

FREN 311. Composition and Conversation (4)

Advanced French composition, development of style, and expression, readings and oral discussions in French of various facets of French culture. Prerequisite: 2 years of college level French or equivalent.

FREN 312. Advanced Style and Syntax (4)

Intensive review of grammar, writing and speaking of current idiomatic French. Prerequisite: Two years of college level French or equivalent.

FREN 341. French Literature I (4)

Masterpieces of French prose and lyric poetry of the Middle Ages and Renaissance. Emphasis on development of French language as viewed through literature of the Classical Age. (Formerly 442) Prerequisite: Two years of lower division French or consent of instructor.

FREN 342. French Literature II (4)

Literature of philosophical and romantic movements in France through novels, poetry, and drama. (Formerly 444) Prerequisite: Two years of lower division French or consent of instructor.

FREN 411. Advanced Composition (4)

Intensive practice at advanced level in written and spoken French. Prerequisite: FREN 311.

FREN 421. French Poetry and Drama of Nineteenth Century (4)

Main currents and major works of the French poetry and drama of the nineteenth century. Poetry from Lamartine to Mallarmé and theater from Musset to Maeterlinck. Prerequisite: FREN 342 or consent of instructor.

FREN 422. French Novel of the Nineteenth Century (4)

Decisive current and major works of the French novel of the nineteenth century. The impact of Hugo, Balzac, Stendahl, Flaubert, Zola, and Maupassant on Western thought. Contributions of the minor novelists. Prerequisites: FREN 342 or consent of instructor.

FREN 431. Twentieth Century Prose and Poetry (4)

Modern French novel from Proust to Sarraute and poetry from Apollinaire to Yves Bonnefoy. Study of trends and novelists and poets of today. Prerequisite: FREN 342 or consent of instructor.

FREN 432. Twentieth Century French Drama (4)

Modern French theater from Claudel to Ionesco. Study of trends and playwrights of today. Prerequisite: FREN 342 or consent of instructor.

FREN 441. French Classical Literature (4)

A study of the literary and intellectual developments in France during the seventeenth century. An analysis of the development of major genres. Prerequisite: FREN 341 or consent of instructor.

Foreign Languages

FREN 442. Literature of the Age of Enlightenment (4)

French literature of l'Age de Raison from the Revocation of the Edict of Nantes to the French Revolution, stressing Voltaire, Rousseau, Montesquieu, and Diderot. (Formerly 451). Prerequisites: FREN 341 and 342 or consent of instructor.

FREN 461. French Civilization I (4)

Cultural development of France from ancient Gaul to the Revolution of 1789. Prerequisite: FREN 203 or consent of instructor.

FREN 462. French Civilization II (4)

Cultural development of France from the Revolution of 1789 to the present day. Prerequisite: FREN 203 or consent of instructor.

FREN 468. French Phonetics (4)

A scientific study of the production and representation of the sounds of modern French, including work on dialectical differences and comparison with English. Prerequisite: Consent of instructor.

FREN 495. Selected Topics in French (Topics to be specified in Class Schedule) (1-5)

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

FREN 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.

GERMAN

Lower Division

GERM 101. Elementary German I (4)

Beginning German, audio-lingual approach. Prerequisite: None.

GERM 102. Elementary German II (4)

First year German. Continuation of GERM 101. Prerequisite: GERM 101 or equivalent.

GERM 103. Elementary German III (4)

First year German. Continuation of GERM 102. Prerequisite: GERM 102 or equivalent.

GERM 201. Intermediate German I (4)

Second year German with intensified work in grammar and composition, reading assignments, and improvement of conversational skills. Prerequisite: One year of college level German or the equivalent.

GERM 202. Intermediate German II (4)

Continuation of GERM 201. Prerequisite: GERM 201 or equivalent.

GERM 203. Intermediate German III (4)

Continuation of GERM 202. Prerequisite: GERM 202 or equivalent.

GERM 310. Advanced Style and Syntax (4)

Intensive review of grammar, writing and speaking of current idiomatic German. Prerequisite: Two years of college German or equivalent.

GERM 341. Survey of German Literature I (4)

Readings in the early period of German Literature from the old Saxon through the Baroque. Prerequisite: Two years of college German or equivalent.

Foreign Languages

GERM 342. Survey of German Literature II (4)

Continuation of Germ 341. From the neo-classic through the Romantic and Modern Periods. Prerequisite: Two years of college German or equivalent.

GERM 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.

SPANISH

Lower Division

SPAN 101. Elementary Spanish I (4)

Beginning Spanish, audio-lingual approach. Prerequisite: None.

SPAN 102. Elementary Spanish II (4)

First year Spanish. Continuation of SPAN 101. Prerequisite: SPAN 101 or equivalent.

SPAN 103. Elementary Spanish III (4)

First year Spanish. Continuation of SPAN 102. Prerequisite: SPAN 102 or equivalent.

SPAN 201. Intermediate Spanish I (4)

Second year Spanish, with emphasis on audio-lingual work in the language laboratory. Also includes review of language structure patterns and reading assignments. Prerequisite: One year of college level Spanish or the equivalent.

SPAN 202. Intermediate Spanish II (4)

Continuation of SPAN 201. Prerequisite: SPAN 201 or equivalent.

SPAN 203. Intermediate Spanish III (4)

Continuation of SPAN 202. Prerequisite: SPAN 202 or equivalent.

Upper Division

SPAN 311. Composition and Conversation (4)

Intensive practice in idiomatic written and oral expression. Prerequisite: Two years of lower division Spanish or equivalent.

SPAN 312. Advanced Style and Syntax (4)

Consistencies of the language, development of proper style and expression, selected readings. Prerequisite: two years of lower division Spanish or consent of instructor.

SPAN 341. Literature of Spain I (4)

Early period through the Golden Age. Lecture and discussion. (Formerly 441) Prerequisite: two years of lower division Spanish or consent of instructor.

SPAN 342. Literature of Spain II (4)

From 1750 to the present. Lecture and discussion. (Formerly 442) Prerequisite: Two years of college Spanish or consent of instructor.

SPAN 343. Spanish-American Literature I (4)

From the beginnings to 1880. (Formerly 443) Prerequisite: Two years of college Spanish or consent of instructor.

SPAN 344. Spanish-American Literature II (4)

From 1880 to the present. (Formerly 444) Prerequisite: Two years of college Spanish or consent of instructor.

Foreign Languages

SPAN 411. Advanced Composition (4)

Intensive practice at advanced level in written and spoken Spanish. Prerequisite: SPAN 311.

SPAN 421. Mexican Literature (4)

Authors of Mexico and their works from Cortes to the contemporary period. Prerequisite: Consent of instructor.

SPAN 427. Golden Age Literature (4)

Intensive study of the literature of Spain of the sixteenth and seventeenth centuries. Prerequisite: SPAN 341.

SPAN 431. Contemporary Literature of Spain (4)

Peninsular literature from 1898 to 1960. Prerequisite: SPAN 341 and 342.

SPAN 461. Spanish-American Civilization I (4)

Growth of Spanish-American institutions and culture. Prerequisite: Consent of instructor.

SPAN 462. Spanish-American Civilization II (4)

Continuation of SPAN 461. Prerequisite: Consent of instructor.

SPAN 468. Spanish Phonetics (4)

A scientific study of the production and representation of the sounds of modern Spanish, including work on area differences and comparison with English. Prerequisite: Consent of instructor.

SPAN 495. Selected Topics in Spanish (Topics to be specified in Class Schedule) (1-5)

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

SPAN 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.

SPAN 595. Selected Topics in Spanish (Topics to be specified in Class Schedule) (1-5)

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

Graduate

SPAN 598. Individual Study (1-5)

For the graduate student with major in Spanish or who is working for a teaching credential in Spanish. Advanced work in any area of Spanish language, literature or civilization. May be repeated for a total of 9 units. Prerequisite: Consent of instructor.

Geography

Alfred W. Bowers, Ph.D., Professor, Chairman
Department of Anthropology/Sociology
Melvin H. Aamodt, Ph.D., Associate Professor
Ira L. Fogel, M.A., Assistant Professor
Leon S. Pitman, M.A., Assistant Professor

The Department of Anthropology/Sociology offers courses in geography as supportive materials for the Social Sciences.

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 200. Introduction to Geography (4)

Introductory study of the traditions, concepts, tools and methods of modern geography, survey and analysis with focus on analysis of selected problems.

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.

Upper Division

GEOG 310. Climatology (4)

The elements and controls of weather and climate, and an analysis of the various climatic regions.

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 351. Geography of North America (4)

Spatial pattern, analysis and relations of environments in North America with emphasis on their evolvement, influences of human-natural environmental factors, problems of regional inequalities.

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.

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 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

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

John P. Rasmussen, Ph.D., Associate Professor

Phebe Ann Marr, Ph.D., Assistant Professor

Ronald Jay VanderMolen, Ph.D., Assistant Professor

Austin Metumara Ahanotu, M.A., Assistant Professor

John R. Kern, M.A., Assistant Professor

Robert R. Smith, Ph.D., Assistant Professor

History, a dialogue between the present and the past about the future, 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 36 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).
5. Demonstrate reading knowledge of an appropriate foreign language by satisfactory performance in a language examination as determined by the Department of History. To meet this requirement, two years of college level foreign language study or equivalent are recommended.

* On sabbatical leave Fall 1970.

DEGREE MAJOR IN HISTORY

Units

Prerequisites to the Major

Required courses in the major field:

HIST 101, 102, 103. Western Civilization I-III, 12 units

At least two of the following courses in non-Western History: 8

- HIST 251. Colonial Hispanic America
- HIST 252. Hispanic American States Since Independence
- HIST 280. East Asia in Traditional Times
- HIST 281. East Asia in the Modern World
- HIST 284. Islamic History I
- HIST 285. Islamic History II
- HIST 286. Africa Before 1800
- HIST 287. Africa since 1800

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
- 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 (One course required)

- HIST 384. Modern Middle East I
- HIST 385. Modern Middle East II
- HIST 386. Contemporary Africa
- HIST 389. East Asian Intellectual History
- HIST 403. Age of Exploration
- HIST 404. Rise of European Colonial Systems 1800-1914
- HIST 405. Fall of European Colonial Systems 1914-1965
- HIST 452. Social Change in Contemporary Latin America
- HIST 454. Northern Latin America
- HIST 455. Southern Latin America
- HIST 480. Modern China
- HIST 484. Modern Japan
- HIST 486. North Africa
- HIST 487. West Africa
- HIST 488. East Africa
- HIST 489. South Africa 4

History

Completion of the following:	<i>Units</i>
HIST 499. Senior Thesis	4
Electives on advisement	12
	<hr/>
Total	36

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.

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. A reading knowledge of an appropriate foreign language will be required for admission to the program *after the spring 1971* registration period.

Requirements for the Degree

I. Completion of at least 45 units to include the following:

Option A. Thesis Plan	<i>Units</i>
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	9-15

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.

Recommendation for the degree by the candidate's committee. To help make its recommendation, the committee will meet with the candidate to review the thesis.

Option B. Colloquia Plan	<i>Units</i>
HIST 593. The History of Historical Writing.....	5
At least one seminar	5
At least three colloquia	15
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>
Minimum required in 500 level courses.....	25
Satisfactory performance on a written examination (to be reviewed by his committee) in the candidate's field of specialization.	
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. Modern Russia, 4 units	
HIST 446. Modern Britain, 4 units	
HIST 450. History of Mexico, 4 units	
HIST 452. Social Change in Contemporary Latin America, 4 units	
HIST 454. Northern Latin America, 4 units	
HIST 455. Southern Latin America, 4 units	
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	
Additional Electives	20–25

III. Additional Requirements

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.

Students are to maintain continuous registration except for summer sessions.

A reading knowledge of an appropriate foreign language as determined by the Department of History.

History

Satisfactory completion of a comprehensive oral examination. 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 251. Colonial Latin America (4)

From the eve of European conquest to the end of colonial control by Spain and Portugal. (Formerly 351)

HIST 252. Latin American States Since Independence (4)

From the struggle for independence to the mid-twentieth century. (Formerly 352)

HIST 280. 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 380)

HIST 281. 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 381)

HIST 284. Islamic History I (4)

The Islamic Middle East from 622 to 1258. The spread of Islam, its political and social institutions, its cultural achievements and the disintegration of the early empires to the Mongol conquest.

HIST 285. Islamic History II (4)

From the establishment of the Ottoman and Saffavid empires in the thirteenth century to World War II. The impact of the West, the emergence of national movements and establishment of contemporary states.

HIST 286. Africa Before 1800 (4)

Characteristic features of African civilizations from the earliest times to 1800.

HIST 287. Africa Since 1800 (4)

Historical foundations of modern African states.

Upper Division

HIST 308. Modern World History 1900-1945 (4)

Integrated global political history and discussion of selected problems of global significance during the period. Prerequisite: HIST 101, 102, and 103 or equivalent. Not open to students who have had HIST 324.

HIST 309. Modern World History Since 1945 (4)

Prerequisites: HIST 101, 102, and 103 or equivalent and consent of instructor. HIST 308 is recommended.

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.

HIST 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: Sophomore standing and HIST 101, 102, 103 or equivalent.

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.

History

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 and Geography (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 384. Modern Middle East I (4)

From the Napoleonic invasion of Egypt (1798) to 1914. Political, social, economic and intellectual interaction between the Middle East and the West. Prerequisite: Sophomore standing.

HIST 385. Modern Middle East II (4)

Continuation of HIST 384 covering the period since World War I. The results of European rule, indigenous nationalist and reform movements and the origins of contemporary conflicts. Prerequisite: Sophomore standing.

HIST 386. Contemporary Africa (4)

Development of Pan-African ideology and the quest for political and economic stability in contemporary Africa. 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 280 and 281.

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 101, 102 and 103 or equivalent.

HIST 442. Modern Russia (4)

Russia since 1689. 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 251 and 252 or consent of instructor.

HIST 454. Northern Latin America (4)

The northern republics of South America and the Caribbean during the 19th and 20th centuries. Readings and research projects will be stressed. Prerequisites: Junior standing and HIST 250 and 251 or consent of instructor.

HIST 455. Southern Latin America (4)

The southern republics of South America during the 19th and 20th centuries. Readings and research projects will be stressed. Prerequisites: Junior standing and HIST 250 and 251 or consent of instructor.

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.

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.

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 280 and 281.

HIST 484. Modern Japan (4)

Development of Japan; emphasis on the period 1853 to present. Prerequisites: Junior standing and HIST 280 and 281.

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 (4)

Formation of early states, of imperialism and nationalism. Prerequisite: Junior standing.

HIST 488. East Africa (4)

Development of the coastal city states, inter-lacustrine kingdoms, imperialism and nationalism. Prerequisite: Junior standing.

HIST 489. South Africa (4)

Political, economic and social history since the 17th century. 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.

HIST 523. Colloquium in Modern European History (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 496, 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
- Chester W. Dyche, M.A., Associate Professor
- Shang-Wang Chang, Ph.D., Assistant Professor
- Louis A. Feldman, Ph.D., Assistant Professor
- Michael J. Berg, Ph.D., Assistant Professor
- James L. Southam, Ph.D., Assistant Professor
- Gary B. Green, M.S., Assistant Professor
- Ralph L. James, Ph.D., Assistant Professor

Courses in mathematics are designed primarily to provide 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 work required for a Bachelor of Arts, Mathematics 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, MATHEMATICS

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

DEGREE MAJOR IN MATHEMATICS

Prerequisites to the Major

- MATH 119. Calculus with Analytic Geometry, 4 units
- MATH 120, 221, 222, 223. Calculus I-IV, 16 units

The Major

Units

Two of the following sequences of courses as approved by the major adviser.

MATH 301, 302, 303. Foundations of Mathematics I-II-III	
MATH 311, 312, 460. Analysis I-II, Complex Variables	
MATH 351, 352, 353. Algebra I-II-III.....	24
Courses in mathematics as approved by the major adviser.....	16
Total	40

* Research and creative leave Spring 1971.

DEGREE MINOR IN MATHEMATICS

(28 units including at least 16 units in upper division)

Lower Division

MATH 119, 120, 221. Calculus with Analytic Geometry, Calculus I-II, 12 units.

Upper Division

Courses as approved by 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 301, 302, and 303.
3. Secondary credential candidates must complete 9 units in courses in mathematics as postbaccalaureate work and receive approval of the Mathematics Department as to 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, relations, nonmetric geometry, systems of numerations, modular arithmetic, properties of the sets of natural numbers, integers, rational and irrational numbers, real numbers. Recommended for general students and those seeking an elementary teaching credential. Not open to students who have had MATH 120 or equivalent. Credit not applicable to major or minor in mathematics. Prerequisites: One year of high school algebra and a knowledge of plane geometry or consent of instructor.

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 119. Calculus With Analytic Geometry (4)

Inequalities, sets and functions, coordinate systems, graphs, limits, the derivative, continuity, sequences, analytic geometry and conic sections. Prerequisites: Two years of high school algebra, one year of plane geometry, and one-half year of plane trigonometry, or MATH 110.

MATH 120. Calculus I (4)

Introduction to differential and integral calculus with applications. Thorough techniques of differential and integral calculus. Taylor's theorem, L'Hopital's rule, partial differentiation, multiple integration, sequences and infinite series, vector spaces and linear algebra, vector field theory, introduction to differential equations. Prerequisite: MATH 119.

* 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 160. Statistics (4)

Introductory course designed for students in the social and natural sciences. Organization and presentation of data, frequency distributions, computation of descriptive constants, fundamentals of distributions, probability, analysis and interpretation of data. Prerequisite: Two years of high school algebra or MATH 105 or consent of instructor.

MATH 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: MATH 105 or two years of high school algebra.

MATH 201. Computer Programming (3)

A continuation of MATH 200/BUS 200, with emphasis on computer programming in scientific, business, or statistical applications. Selection of the appropriate programming language laboratory is based on student area of interest. (Lecture, 1 hour; laboratory, 4 hours). Prerequisite: MATH 200.

MATH 210. 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. Prerequisite: One year of high school algebra or MATH 100 or consent of instructor.

MATH 221. Calculus II (4)

Continuation of MATH 120. Prerequisite: MATH 120.

MATH 222. Calculus III (4)

Continuation of MATH 221. Prerequisite: MATH 221.

MATH 223. Calculus IV (4)

Continuation of MATH 222. Prerequisite: MATH 222.

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 311. Analysis I (4)

Real and complex number systems, point set topology, metric spaces, compactness, Bolzano-Weierstrass theorem, completeness, limit and continuity, differentiation, Riemann-Stieltjes integral, sequences and series of functions, uniform convergence, Fourier series, functions of several variables, implicit function theorem, inverse function theorem, Green's and Stoke's theorems, Lebesgue theory. Prerequisite: MATH 223.

MATH 312. Analysis II (4)

Continuation of MATH 311. Prerequisite: MATH 311.

MATH 313. Analysis III (4)

Continuation of MATH 312. Prerequisite: MATH 312.

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 223 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 332. Topology of Metric Spaces (4)

Set theory, metrics and metric spaces, separation properties, density, connectedness, topological spaces, homeomorphisms, equivalent metrics, simplicies and simplicial complexes, cells and cell complexes, Euclidean spaces, subspaces, and subsets, implicit function theorems and algebraic varieties. Prerequisite: MATH 223.

MATH 333. Differential Geometry (4)

Vector spaces and their duals, tangent spaces and tangent vectors of Euclidean spaces, vector fields and distributions over Euclidean spaces, differentiable manifolds and submanifolds, the existence and properties of Riemannian metrics, geodesics, curvature, surface area, Gauss-Bonnet theorem. Prerequisite: MATH 332.

MATH 334. Differential and Algebraic Topology (4)

Homotopy, the fundamental group and simple connectedness, differentiable connections, curvature, elementary homology and cohomology theory, manifold duality, De Rham's theorem. Prerequisite: MATH 333 and 351.

MATH 341. Introduction to Linear Programming (4)

Linear programming model, other mathematical models, linear equations, the simplex method, transportation problems, distribution problems, maximum flow in networks, nutrition problem. Prerequisite: MATH 110.

Mathematics

MATH 342. Introduction to Operations Research I (4)

Vector spaces and matrices, systems of linear equations and inequalities, convex sets, geometric interpretation of linear programming, simplex multipliers, revised simplex method, duality and existence theorem, matrix games and the fundamental theorem, solutions of matrix games. Prerequisite: MATH 119 or consent of instructor.

MATH 343. Introduction to Operations Research II (4)

Continuation of MATH 342. Prerequisite: MATH 342.

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, characteristic 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 120.

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 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 420. Vector and Tensor Analysis (4)

Vector algebra, differentiation of vectors, gradient, divergence, curl, Green's theorem, Stoke's theorem, introduction to tensor analysis, applications to geometry and physics. Prerequisite: MATH 223 or consent of instructor.

MATH 431. Numerical Analysis I (4)

Newton, Lagrange and Chebyshev approximation of functions. Inverse interpolation, numerical evaluation of roots and define integrals. Prerequisite: MATH 223.

MATH 432. Numerical Analysis II (4)

Solution of systems of linear equations. Application of numerical methods to the solution of partial differential equations and integral equations. Prerequisite: MATH 431.

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 120.

MATH 460. Complex Variables (4)

Analytic functions, Cauchy-Riemann equations, theorem of Cauchy, Laurent series, calculus of residues. Prerequisite: MATH 311 or consent of instructor.

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 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. 595. 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. Prerequisite: Consent of instructor.

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 Real Number System (5)

Sets, relations, systems of numerations, modular arithmetic, properties of the sets of natural numbers, integers, 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

R. Scott Coulter, M.M., Chairman

Giovanni Camajani, Ph.D., Professor

Gene C. Wisler, Ed.D., Professor

Joseph E. Bruggman, 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. Prior to acceptance as a music major or minor the student is required to demonstrate an acceptable level of performance skills in both piano and voice. Minimum abilities are: *Piano*—play four-part hymns and provide a simple accompaniment utilizing I, IV, V₇ chords for songs selected from literature of the community singing type; *Voice*—sing any part of a four-part hymn; demonstrate knowledge of proper phrasing, breathing, vowels and consonants, and tone production in songs selected from simple vocal literature. The student should consult his adviser about this requirement and if necessary schedule courses in piano and voice during the freshman year. Class instruction is offered at the beginning level in both piano and voice.
3. 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.

4. A freshman or lower division transfer will be evaluated for 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 an audition in the major medium of performance conducted by a committee of the music faculty.
5. Students are required to perform in recital as a part of a course in applied music as determined by the instructor.
6. Music majors are required to participate in one performing group (chorus, ensemble or band) each quarter.
7. All music majors are required during the senior year to present themselves in solo or chamber ensemble performance in the area of their major medium of performance as may be determined by a committee of the music faculty. Satisfactory performance is required for fulfillment of major requirements.

DEGREE MAJOR IN MUSIC

Prerequisites to the Major

- MUS 122, 123. Foundational Theory I-II, 6 units.
 MUS 161, 164. Basic Class Piano and Basic Class Voice, 1 unit (May be met by examination; additional work may be required dependent upon level of competence. If met by examination, units will be added to courses in music as provided by the major adviser.)
 MUS 222, 223, 224. Intermediate Theory I-III, 9 units
 MUS 241 or 242 or 243 or 244. Group Performance (chorus, choral or instrumental ensemble, concert band), 6 units
 MUS 261 through 287. Applied Music (major performance medium), 6 units

The Major

Units

MUS 301, 302, 303. History and Literature I-III	9
MUS 320. Counterpoint	3
MUS 321. Analysis and Composition in Small Forms	3
MUS 324. Orchestration	3
MUS 325. Conducting	3
MUS 441, 442, 443, 444. Group Performance (chorus, ensembles, or concert band)	6
MUS 461 through 487. Applied Music (major performance medium)	6
Courses as approved by major adviser	6
Total	39

Students preparing for the credential program in music are advised to include courses in string, woodwind, and brass techniques.

Music

DEGREE MINOR IN MUSIC

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

Lower Division

MUS 122, 123. Foundational Theory I-II, 6 units

MUS 161, 164. Basic Class Piano and Basic Class Voice, 1 unit (May be met by examination; additional work may be required dependent upon level of competence. If met by examination, units will be added to courses in music as provided by the major adviser.)

MUS 222. Intermediate Theory I, 3 units

MUS 241 or 242 or 243 or 244. Group Performance (chorus, choral or instrumental ensemble, concert band), 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. Conducting

MUS 335. Music in the 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 or 442 or 443 or 444. 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 fulfill the following requirements:

1. Degree major in music.
2. In addition to the degree major, complete MUS 335. Music in Elementary School (may be taken in upper division, but must be taken prior to student teaching).
3. Secondary credential candidates must complete 12 units in music courses as postbaccalaureate work, which include Major Instrument or Voice, String Techniques, Percussion Techniques, Analysis of Instrumental or Vocal Literature, and Advanced Conducting.
4. Complete requirements for credential by the Education Department.

MUSIC COURSES FOR NON-MAJORS

For the non-major who is interested in music as a cultural heritage, Music offers courses in Symphonic Literature, the Bach Festival (given only in the summer session), the World of Opera, American Music. Survey of the Oratorio, History of Jazz and Music of Black America. Music also welcomes general student participation in its group performance courses (chorus, ensembles and concert band).

GROUP PERFORMANCE COURSE CREDIT

A maximum of 18 units, including no more than 9 units in lower division in group performance courses (chorus, ensemble or band) may apply toward a degree.

COURSE DESCRIPTIONS**THEORY****Lower Division****MUS 101. Basic Musicianship (3)**

Study of the rudiments of rhythm, intervals, notation 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 (3)

All triads and inversions, cadences, chord connections, and four-part writing. Ear training, sight singing, analysis, and keyboard harmony. Prerequisite: MUS 101 or equivalent.

MUS 123. Foundational Theory II (3)

Continuation of MUS 122. Non-harmonic tones, second inversion triads, dominant seventh chord with inversions, and modulation. Ear training, sight singing, analysis, and keyboard harmony. Prerequisite: MUS 122.

MUS 222. Intermediate Theory I (3)

Continuation of MUS 123. Secondary dominants, diminished seventh chord, modulation and dominant ninth chord. Ear training, sight-singing, analysis and keyboard harmony. Prerequisite: MUS 123.

MUS 223. Intermediate Theory II (3)

Continuation of MUS 222. Seventh chords and inversions, sequence and non-dominant ninth, eleventh and thirteenth chord. Ear training, sight singing, analysis and keyboard harmony. Prerequisite: MUS 222.

MUS 224. Intermediate Theory III (3)

Continuation of MUS 223. Altered chords, chromatic modulation, modal harmony, impressionistic devices and some aspects of twentieth century harmony. Ear training, sight-singing, analysis and keyboard harmony. Prerequisite: MUS 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.

Music

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. Conducting (3)

A study of basic baton technique and score reading. Prerequisite: MUS 224 or consent of instructor.

MUS 425. Advanced Conducting (3)

Continuation of MUS 325; emphasis on score reading, interpretation, styles and advanced problems in conducting. Prerequisite: MUS 325 or consent of instructor.

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. No prerequisites.

MUS 230. Symphonic Literature (4)

The symphony: abstract and programmatic aspects; the tone poem and its relation 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.

Upper Division

MUS 301. History and Literature I (3)

An 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.

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 309. Bach Festival (2) Summer Session Only

Study of the music of Bach and the Baroque and Classical Eras with a concentration on the works which will be performed at the Carmel Bach Festival. Travel to Carmel to attend four concerts. The course may be repeated for credit twice, not to exceed six quarter units.

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. Prerequisite: Ability to read music.

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. Prerequisite: Ability to read music.

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. Prerequisite: Ability to read music.

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. Prerequisite: Ability to read music.

MUS 405. Twentieth Century Music (3)

A critical examination of impressionism and expressionism in music of Debussy and Schoenberg. Polytonal and atonal ramifications; primitivism of Stravinsky. Prerequisite: Ability to read music.

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.

Music

MUS 365. String Techniques I (1)

Performance 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.

GROUP PERFORMANCE

Lower Division

MUS 241. Chorus (1)

Study and performance of choral masterworks. Open to all students. A voice test will be given. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 6 units. (Formerly 351) Prerequisites: Ability to read music and an acceptable singing voice.

MUS 242. Choral Ensemble (1)

Study and performance of music for small vocal ensembles. Participation in public performance is expected. May be repeated for a total of 6 units. Prerequisites: Ability to read music and an acceptable singing voice.

MUS 243. Instrumental Ensemble (1)

Study and performance of materials for small instrumental ensembles. Students are expected to participate in all public performances. May be repeated for a total of 6 units. Prerequisites: An acceptable degree of performance skill.

MUS 244. Concert Band (1)

Study and performance of materials for the concert band. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 6 units. Prerequisite: An acceptable degree of performance skill.

Upper Division

MUS 441. Chorus (1)

Study and performance of choral masterworks. Open to all students. A voice test will be given. Students are expected to participate in all public performances. May be repeated for a total of 6 units. (Formerly 351) Prerequisites: Ability to read music and an acceptable singing voice.

MUS 442. Choral Ensemble (1)

Study and performance of music for small vocal ensembles. Participation in public performance is expected. May be repeated for a total of 6 units. Prerequisites: Ability to read music and an acceptable singing voice.

MUS 443. Instrumental Ensemble (1)

Study and performance of materials for small instrumental ensembles. Students are expected to participate in all public performances. May be repeated for a total of 6 units. Prerequisite: An acceptable degree of performance skill.

MUS 444. Concert Band (1)

Study and performance of materials for the concert band. As a member of a major performance group, the student will participate in public performances. May be repeated for a total of 6 units. Prerequisite: An acceptable degree of performance skill.

MUS 490. Opera Repertory Theatre (2)

An intensive study of operatic mise-en-scène, makeup, vocal ensemble, staging of scenes, direction and lighting. All students are expected to participate in every aspect of operatic production. Prerequisites: DRAM 340 and 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 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, and brasses. 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, and brasses. 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.

Music

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, limited to juniors and seniors. Since topics change each term, this course may be repeated for credit.

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 595. Selected Topics in Music (1-5)

Consideration of selected topics in music, limited to qualified graduate students. Since topics change each term, this course may be repeated for credit.

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
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 140. Introduction to Ethics (4)

Introduction to ethical concepts, problems, and methods of analysis.

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.

Philosophy

PHIL 302. Philosophy of Religion I (4)

Critical study of the traditional arguments for the existence of God. Prerequisite: Twelve units in lower division courses in philosophy or consent of instructor.

PHIL 303. Philosophy of Religion II (4)

Continued study of religious concepts and language. An epistemological and logical analysis of mysticism. Prerequisite: PHIL 302 or consent of instructor.

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 405. Philosophy in Literature (4)

Examination of philosophic attitudes or issues as expressed in poetry, novel, and drama. Aristotelian formism and classicism, Kantian idealism and romanticism, realism and naturalism, existentialism. Prerequisite: (English majors excepted) Twelve units in lower division courses in philosophy and senior standing.

PHIL 410. Philosophy of History (4)

Survey and philosophical analysis of the problems raised by history as a science. Prerequisite: (History majors excepted) Twelve units in lower division courses in philosophy and senior standing.

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 PHIL 111 or PHIL 400 and PHIL 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 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.

Physical Education and Health

Richard D. Conant, Ph.D., Assistant Professor, Chairman

Zaki I. Habashi, Ed.D., Associate Professor

James K. Hanny, M.A., Associate Professor

Dora L. Carter, M.S., Assistant Professor

Wayne Nelson, M.S., Assistant Professor

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, a program for preprofessional work such as physical therapy, and a preparation for work in industry as director of physical education.

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.
3. Complete the major of not less than 28 upper division units and listed courses in supporting fields.
4. Complete an academic minor.

DEGREE MAJOR IN PHYSICAL EDUCATION

Prerequisites to the Major

Required courses in major field:

PHED 101, 102, 103. Fitness, Lifetime Activities, Team Activities, 0-12 units †

Required courses in supporting fields: ‡

HLTH 101. Healthful Living, 2 units

PSYC 201. Introduction to Psychology, 4 units

ZOOL 102. Principles of Zoology *or*

BIOL 101. Principles of Biology, 5 units

One course in physical sciences as approved by major adviser, 5 units

One of the following series, 8 units

1. ANTH 205. Introduction to Human Origins

ANTH 206. Introduction to Cultural Anthropology

2. Two courses in sociology as approved by major adviser.

3. HIST 101, 102. Western Civilization I-II

One course in human anatomy and one course in human physiology as approved by major adviser, 10 units

† One and a half units of physical education activities are required in General Education for graduation. In addition, physical education majors are required to achieve satisfactory skill in at least six activities. This requirement may be met by passing proficiency tests. Activity classes should be taken as needed.

‡ These courses may apply to the General Education requirements.

Physical Education

The Major

Units

Required courses in supporting fields:

Two upper division courses in each of two of the following fields as approved by major adviser: anthropology, history, psychology, sociology or zoology 16

Required courses in major field:

PHED 310. Foundations of Physical Education	4
PHED 480. Measurement and Evaluation in Physical Education	4
PHED 484. Kinesiology	5
PHED 487. Exercise Physiology	4
PHED 495. Selected Topics in Physical Education	3-5

One of the following:

- PHED 340. Motor Development
- PHED 370. Sociological Factors in Physical Education
- PHED 380. Psychological Factors in Physical Education

One of the following:

- PHED 390. Philosophy of Physical Education
- PHED 440. History of Physical Education

Total 28-30

DEGREE MINOR IN PHYSICAL EDUCATION

(32 units approved by the minor adviser are required, including at least 12 units in upper division courses)

Lower Division

PHED 101, 102, 103. Fitness, Lifetime Activities, Team Activities, 0-6 units *
One course in human anatomy as approved by major adviser, 5 units

Upper Division

PHED 310. Foundations of Physical Education, 4 units
PHED 325. Analysis of Movement *or*
PHED 484. Kinesiology, 3-5 units

One course from the following, 3 units

- PHED 320. Theory and Practice of Team Sports
- PHED 321. Theory and Practice of Individual Sports
- PHED 324. Theory and Practice of Dance

Additional courses to complete the 32 units as approved by minor adviser, 11 units

TEACHING CREDENTIALS

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

1. Participate in at least two quarters of intercollegiate athletics.
2. 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.

* One and a half units of physical education activities are required in General Education for graduation. In addition, physical education minors are required to achieve satisfactory skill in at least three activities. This requirement may be met by passing proficiency tests. Activity classes should be taken as needed.

Minors in physical education seeking to teach in secondary school are required to participate in at least one quarter of intercollegiate athletics.

Physical Education

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 11 units in health and physical education from:

- PHED 200. Sports Officiating, 2 units
- HLTH 201. First Aid and Safety, 3 units
- HLTH 220. Health and Society, 3 units
- HLTH 310. Prevention and Care of Athletic Injuries, 3 units
- PHED 350. Recreation and Society, 4 units
- PHED 360. Intramural Athletic Programs, 3 units
- PHED 460. Administration and Organization of Physical Education, 4 units
- PHED 490. Adapted Physical Education, 4 units

Secondary credential candidates must complete 9 units from the upper division courses listed above after obtaining the degree major in physical education.

3. Complete a degree major in physical education.
4. Complete requirements for credential as presented by the Education Department.

PHYSICAL EDUCATION DIRECTORS IN INDUSTRY

Students seeking a career in industry as physical education directors are expected to complete 20 additional units beyond the minimum bachelor of arts degree requirements in physical education as approved by major adviser.

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. Prerequisite: PHED 101.

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. Prerequisite: PHED 101.

PHED 200. Sports Officiating (2)

The study and interpretation of rules for various sports; procedures, mechanics and practice in officiating.

PHED 251. Intercollegiate Athletics (½)

To be selected from baseball, basketball, cross country, golf, tennis, track and volleyball. 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. Prerequisites: PHED 101, 102, 103, and 251.

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. Prerequisites: PHED 101, 102, 103, and 251.

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. Prerequisite: PHED 101.

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.

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. Prerequisite: PHED 310.

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 201.

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: PHIL 101, 102, and 103.

Physical Education

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: HIST 101, 102, 103.

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 (4)

Historical development of evaluation in physical education, measurement of physical fitness, social efficiency, and physical education skills. Prerequisite: MATH 160.

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: One course in anatomy, one course in physiology, and consent of instructor.

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: PHED 484.

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: PHED 484 and 487.

PHED 495. Selected Topics in Physical Education (3-5)

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 (3-4)

For students capable of independent work in need of advanced and specialized study. May be repeated for a total of 9 units. Prerequisites: Senior standing and 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.

Physical Education

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: One course in human anatomy.

Physical Education Activity Course Credit

A maximum of 12 units in physical education activity courses may apply toward a degree.

Physical Sciences

- * Ervin H. Schwarcz, Ph.D., Professor of Physics, Acting Chairman
- Carl Gatlin, Ph.D., Professor of Applied Sciences
- 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 confers the degree Bachelor of Arts, Physical Sciences.

The program in physical sciences provides courses in the disciplines of astronomy, geology and physics. Courses in the Department of Physical Sciences are designed to serve the needs of majors in physical sciences, physics, and chemistry. The department offers courses as part of the general education of students pursuing a liberal arts program, and provides supporting courses for students in biology, premedical, pre-dental and mathematics programs.

The department also prepares prospective elementary and secondary school teachers.

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 philosophy is recommended.

DEGREE MAJOR IN PHYSICAL SCIENCES

Prerequisites to the Major

Required courses in major field:

PHYS 221, 222, 223, 224. General Physics I-IV, 20 units

CHEM 101, 102, 103. Principles of Chemistry I-III, 15 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 119. Calculus with Analytic Geometry, 4 units

MATH 120, 221, 222. Calculus I-III, 12 units

MATH 321. Differential Equations I, 4 units

Recommended courses

Philosophy 110. Deductive Logic, 4 units

MATH 322, 323. Differential Equations II, 8 units

* Research and creative leave Winter 1971.

Physical Sciences

The Major	<i>Units</i>
PHYS 311. Analytical Mechanics I	4
PHYS 322. Electromagnetism	4
PHYS 372. Modern Physics	4
CHEM 461. Physical Chemistry I	
CHEM 412. Analytic Chemistry II <i>and</i>	
CHEM 321, 324. Organic Chemistry <i>or</i>	
CHEM 321, 322, 323, 324, 325, 326. Organic Chemistry	8-15
 At least three of the following courses as approved by the major adviser:	
PHSC 412. History of Physical Sciences	
PHYS 312. Analytical Mechanics II	
PHYS 323. Electromagnetism II	
PHYS 330. Introduction to Electronics	
PHYS 325. Electromagnetism and Theory of Relativity	
PHYS 451. Thermodynamics	
PHYS 373. Quantum Mechanics I	
PHYS 450. Elements of Astromechanics	
PHYS 480, 481. Theory of Elasticity and Mechanical Vibrations	
PHYS 495. Selected Topic in Physics	
CHEM 322, 323, 325, 326. Organic Chemistry	
CHEM 461, 462, 463. Physical Chemistry	12-19
 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

ASTRONOMY

Lower Division

ASTR 200. Descriptive Astronomy (4)

Topics in development of astronomy: solar system and stars. (Lectures, 4 hours)
(Formerly 300)

Physical Sciences

ASTR 201. Astronomy Lab (1)

Telescope observations, stellar parallax, observation of sunset point and sunspot cycle and other optical experiments in lab. Concurrent enrollment in ASTR 200 is required. (Lab, 3 hours)

Upper Division

ASTR 301. Introduction to Space Sciences I (4)

Applied astronomy and general problems related to space and the atmosphere, and evaluation of knowledge and information gained by means of space vehicles. (Lecture, 3 hours; discussion, 1 hour) Prerequisites: ASTR 200, PHYS 201 and 202, or consent of instructor.

ASTR 302. Introduction to Space Sciences II (4)

Continuation of ASTR 301. Includes guidance, tracking, information systems, and application of satellite information to meteorology, communications, and navigation. (Lecture, 3 hours; discussion, 1 hour) Prerequisites: ASTR 301, PHYS 201 and 202, or consent of instructor.

ASTR 303. Introduction to Spaces Sciences III (4)

Continuation of ASTR 302. Study of man in space: Project Mercury, Project Gemini, Project Apollo. Life support in space and physiological aspects of space flight. (Lecture, 3 hours; discussion, 1 hour) Prerequisites: ASTR 302, PHYS 201 and 202, or consent of instructor.

Postbaccalaureate

ASTR 600. Astronomy (4)

Elementary concepts of astronomy: the solar system, the planets, and the galaxies within the universe.

GEOLOGY

Lower Division

GEOLOGY 200. Principles of Geology I (4)

Study of rocks, minerals, fossils, geologic history, and evolution of life on earth. (Lecture, 3 hours; laboratory, 3 hours)

GEOLOGY 201. Principles of Geology II (4)

Continuation of GEOLOGY 200. Condensed 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: GEOLOGY 200 or consent of instructor.

GEOLOGY 221. Descriptive Mineralogy (3)

Physical and chemical properties of minerals; deals with description and determination of minerals on basis of their physical properties. (Lectures, laboratory, and field trips) Prerequisite: CHEM 102 or equivalent.

Postbaccalaureate

GEOLOGY 600. Geology (4)

A condensed survey of the structure and materials that compose the outer portion of the earth, and the geologic processes responsible for sculpturing the earth today. A technical study of rocks, minerals, fossils; the origin, and geologic history and evolution of life on earth. (Lecture, 3 hours; laboratory, 3 hours)

Physics

* Ervin C. Schwarcz, Ph.D., Professor of Physics, Acting Chairman
Department of Physical Sciences

Carl Gatlin, Ph.D., Professor of Applied Sciences

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 Bachelor of Arts, Physics.

Physics is studied by those preparing for professional fields, such as medicine, and for teaching or research careers. The study of physics is also a part of General Education. Prospective teachers on the college level are advised to obtain a B.A. degree with a major in physics.

The physics major is designed to give the student a broad and thorough understanding of the fundamentals of physics. Students are requested to consult with an adviser in order to plan their program and discuss opportunities after graduation. Graduates who do not intend to teach may work in government or industrial laboratories or may enter graduate work in physics or other scientific fields such as aerospace, astrophysics, biophysics or geophysics.

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 41 upper division units of physics.
4. Complete a minor to be selected in consultation with the major adviser. A minor in mathematics, chemistry or philosophy is recommended.

DEGREE MAJOR IN PHYSICS

Prerequisites to the Major

Required courses in major field:

PHYS 221, 222, 223, 224. General Physics, 20 units

Required courses in supporting field:

(These courses may also apply towards the minor)

MATH 119. Calculus with Analytic Geometry, 4 units

MATH 120, 221, 222. Calculus I-III, 12 units

MATH 321, 322, 323. Differential Equations I-III, 12 units

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

Recommended course:

Philosophy 110. Deductive Logic, 4 units

MATH 223. Calculus IV, 4 units

PHSC 412. History of Physical Science, 4 units

* Research and creative leave Winter 1971.

Physics

The Major	Units
PHYS 311, 312. Analytical Mechanics I-II.....	8
PHYS 322, 323. Fundamentals of Electrodynamics I-II.....	8
PHYS 330. Introduction to Electronics	3
PHYS 372. Modern Physics	3
PHYS 373, 374. Quantum Mechanics I-II	6
PHYS 301, 302, 303, 401, 402, 403. Advanced Laboratory I-VI. Four units required from these courses	
PHYS 451. Thermodynamics	3
PHYS 452. Introduction to Statistical Mechanics	3
A minimum of three units of upper division electives from physics courses and including:	
CHEM 461, 462, 463. Physical Chemistry I-III	
ASTR 301, 302, 303. Introduction to Space Sciences.....	3-4
Total	41-42

DEGREE MINOR IN PHYSICS

Consists of 27 units in physics as approved by the minor adviser, to include at least 12 units in upper division.

Physics majors are required to earn a grade of C or better in all required major courses and their prerequisites.

COURSE DESCRIPTIONS

Lower Division

PHYS 100. Introduction to Natural Sciences (5)

Principles and concepts of physics and chemistry which are common and basic to the natural sciences. Evaluation and correlation of experimental and observational data with the development and modification of scientific theories. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) No prerequisites.

No credit will be given to students with previous college chemistry or physics.

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.

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 221. General Physics I (5)

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; laboratory, 3 hours). Prerequisite: Concurrent enrollment in MATH 120.

PHYS 222. General Physics II (5)
Continuation of PHYS 221. Prerequisite: PHYS 221.

PHYS 223. General Physics III (5)
Continuation of PHYS 222. Prerequisite: PHYS 222.

PHYS 224. General Physics IV (5)
Continuation of PHYS 223. Prerequisite: PHYS 223.

Upper Division

PHYS 301. Advanced Physics I—Laboratory (1)
Fundamental experiments in mechanics, heat, electricity and magnetism, optics, and atomic physics. One set of apparatus for each experiment is available so that one or two students will perform a given experiment during a particular laboratory session. Prerequisite: PHYS 223 or equivalent.

PHYS 302. Advanced Physics II—Laboratory (1)
Continuation of PHYS 301. Prerequisite: PHYS 301.

PHYS 303. Advanced Physics III—Laboratory (1)
Continuation of PHYS 302. Prerequisite: PHYS 302.

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 330. Introduction to Electronics (3)
Fundamental principles and theory of rectifiers; amplifiers; oscillators, oscilloscope and other resonant circuits and A.C. bridges. Lecture, 2 hours; laboratory, 3 hours) Prerequisites: PHYS 222 or concurrent enrollment or consent of instructor.

PHYS 331. Introduction to Electronics II (3)
Continuation of PHYS 330. (Lecture, 2 hours; laboratory, 3 hours) Prerequisite: PHYS 330.

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.

Physics

PHYS 373. Quantum Mechanics I (3)

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 (3)

Continuation of PHYS 373. Prerequisite: PHYS 373.

PHYS 401. Advanced Physics IV—Laboratory (1)

Experiments in atomic physics, nuclear physics, including Zeeman effect, scattering, the Fabry-Perot Interferometer. One set of apparatus for each experiment is available so that one or two students will perform a given experiment during a particular laboratory session. Prerequisite: PHYS 303.

PHYS 402. Advanced Physics V—Laboratory (1)

Continuation of PHYS 401. Prerequisite: PHYS 401.

PHYS 403. Advanced Physics VI—Laboratory (1)

Continuation of PHYS 402. Prerequisite: PHYS 402.

PHYS 412. History of Physical Sciences (4)

Development of the physical sciences from beginning to present; influence of science upon developments of philosophy, technology, culture, and civilization. Prerequisites: Minimum of 8 units in the physical sciences, or consent of instructor.

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.

PHYS 450. Elements of Astromechanics (3)

The kinematics of plane curvilinear motion and the geometry of conic sections, Kepler's laws and Newton's law of gravitation, the two body problem, orbital velocity, size and shape of orbits, orbits of least energy, analysis of double star orbits. Prerequisites: ASTR 200, PHYS 311 and 312.

PHYS 451. Thermodynamics (3)

Expansion of matter, transmission of heat, specific heat, temperature, change of state, kinetic theory, Van der Waals equation. Prerequisites: MATH 223 and PHYS 102.

PHYS 452. Introduction to Statistical Mechanics (3)

Concepts of statistical mechanics from Boltzmann point of view, including quantum statistics. Prerequisites: PHYS 351 and 373.

PHYS 455. Solid State Physics (3)

Crystal structure, empirical classification, 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 473. Introduction to Theoretical Physics III (3)

Continuation of PHYS 472. Prerequisite: PHYS 472.

PHYS 480. Theory of Elasticity and Mechanical Vibrations I (4)

Stress tensor, strain tensor, stress strain relations, applications of the theory of elasticity. Theory of elasticity of porous medium, elastic disturbance and propagation of elastic waves with applications to seismic waves. Prerequisites: PHYS 312.

PHYS 481. Theory of Elasticity and Mechanical Vibrations II (4)

Continuation of PHYS 480. Prerequisite: PHYS 480.

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

Political Science

- * Paul F. Magnelia, Ph.D., Associate Professor, Chairman
- Tosh Lee, M.A., Assistant Professor
- Richard Mendes, M.A., Assistant Professor
- Ralph Premdas, M.A., Assistant Professor
- Gary Shaw, Ph.D., Assistant Professor

The Division of Arts and Sciences 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.

The Division of Arts and Sciences also offers the degree Bachelor of Arts, Social Sciences. The student who pursues this program may select an interdepartmental major in political science and any other discipline within the social sciences. (For further information, see Social Sciences.)

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 202. American Government, 4 units
- PSCI 222. Modern ISMS, 4 units

Required courses in supporting fields: three of the following.

- ANTH 206. Introduction to Cultural Anthropology
- ECON 250. Principles of Economics
- PSYC 201. Introduction to Psychology
- SOCL 201. Introduction to Sociology

The Major

One introductory course in statistics.

Three courses required in supporting fields as approved by major adviser.

Required courses in Political Science

	<i>Units</i>
PSCI 312. Comparative Politics	4
PSCI 321. Ancient and Medieval Political Thought	4
PSCI 322. Modern Political Thought	4
PSCI 331. International Relations	4

* Research and creative leave Spring 1971.

Political Science

	<i>Units</i>
PSCI 326. Scope and Methods of Political Science	4
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 202. American Government (4)

Analysis of the structure, powers, and functions of American Government through the problem approach. Meets U.S. Constitution and California State and Local Government requirements for General Education. (Formerly 101)

PSCI 222. Modern ISMS (4)

Survey of modern ideologies, including Democracy, Communism, Nationalism and Fascism. (Formerly 213)

Upper Division

METHODOLOGY

PSCI 326. Scope and Methods of Political Science (4)

An introduction to political analysis with emphasis on the focus and the requirements of empirical political research. Prerequisites: PSCI 202, 222 majors only.

COMPARATIVE POLITICAL SYSTEMS

PSCI 311. European Political Systems (4)

A comparative analysis of several of the political systems extant in Western Europe. Prerequisites: PSCI 202 and 222.

PSCI 312. Comparative Politics (4)

Creates a frame of reference for the analysis of political systems in diverse social settings. Prerequisites: PSCI 202 and 222.

PSCI 313. Totalitarian Political Systems (4)

An analysis of the essential functions characteristic of totalitarian political systems. Prerequisites: PSCI 202 and 222.

PSCI 314. Comparative Politics of Latin America (4)

An analysis of the political systems of Latin America; emphasis on political change and development. Prerequisites: PSCI 202 and 222.

PSCI 315. Comparative Politics of Asia (4)

Survey of governments and politics of Japan, China, India, and countries in Southeast Asia. Prerequisites: PSCI 202 and 222.

Political Science

PSCI 411. Modernization of China (4)

Evaluation of problems which China has encountered in the process of modernization: emphasis on change in political structure. Prerequisite: PSCI 202 and 222.

PSCI 414. Political Development (4)

Comparative analysis of nation-building as a political process. (Formerly 314) Prerequisites: PSCI 202 and 222.

POLITICAL THEORY

PSCI 321. Ancient and Medieval Political Thought (4)

Historical development of political philosophy from ancient times to seventeenth century. Prerequisites: PSCI 202 and 222.

PSCI 322. Modern Political Thought (4)

Political thought from seventeenth century to present, with emphasis on such European philosophers as Hobbes, Locke, Rousseau, and Marx. Prerequisites: PSCI 202 and 222.

PSCI 323. American Political Thought (4)

Main trends of American political thinking from colonial times to present. Meets U.S. Constitution requirement for General Education. Prerequisites: PSCI 202 and 222.

PSCI 324. Problems in Political Theory (4)

Analysis and discussion of selected issues and/or systems in Western political thought. Prerequisites: PSCI 202 and 222.

INTERNATIONAL RELATIONS

PSCI 331. International Relations (4)

Introduction to the elements of international politics.

PSCI 332. International Organization (4)

Analysis and evaluation of the development, functions, powers and future of international organization. Prerequisite: PSCI 202 and 222.

PSCI 333. System and Process in International Politics (4)

Systematic study of the abstract, theoretical, and semiformal aspects of international politics. Prerequisite: PSCI 331.

PSCI 334. Contemporary Problems in International Politics (4)

Analysis of the communist challenge to the non-communist world, the Western response to the challenge of communism, role of middle powers and small states, and the United Nations. Prerequisites: PSCI 202 and 222.

PSCI 336. Readings in International Politics (4)

Analysis and evaluation of a number of the significant writings in International Politics. Prerequisite: PSCI 331.

PSCI 433. American Foreign Policy (4)

United States governmental machinery for conduct of American foreign relations, and analysis of twentieth century foreign policy with emphasis on post-World War II period. Background in recent American history desirable but not required. Prerequisites: PSCI 202 and 222.

PSCI 434. Soviet Foreign Policy (4)

Analytical and historical examination of the origins and development of Soviet foreign policy. Emphasis on the role of communist ideology, Russian tradition, and politics of the Soviet Union as factors affecting policy. Prerequisite: PSCI 222 or consent of instructor.

AMERICAN POLITICS

PSCI 353. The Chief Executive (4)

A study of the chief executive at all levels of American government. The roles, responsibilities, powers and limits of the president, governors, and mayors are analyzed, and the centrality of the executive in the American political system is emphasized. Prerequisite: PSCI 202 and 222.

PSCI 354. Legislative Process (4)

Leadership, voting, and work groups in the legislature; legislative-executive relations. Prerequisites: PSCI 202 and 222.

PSCI 370. 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. Prerequisite: PSCI 202 and 222.

PSCI 450. 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. Prerequisite: PSCI 202 and 222.

PSCI 455. 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 government. (Formerly 361) Prerequisites: PSCI 202 and 222.

POLITICAL DYNAMICS

PSCI 351. Political Parties (4)

Critical analysis of the political party as a part of the process of government: party organization and activities, campaign methods, and party responsibility. Prerequisites: PSCI 202 and 222.

PSCI 362. Public Opinion and Voting Behavior (4)

American voting behavior, political attitude and opinion formation. Prerequisites: PSCI 202 and 222.

PSCI 460. Political Behavior (4)

An analysis of the political manifestations of individual and group decision-making. (Formerly 360) Prerequisites: PSCI 202 and 222.

PSCI 461. Political Socialization (4)

An examination of the major variables and processes related to political socialization. Prerequisites: PSCI 202 and 222.

PSCI 462. Political Change: A Study of Revolution (4)

A systematic and analytic study of revolution as one form of political change. (Formerly 421) Prerequisites: PSCI 202 and 222.

PSCI 494. 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.

Political Science

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 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., Assistant Professor, Chairman

Lloyd H. Ahlem, Ed.D., Professor

W. Mack Goldsmith, Ph.D., Associate Professor

Stanley E. Sherman, Ph.D., Assistant Professor

Frank C. Eichensehr, M.A., Assistant Professor

The Department of Psychology offers the Bachelor of Arts, 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 discipline 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 with prior approval of the major adviser.

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 201. Introduction to Sociology, 4 units
2. BIOL 101. Principles of Biology, 5 units
or
ZOOL 102. Principles of Zoology, 5 units
3. MATH 160.* Statistics, 4 units

* Under certain circumstances MATH 110 or MATH 210 will be accepted in lieu of MATH 160 with prior approval of the major adviser.

Psychology

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	
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. Complete prerequisites to minor.
2. Twenty units in psychology approved by minor advisor, 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 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

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
- PSYC 436. Theory and Research in Clinical and Abnormal Psychology, 4 units
- PSYC 416. Advanced Tests and Measurement, 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 on 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.

PROPOSED MASTER'S DEGREE

A master's degree program in psychology is in preparation. Students interested in this program should consult the Department of Psychology for complete details.

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.

† 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.

Psychology

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.

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 neuro-physiological processes. Prerequisites: PSYC 202. ZOO 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 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 416. Advanced Tests and Measurements (4)

Advanced concepts of psychological measurement and use of group psychological tests. (Formerly 461) Prerequisites: PSYC 304 and 316.

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.

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 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 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.

Psychology

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 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 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 (4)

Experience in psychological work performed in schools, agencies, institutions under joint supervision of college and agency. Prerequisite: 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.

Social Sciences

Frederick E. Kottke, Ph.D., Coordinator

The student seeking a Bachelor of Arts, Social Sciences may select 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 305.
2. Three courses from ANTH 306, 307, 308, 309, 335, 336, 402, or 421

B. Economics: Prerequisite: ECON 300 or equivalent. One course from each of four of the following fields:

1. Economic Theory and Doctrine (ECON 315, 330, 331, 400, 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 202 or equivalent. At least four courses selected from the following: GEOG 310, 330, 351, 352, 402, or 495.

D. History: Prerequisite: HIST 101, 102, 103 or equivalent. At least one course in each of the following fields:

United States History

California History

Asian History (HIST 380, 381, 389)

E. Political Science: Prerequisite: PSCI 202

1. At least 3 of the following: PSCI 322, 351, 354, 361, or 450.
2. A fourth course from the above or PSCI 312 or 331.

Social Sciences

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 201.

1. Sociology 315.
2. At least 3 courses selected from the following:
SOCL 301, 331, 361, 371, 372, 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 Inter-Departmental 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, political science, or economics. Anthropology, psychology, and sociology are not commonly taught in the secondary schools.

Sociology

Alfred W. Bowers, Ph.D., Professor, Chairman

Julian B. Roebuck, Ph.D., Professor

Harriet C. Stull, Ph.D., Professor

Antonio Donini, Ph.D., Associate Professor

Harry Hale, Jr., Ph.D., Associate Professor

Frank E. Cooney, M.A., Assistant Professor

J. Emery Fleming, Jr., MA, Assistant Professor

The Department of Anthropology/Sociology offers the Bachelor of Arts, Sociology. The major is designed to provide a comprehensive academic experience in sociology and the related field of anthropology. 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, may select courses which provide a background in mental health, community development, sociological teaching and research, family relations, and government.

The student may arrange his program to attain background for professional roles in social welfare services, correctional institutions, mental health services and institutions, and probation and parole work.

The College also offers the degree Bachelor of Arts, Social Sciences. The student seeking this degree may select an interdepartmental major in sociology and any other discipline 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 36 upper division units, as approved by the major adviser.
4. Completion of a minor is not required.

DEGREE MAJOR IN SOCIOLOGY

Prerequisite to the Major

SOCL 201. Introduction to Sociology, 4 units

SOCL 224. Social Problems

ANTH 206. Introduction to Cultural Anthropology, 4 units

ANTH 207. Primitive Social Systems

One other lower division sociology or anthropology course, 4 units

Recommended courses in supporting fields:

One of the following as approved by major adviser, 4-5 units

ECON 320. Quantitative Analysis

MATH 160. Statistics

PSYC 304. Experimental Methods in Psychology I

Sociology

The Major

Units

A minimum of 36 upper division units distributed as follows:

Social Organizations and institutions.....	8
Social Processes	8
Theory and Methodology (SOCL 401, SOCL 441).....	8
† Electives from Sociology.....	12
Total	36

DEGREE MINOR IN SOCIOLOGY

Twenty-four units approved by the minor adviser are required, including at least 20 units in upper division courses.

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 201. Introduction to Sociology (4)

Fundamental concepts, methods, and empirical findings of sociology. This course or its equivalent is a prerequisite for 300 and 400 level courses.

SOCL 221. American Society (4)

Analysis of American society; major structural characteristics and their functions; major changes, trends, and contemporary social problems examined in their relation to institutional structures. (Formerly 321) Prerequisites: SOCL 201 or consent of instructor.

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 201 or consent of instructor.

Upper Division

SOCIAL ORGANIZATION AND INSTITUTIONS

SOCL 301. Race and Ethnic Group Relations (4)

The sociology of minority group relations; with attention to specific racial, ethnic, and religious minorities. Special emphasis on the status of the American Negro minority. Prerequisite: SOCL 201 or consent of instructor.

SOCL 315. The Family (4)

Social structure and changing functions of the modern family. Social interaction. Recent research and theoretical development in the sociology of the family. Prerequisite: SOCL 201 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.

† The elective units should be selected in consultation with and approved by the major adviser. PSYC 331, 432, and ANTH 305, 401, 411 and 421 may be applied to the major program if they are not included in a minor in psychology or anthropology.

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 201 or consent of instructor.

SOCL 331. Social Stratification (4)

Origins, characteristics, and functions of social classes and castes; emphasis on recent research and theoretical developments. Prerequisites: SOCL 201 or consent of instructor.

SOCL 361. The Small Group (4)

Structure and dynamics of the small human group, with emphasis on modern theory, research methods and empirical findings. Prerequisite: SOCL 201 or consent of instructor.

SOCL 371. Community Organization (4)

Social structure of the community, with special attention to the contemporary U.S. community. Formal and informal power structure, social stratification, and communication network. Attention to recent research. Prerequisite: SOCL 201 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 201.

SOCL 400. Contemporary Mexican-American Studies (4)

The sociology of the contemporary Mexican-American with attention given to his culture and to his institution in the Anglo society. Special emphasis is put on the problems concerning the Mexican-American in education, politics, and the economy and in particular the farm labor situation and the student movements. The changing role of the Mexican-American will be examined.

SOCL 432. Sociology of Religion (4)

Sociological analysis of religious belief and behavior, classic theories of religion, recent research methods and empirical findings. Prerequisite: SOCL 201 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 201 or permission of instructor.

SOCL 460. Industrial Sociology (4)

A consideration of the industrial institution in some detail with emphasis on the special sociological concomitants of industrialization in any society.

SOCIAL PROCESSES

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 201 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 201 or consent of instructor.

Sociology

SOCL 351. Human Ecology (4)

Examination of differential distribution and density of human populations with attention to social implications. World and U.S. ecological trends and urbanization; emphasis on contemporary U.S. Prerequisite: SOCL 201 or consent of instructor.

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.

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 201 or consent of instructor.

SOCL 426. The Sociology of Mental Illness (4)

Survey of alternative approaches to the study and treatment of mental illness and the processes of recovery; use of historical and historical perspectives to develop a theory of human personality. Prerequisite: SOCL 201 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 201 or consent of instructor.

THEORY AND METHODOLOGY

SOCL 401. Sociological Research (4)

Introduction to research design and methodology in sociology: the hypothesis, theory, types of research, historical research, experiment, survey, statistical elements for sociology, questionnaire and interview studies, data analysis and evaluation, final results and written report. Prerequisite: 16 upper division units of sociology.

SOCL 441. Modern Sociological Theory (4)

Major contributions to systematic sociological theory from Durkheim to Parsons. Theories of social structure and social change. Aspects of theory-building. Prerequisite: SOCL 201 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.

Communication Arts and Sciences

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
Richard S. Lucas, M.A., Assistant Professor
Susan E. Kellogg, M.S., Assistant Professor
Sam Wellbaum, M.A., Assistant Professor

The Department of Communication Arts and Sciences offers the Bachelor of Arts and Master of Arts, Speech. 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

	Units
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

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 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 Authorizing Service as Speech and Hearing Specialist (administered by the Department of Communication Arts and Sciences.)

Students planning careers as speech and hearing specialists should consult with the credential adviser in the Department of Communication Arts and Sciences regarding program requirements for the Restricted Credential, Specialization in Speech and Hearing Handicapped, California State Department of Education.

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 313, 332, 335, 379 and 432; EDUC 412 and 676.

MASTER OF ARTS IN SPEECH

The department offers the Master of Arts Degree in Speech 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 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

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.

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)

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 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 psychology 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. (Formerly 413) Prerequisite: Senior standing or 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. Prerequisites: SPCH 360, 361, or equivalents.

Speech

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. 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. 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 in 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 in 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. Prerequisite: SPCH 361 or consent of instructor.

SPCH 561. Seminar: Stuttering (4)

Theories and research in stuttering and neurological disorders. Guided observations, class discussions and evaluations. Prerequisite: SPCH 361 or consent of instructor.

SPCH 562. Seminar: Cleft Palate Speech (4)

Etiology, surgical and therapeutic procedures, parental counseling. Guided observation, discussion and evaluation. Prerequisite: SPCH 361 or 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. Prerequisites: SPCH 461 or 462 or 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. Students are required to register concurrently for SPCH 571 for one unit. Prerequisite: SPCH 463 or 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. Prerequisite: SPCH 361 or consent of instructor.

SPCH 570. Advanced Clinical Practice: Speech Correction (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.

Speech

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 school 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.

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.

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, 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 South-
 ern California; Certified Psychologist, 1959, State of California
- Aubert, Edward J. (1961).....Director of Admissions
 and Relations with Schools
 B.S., 1956, University of San Francisco; M.B.A., 1961, University of California,
 Berkeley
- Balbo, Frank C. (1964).....Business Manager
 B.S., 1937, University of California, Berkeley
- Barrett, Thomas P. (1961).....Associate Professor of Business Administration
 B.A., 1954, Northeastern University; M.A., 1958, Michigan State University
- Beamish, Jerome J. (1964).....Test Officer
 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
- Booker, James L. (1970).....Assistant Professor of Chemistry
 B.S., 1963; M.S., 1965, Texas Technological College; Ph.D., 1970, University of
 Washington
- Bowers, Alfred W. (1967).....Professor of Anthropology
 B.S., 1928, Beloit College; M.A., 1929, Ph.D., 1948, University of Chicago
- Bretz, Richard D. (1968).....Assistant Professor of English
 B.A., 1960, Cornell College; M.A., 1964, Ohio University
- 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

Faculty

- Bruggman, Joseph E. (1960)..... Professor of Music
B.A., 1941, San Jose State College; M.A., 1947; Ed.D., 1949, Columbia University
- 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
- Carter, Dora L. (1969)..... Assistant Professor of Physical Education
B.S., 1960, University of Oklahoma; M.S., 1964, University of Colorado
- 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, University of Hawaii
- Cockrell, Lloyd L. (1967)..... Assistant to Executive Dean—Facilities
B.S., 1950, New Mexico State University; M.A., 1956, Eastern New Mexico University; Ed.D., 1961, University of New Mexico
- 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)..... Assistant Professor of Physical Education
A.B., 1955, Occidental College; M.S., 1956, University of California, Los Angeles; Ph.D., 1969, University of Oregon.
- Cooney, Frank E. (1970)..... Assistant Professor of Sociology
B.A., 1966, University of San Francisco; M.A., 1967, University of Kentucky
- 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 (1969)..... Assistant Professor of English
B.A., 1965; M.A., 1966, University of California, Berkeley
- 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 C. (1969)..... Assistant Professor of Economics
B.S., 1960; M.A., 1962, University of Nebraska

Faculty

- Crowley, Gerald J. (1960)..... Executive Dean;
Professor of Management
A.B., 1942, Loyola College; Ed.M., 1951, Boston University
- Dean, Britten (1967)..... Associate Professor of History
A.B., 1957, Brown University; M.A., 1962; Ph.D., 1969, Columbia University
- Dinse, Noble T. (1970)..... Instructor in 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
- 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
- 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
- Farnsworth, Richard B. (1967)..... Director of Continuing Education;
Lecturer in Education
B.A., 1935, University of Montana; M.A., 1942, Stanford University
- *Farrar, Charles R. (1960)..... Professor of Education
B.A., 1949; M.A., 1950, Humboldt State College; Ed.D., 1963, Stanford University
- Feldman, Louis A. (1968)..... Assistant 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
- Fleming, J. Emery, Jr. (1970)..... Assistant Professor of Sociology
B.A., 1951, University of California, Los Angeles; B.D., 1959, Garrett Theological Seminary; M.A., 1959, Northwestern University
- Fogel, Ira L. (1970)..... Assistant Professor of Anthropology and Geography
B.S., 1960; M.A., 1962, University of Chicago
- Foster, John L. (1964)..... Supervisor of Buildings and Grounds
B.S., 1934, U.S. Naval Academy
- 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

* On sabbatical leave Fall 1970.

Faculty

- Goldsmith, W. Mack (1966).....Associate Professor of Psychology
A.B., 1957, Ripon College; Ph.D., 1966, Cornell University
- Gonzales, Norbert M. (1969).....Director of Special Programs
B.A.; M.A., 1969, Chico State College
- 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 Wash-
ington
- 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
- Grillos, Steve J. (1965).....Professor of Botany
B.S., 1951, University of Denver; M.S., 1952, University of Wyoming; Ph.D.,
1956, Oregon State College
- Habashi, 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).....Associate Professor of Biology
B.S., 1957; M.S., 1958, Brigham Young University; Ph.D., 1967, Oregon State
University
- Hale, Harry, Jr. (1970).....Associate Professor of Sociology
B.A., 1959, Fresno State College; Ph.D., 1963, University of Tennessee
- Hamilton, Hobart G. (1968).....Assistant 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 Biology
B.A., 1955; M.A., 1957, University of the Pacific; Ph.D., 1967, Oregon State
University
- Harrison, Francis B. (1968).....Administrative Assistant to Business Manager
B.S., 1938, U.S. Military Academy; M.B.A., 1953, Syracuse University
- 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
- Holder, Frank B. (1965).....Associate Professor of History
B.A., 1949; M.A., 1951; Ph.D., 1962, 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

Faculty

- 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
- 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; Doc-
torat 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 Uni-
versity of America; D.B.A., 1963, University of Southern California; C.P.A.,
1958, State of California
- Jensen, James P. (1961).....Associate Professor of English
B.A., 1953; M.A., 1957; Ph.D., 1964, University of Washington
- Johnson, Lola V. (1960).....Associate Professor of English
B.A., 1956; M.A., 1959, University of the Pacific
- Johnson, E. Lorraine (1960).....Coordinator of Faculty Records
C.P.S., 1955; B.A., 1966, Stanislaus State College
- Jones, Richard V. (1966).....Associate Professor of Education
B.A., 1956; M.A., 1956, Stanford University; Ed.D., 1966, University of Cali-
fornia, Berkeley
- Kellogg, Susan E. (1969).....Assistant Professor of Audiology
B.A., 1964, Syracuse University; M.S., 1965, University of Wisconsin, Madison
- Kern, John R. (1970).....Assistant Professor of History
B.A., 1961, Swarthmore College; M.A., 1967, University of Wisconsin
- Klein, Michael (1970).....Assistant Professor of English
B.A., 1960, University of Rochester; M.A., 1963, University of Minnesota
- Kottke, Frederick E. (1963).....Professor of Economics
B.S., 1952, Pepperdine College; M.A., 1957; Ph.D., 1960, University of Southern
California
- Lambright, Robert W. (1968).....Professor of Marketing
B.A., 1952; M.B.A., 1954; D.B.A., 1966, University of Washington at Seattle
- Lee, Tosh (1970).....Assistant Professor of Political Science
B.A., 1961; M.A., 1962, University of Washington
- Lee, Yin-Po (1970).....Assistant Professor of Economics
B.A., 1955, National Taiwan University; Ph.D., 1970, Southern Illinois University.
- Leo, Louis J. (1969).....Acting Dean of Student Services
B.A., 1966, University of Michigan; LL.B. (J.D.), 1969, University of Michigan
Law School
- Lucas, Richard S. (1969).....Assistant Professor of Speech
B.A., 1966; M.A., 1968, Sacramento State College

Faculty

- Mack, Gerhard (1970).....Assistant Professor of German
A.B., 1965, California State, Los Angeles; M.A., 1967, 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).....Assistant 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 Uni-
versity; Ph.D., 1968, Purdue University
- McClintock, William F. (1963).....Director of 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
A.B., 1958, Pomona College; M.A., 1960, University of Carolina; Ph.D., 1963,
University of Iowa
- McManus, Betty D. (1965).....Test Coordinator
B.A., 1948, University of Miami; M.Ed., 1960, Xavier University
- Mendes, Richard (1970).....Assistant Professor of Political Science
B.A., 1966, Wabash College; M.A., 1967, University of Illinois
- Mild, J. Donald (1969).....Director of Institutional Research
B.S., 1958; M.S.P.A., 1966, University of Southern California; C.D.P.
- Moriconi, R. J. (1968).....Assistant Professor of Education
A.B., 1955; M.A., 1957, Stanford University; Ed.D., 1967, University of Florida
- Nickerson, Melvin R. (1966).....Coordinator of A-V Services
A.B., 1956; A.M., 1960, University of the Pacific; Ph.D., 1966, University of
Michigan
- Norton, Max C. (1961).....Professor of Speech and Communication Science
B.A., 1951; M.A., 1955, University of the Pacific; Ph.D., 1962, University of
Denver
- O'Brien, Audrey V. (1966).....Reference Librarian
B.A., 1945, Hofstra University; M.S., 1965, Long Island University
- Parker, J. Carlyle (1963).....Public Services Librarian
A.B., 1957, Brigham Young University; M.L.S., 1958, University of California,
Berkeley

* Research and creative leave Spring 1971.

Faculty

- *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
- 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
- Premdas, Ralph (1970).....Assistant Professor of Political Science
B.A., 1965, Aurora College; M.A., 1967, University of Illinois
- Quinley, C. W., Jr. (1962).....Registrar
A.B., 1950, San Jose State College
- Rao, Cherukuri U. (1970).....Lecturer in Business Administration
B.Com., 1954; M.Com., 1956, Andhra University; M.B.A., 1966, Atlanta University
- Rasmussen, John Peter (1962).....Associate Professor of History
B.A., 1955, Fresno State College; M.A., 1959; Ph.D., 1962, Stanford University
- Rau, Catherine D. (1965).....Professor of Philosophy
A.B., 1925; M.A., 1939; Ph.D., 1945, University of California, Berkeley
- Renning, H. Dieter (1970).....Associate Professor of Economics
Dr. rer. pol. (Doctor of Economics), 1961, University of Freiburg, Germany
- Richardson, Lowell G. (1964).....Associate Professor of Foreign Languages
B.A., 1941; M.A., 1947, University of Wisconsin; 1967, Ph.D., Universidad
Inter-America, Saltillo, Mexico
- Riddle, Jean H. (1967).....Assistant Professor of English
B.A., 1946; M.A., 1961, Ohio Wesleyan University
- Roebuck, Julian B. (1970).....Professor of Sociology
A.B., 1941, Antioch Christian College; M.A., 1944, Duke University; Ph.D.,
1958, University of Maryland
- 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
- Samuelson, Ralph (1970).....Professor of English
B.A., 1949, University of Washington; M.A., 1951, Columbia University; Ph.D.,
1956, University of Washington
- †Schwarcz, Ervin H. (1967).....Professor of Physics
B.S., 1945, Ohio State University; M.S., 1948; Ph.D., 1955, University of Michigan
- Shaw, Gary C. (1969).....Assistant Professor of Political Science
B.A., 1966, Utah State University; M.A., 1967; Ph.D., 1970, Michigan State
University

* On sabbatical leave Spring 1971.

† Research and creative leave Winter 1971.

Faculty

- 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
- Smith, Priscilla R. (1968).....Associate Professor of Education
A.B., 1941, John R. Stetson University; M.Ed., 1955, National College of Edu-
cation; Ed.D., 1963, University of Denver
- Smith, Robert R. (1969).....Assistant Professor of History
A.B., 1960, Wayne State University; M.A., 1963, University of California, Los
Angeles
- 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).....Assistant Professor of Psychology
B.A., 1961, Western Washington State College; M.A., 1965; Ph.D., 1968, Uni-
versity 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
- 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).....Associate 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 Foreign Language—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).....Assistant 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, Colorado State 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
- Tullis, Garner H. (1969).....Assistant Professor of Fine Art
B.F.A., 1964, University of Pennsylvania; M.A., 1967, Stanford University

* On sabbatical leave Fall 1970.

Faculty

- 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
- Watling, Thomas C. (1967).....Coordinator of Student Housing
B.A., 1949; M.Ed., 1955, Drury College; Ph.D., 1967, University of Denver
- Wellbaum, Sam (1970).....Assistant Professor of Speech
B.A., 1948, University of California, Los Angeles; M.A., 1962, University of Southern California
- White, Thomas J. (1960).....Business Services Officer
A.B., 1950, San Diego State College
- 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
- Young, Kenneth G. (1961).....Professor of Accounting
B.S.C., 1948, Loyola University; M.B.A., 1951, University of California, Berkeley; C.P.A., 1944, University of Illinois; C.P.A., 1948, State of California
- 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
- Zakarian, Richard H. (1970).....Professor of Foreign Languages
A.B., 1949, Bates College; M.A., 1950, Middlebury College; Graduate School of French, Paris, France; Ph.D., 1960, Northwestern University

Faculty

NEW APPOINTMENTS

- Bowen, James C. (1970).....Assistant Professor of Physical Education
B.A., 1965, University of Northern Iowa; M.A., 1969, State University of Iowa
- Buchanan, William A. (1970).....Assistant Professor of Psychology
B.A., 1965; M.A., 1967, California State at Los Angeles; Ph.D., 1969, University of Colorado
- Caldwell, John C. (1970).....Technical Services Librarian
B.S., 1950, St. Vincent College; M.A., 1951, University of Pennsylvania; M.S.L.S., 1954, Drexel Institute of Technology
- Coulter, R. Scott (1970).....Associate Professor of Music
B.M., 1949; M.M., 1952, University of Pacific
- 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
- Duerner, Gary D. (1970).....Personnel Officer
B.S., 1968, Sacramento State College
- 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
- Keener, Wilford R. (1970).....Director of College Relations
B.A., 1962, San Jose State College
- 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
- Peyton, Cary R. (1970).....Financial Aids Officer
B.S., 1954, U.S. Military Academy, West Point
- 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
- Sebok, Richard F. (1970).....Associate Dean of Student Services
B.A., 1960, Millikin University; M.Ed., University of Illinois
- Shrable, V. Kenneth (1970).....Associate Professor of Psychology
B.D., 1957, Fuller Seminary; A.B., 1950, Harding College; M.A., 1961; Ph.D., 1965, University of California, Berkeley
- Steven, James M. (1970).....Assistant Professor of Fine Art
B.F.A., 1962; M.F.A., 1965, Art Institute of Chicago
- Villa-Lobos, Raymond A. (1970).....Assistant Professor of Fine Art
B.A., 1966; M.A., 1970, University of California at Los Angeles
- Wold, John T. (1970).....Assistant Professor of Political Science
B.A., 1965, California Lutheran College; M.A., 1968, The Johns Hopkins University
- Yasui, Roy Y. (1970).....Education
B.Ed., 1964, University of Alberta; M.S., 1965; Ph.D., 1967, University of Oregon

INDEX

- Academic Advisement, 30-31
 Academic Calendar, 7-10
 Academic Program, 16-17
 Academic Standards, 33-35
 Accreditation, 17
 Administration, College, 15-16
 Admission As An Undergraduate Transfer, 23-24
 Admission to the College, 20-31
 Admission Examination, 27
 Admission Procedure, 25-28
 Admission Requirements, 20-25
 Advanced Placement and Credit, 29
 Alumni, 49
 Announcement of Courses, 61
 Anthropology, 63-66
 Applicants With Fewer Than 90 Quarter Units, 24
 Applicants With Courses in Progress, 26
 Applicants With 90 or More Units, 24
 Application Fee, 26
 Auditors, 35-36
 Biological Sciences, 67-72
 Business Administration, 73-80
 California High School Graduates and Residents, 22
 California State Colleges, 13-14
 Change of Address, 39
 Change of Official Program, 37
 Chemistry, 81-84
 Class Attendance, 35
 College Facilities, 17
 College, The, 16
 College Medical Services, 46
 Communication Arts and Sciences, 197-204
 Concurrent Enrollment, 36
 Counseling, 43
 Course Numbering System, 62
 Credential Program, Admission to a, 31-32
 Credential Program, Continuance in, 32
 Credit By Examination, 36
 Credit For Extension and Correspondence Courses, 29
 Credit For Military Service, 30
 Credit From Non-Accredited Colleges, 29
 Credit/No Credit Grading, 33-34
 Degree and Credential Programs, 17-18
 Drama, 85-88
 Economics, 89-92
 Education, 93-112
 English, 113-121
 Evaluation and Acceptance of Credit, 28
 Faculty, 205-214
 Federal Insured Student Loan, 44
 Fees and Refunds, 40-42
 Fine Art, 122-128
 Foreign Languages, 129-135
 Former Students, 27
 Freshman, Admission of, 20-22
 General Education, 50-53
 General Education Credit, 35
 General Information, 16-20
 General Requirements for Degrees, 49-58
 Geography, 136-137
 Grade Reports to Students, 39
 Grading System, 33
 Graduates of High Schools in a Foreign Country, 23
 Graduate Record Examination, 47
 Graduate Students, 24, 26-27
 Health Examinations, 46
 Health History Statement and Examination, 28
 High School Students Entering Advanced Placement Program, 23
 History, 138-147
 Honors at Entrance, 24
 Honor List of Students, 33
 Housing, 43
 Incomplete Work, 38
 Individual Study Courses, 37
 International Program, 19-20
 International Students, 43
 Intra-System Transfer, 24
 Law Enforcement Education Grant and Loan Program, 44
 Leave of Absence, 38
 Library, 18-19
 Loan Fund, College Student, 44
 Major, 53-54
 Major or Minor, Declaration or Change of, 37
 Mathematics, 148-153
 Minor, 54-55
 Music, 154-162
 National Defense Student Loan, 44
 Non-High School Graduates, 23
 Non-Residents Graduating From High Schools in Other States or Possessions, 22-23
 Office of the Chancellor, 12
 Office Hours, 10
 Official Program Limits, 36
 Other Applicants, 23, 24
 Other Sources of Student Aid, 45
 Petitions, 40
 Philosophy, 163-165
 Physical Education and Health, 166-171
 Physical Sciences, 172-175
 Physics, 175-179
 Placement, 43
 Policies and Procedures, 35-39
 Political Science, 180-185
 Postbaccalaureate Credit, 37
 Psychology, 185-190
 Quarter System, 18
 Redirection of Applicants, 24
 Registration, 30
 Requirements For An Additional Baccalaureate Degree, 55
 Requirements For The Bachelor of Arts Degree, 50
 Requirements For The Master of Arts Degree, 56-58
 Scholarship, 44
 Scholarship Standards, 34-35
 Selective Service, 48
 Social Sciences, 191-192
 Sociology, 193-196
 Special Major, 54
 Stanislaus State College, 15-16
 Statement of Residence, 28
 Student Activities, 48
 Student Classifications, 39
 Student Conduct and Responsibility, 48-49
 Student Financial Assistance, 44
 Students Formerly Enrolled, 24
 Student Health, 46
 Students Seeking Enrollment As Auditors Without Credit, 25
 Students Seeking Part-Time Enrollment, 25
 Students Seeking Summer Session or Extension Enrollment, 25
 Student Services, 42-49
 Summer Session and Extension, 19
 Summer Session and Extension Registrants, 27
 Table of Contents, 5-6
 Testing, 46-47
 Thesis, Project, or Comprehensive Examination, 57-58
 Transcripts, 40
 Transcripts Required, 26
 Transfer of Credit From A Junior College, 29
 Trustees of the California State Colleges, 11-12
 Veterans, 26
 Veterans Assistance, 47-48
 Waivers of Non-Resident Fees, 45
 When to Apply, 25-26
 Withdrawal From College, 38
 Workshop Credit, 29
 Work-Study Program, 44

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

To Modesto
Sacramento
San Francisco



WALNUT ROAD

CROWELL ROAD

STANISLAUS
STATE COLLEGE

MONTE VISTA AVENUE

99

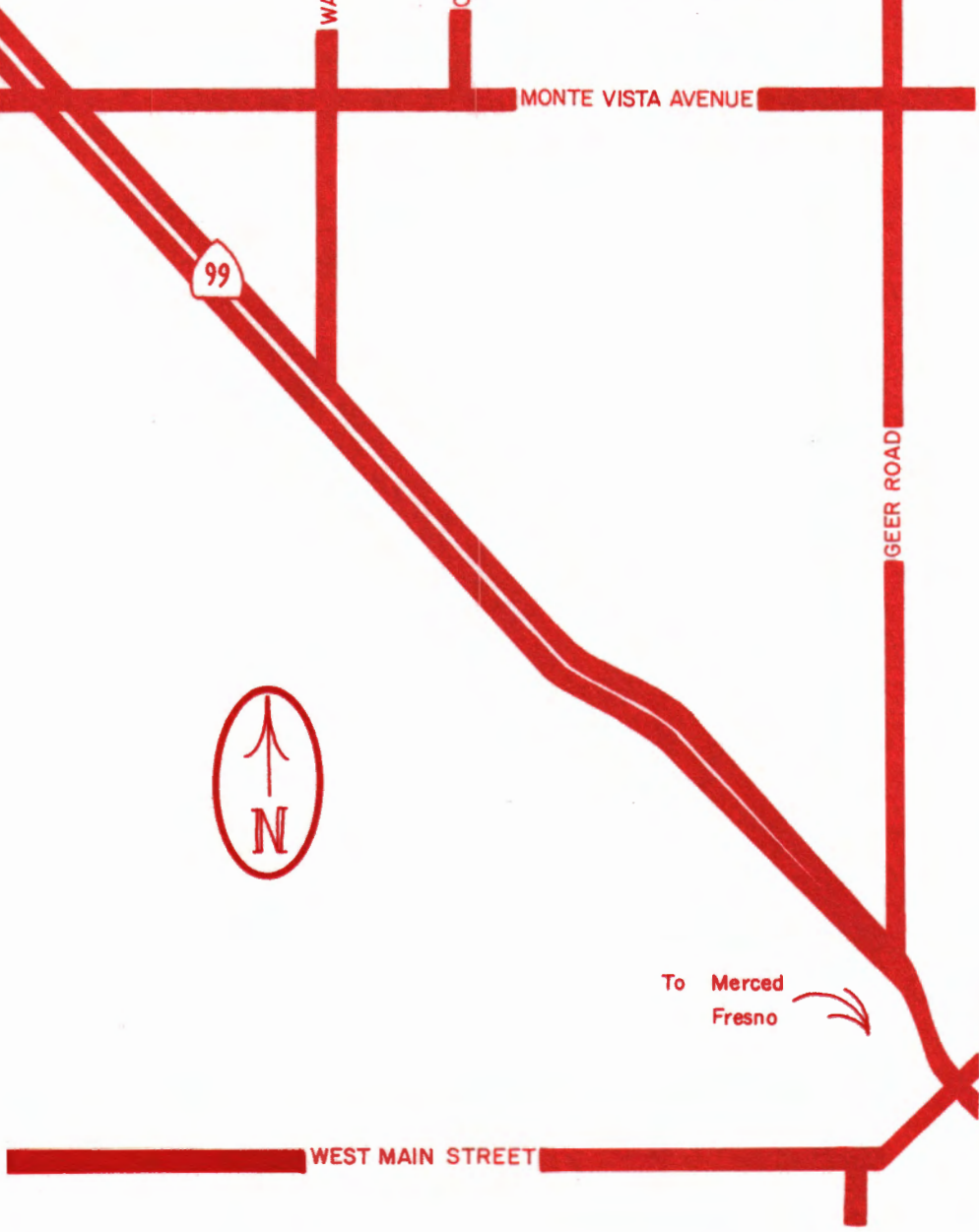
GEER ROAD



To Merced
Fresno



WEST MAIN STREET



STANISLAUS STATE COLLEGE

800 Monte Vista Avenue
Turlock, California 95380

CATALOG

Nonprofit Organization

U. S. POSTAGE

PAID

Turlock, California

PERMIT NO. 193