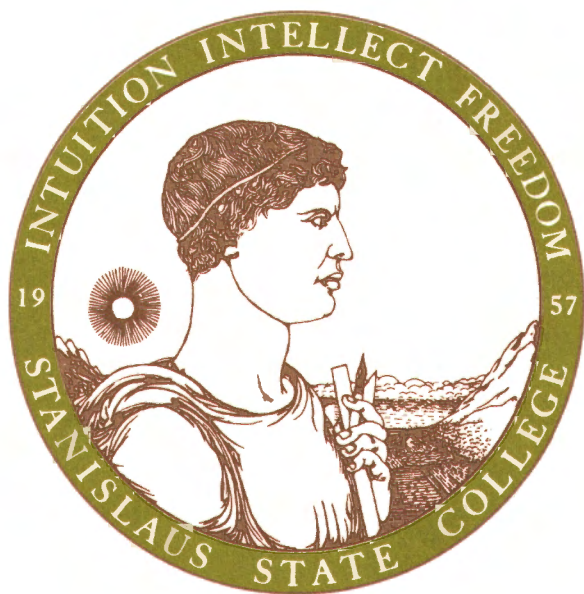


STANISLAUS STATE COLLEGE



68

CATALOG

69

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STANISLAUS STATE COLLEGE

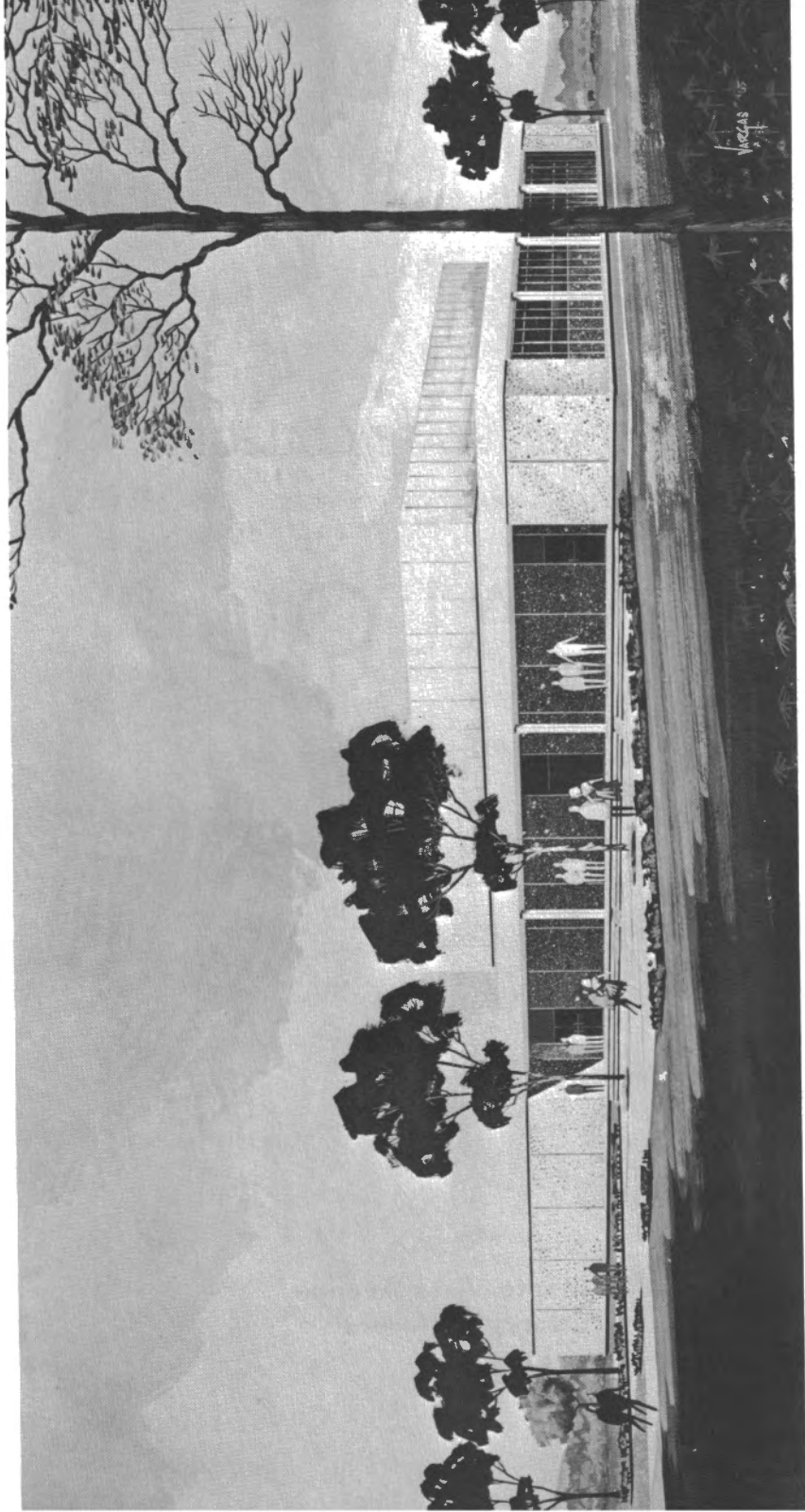
THE CALIFORNIA STATE COLLEGES

CATALOG

1968-69



800 Monte Vista Avenue
Turlock, California



Stanislaus State College Fieldhouse



Library at the SSC Campus



Classroom Building

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ACADEMIC CALENDAR

SUMMER SESSION 1967

- May 15, Wednesday_ Due date for filing applications for summer session 1968 registrations
- May 15, Wednesday..... Due date for filing applications for financial aid in summer session 1968
- June 14, Friday..... End of Regular Registration Period (refer to Summer Session Bulletin)
- June 17-July 26..... Six-week session
- July 29-August 9..... Two-week session

FALL QUARTER 1968

- January 1, Monday..... Period for accepting admission applications for fall quarter 1968 begins
- March 1, Friday..... Due date for filing applications for admission or readmission, transcripts and supporting admission documents for fall quarter 1968 (although applications will be accepted after the due date, the College cannot *guarantee* complete admission processing for students who complete the application procedure after this date)
- March 1, Friday..... Due date for filing applications for financial aid in the fall quarter 1968
- September 12-19, Thursday
through Thursday..... Student Orientation Program (includes two-day Freshman Camp)
- September 19, Thursday..... Registration (refer to *Class Schedule*)
- September 19, Thursday..... Last day to register without late registration fee
- September 20, Friday..... Instruction begins
- September 26, Thursday..... First day to add or drop a course
- October 3, Thursday..... Last day of late registration
- October 3, Thursday..... Last day to add a course
- October 3, Thursday..... Last day to apply for fall 1968 graduation
- October 4, Friday..... Last day to file application for partial refund of fees from dropping courses or withdrawing from the College
- October 15, Tuesday..... Last day to drop a course without a grade
- October 15, Tuesday..... Applications due for spring and summer 1969 graduation
- October 24, Thursday..... Scholarship reports due
- November 11, Monday..... Legal holiday (Veterans Day)
- November 25-December 10,
Monday through Tuesday..... Advising period for winter registration

Academic Calendar

November 28–December 1, Thursday through Sunday	Thanksgiving holiday
December 2, Monday	Last day to drop a course
December 3, Tuesday	Classes meet on Thursday schedule
December 3, Tuesday	Last day of classes for fall quarter
December 4–9, Wednesday through Monday	Reading period *
December 10–14, Tuesday through Saturday	Final examinations for fall quarter
December 14, Saturday	Fall quarter ends

WINTER QUARTER 1969

September 15, Sunday	Period for accepting admission applications for winter quarter 1969 begins
November 15, Friday	Due date for filing applications for admission or readmission, transcripts, and supporting admission documents for winter quarter 1969 (although applications will be accepted after the due date, the College cannot <i>guarantee</i> complete admission processing for students who complete the application procedure after this date)
November 15, Friday	Due date for filing applications for financial aid in winter quarter 1969
January 1, Wednesday	Legal holiday (New Year's Day)
January 2, Thursday	Registration (refer to <i>Class Schedule</i>)
January 2, Thursday	Last day to register without late registration fee
January 3, Friday	Instruction begins
January 9, Thursday	First day to add or drop a course
January 16, Thursday	Last day of late registration
January 16, Thursday	Last day to add a course
January 16, Thursday	Last day to apply for winter 1969 graduation
January 17, Friday	Last day to file application for partial refund of fees from dropping or withdrawing from the College
January 28, Tuesday	Last day to drop a course without a grade
January 28, Tuesday	Applications due for fall 1969 graduation
February 6, Thursday	Scholarship reports due
February 12, Wednesday	Legal holiday (Lincoln's Birthday)
February 22, Saturday	Legal holiday (Washington's Birthday)
February 24–March 7, Monday through Friday	Advising period for spring and summer registration
March 6, Thursday	Last day to drop a course
March 12, Wednesday	Last day of classes for winter quarter

* Classes are not scheduled to meet during the Reading Period. This is a week 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

March 13, Thursday.....	Reading Day
March 14-19, Friday through Wednesday.....	Final examinations for winter quarter
March 19, Wednesday.....	Winter quarter ends

SPRING QUARTER 1969

December 15, Sunday.....	Period for accepting admission applications for spring quarter 1969 begins
February 15, Saturday.....	Due date for filing applications for admission or readmission, transcripts and supporting admissions documents for spring quarter 1969 (although applications will be accepted after the due date the College cannot <i>guarantee</i> complete admission processing for students who complete the application procedure after this date)
March 27, Thursday.....	Registration (refer to <i>Class Schedule</i>)
March 27, Thursday.....	Last day to register without late registration fee
March 28, Friday.....	Instruction begins
April 3, Thursday.....	First day to add or drop a course
April 4, Friday.....	Academic holiday (Good Friday)
April 10, Thursday.....	Last day of late registration
April 10, Thursday.....	Last day to add a course
April 10, Thursday.....	Last day to apply for spring 1969 and summer 1969 graduation
April 11, Friday.....	Last day to file application for partial refund of fees from dropping courses or withdrawing from the College
April 22, Tuesday.....	Last day to drop a course without a grade
April 22, Tuesday.....	Applications due for winter 1970 graduation
May 1, Thursday.....	Scholarship reports due
May 19-29, Monday through Thursday.....	Advising period for fall registration
May 29, Thursday.....	Last day to drop a course
May 30, Friday.....	Legal holiday (Memorial Day)
June 5, Thursday.....	Last day of classes for spring quarter
June 6, Friday.....	Reading Day
June 7-12, Saturday through Thursday.....	Final examinations for spring quarter
June 14, Saturday.....	Commencement
June 14, Saturday.....	Spring quarter ends

SUMMER SESSION 1969 (TENTATIVE)

June 23-August 1.....	Six-week session
August 4-15.....	Two-week session

Academic Calendar

OFFICE HOURS

Regular Session..... Monday–Friday, 8 a.m. to 12; 1 to 5 p.m.
Summer Session..... Monday–Friday, 8 a.m. to 12; 1 to 5 p.m.

LIBRARY HOURS

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

THE CALIFORNIA STATE COLLEGES

- California State College,
Dominguez Hills
809 East Victoria Street
Dominguez Hills, California 90247
Leo F. Cain, President
213 532-4300
- California State College at Fullerton
800 North State College Boulevard
Fullerton, California 92631
William B. Langsdorf, President
714 871-3300
- California State College at Hayward
25800 Hillary Street
Hayward, California 94542
Ellis E. McCune, Interim President
415 538-8000
- California State College at Long Beach
6101 East Seventh Street
Long Beach, California 90804
Carl W. McIntosh, President
213 433-0951
- California State College at Los Angeles
5151 State College Drive
Los Angeles, California 90032
John A. Greenlee, President
213 224-2011
- California State College at
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
916 343-4411
- Fresno State College
Shaw and Cedar Avenues
Fresno, California 93726
Frederic W. Ness, President
209 487-9011
- Humboldt State College
Arcata, California 95521
Cornelius H. Siemens, President
707 822-1771
- Sacramento State College
6000 Jay Street
Sacramento, California 95819
Robert Johns, 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
Ralph Prator, President
213 349-1200
- San Francisco State College
1600 Holloway Avenue
San Francisco, California 94132
John Summerskill, President
415 469-9123
- San Jose State College
125 South Seventh Street
San Jose, California 95114
Robert D. Clark, President
408 294-6414
- Sonoma State College
1801 East Cotati Avenue
Rohnert Park, (Cotati)
California 94928
Ambrose R. Nichols, President
707 795-2011
- Stanislaus State College
800 Monte Vista Avenue
Turlock, California 95380
Alexander Capurso, President
209 634-9101
- California State College in Kern County
615 California Avenue
Bakersfield, California 93304
Paul F. Romberg, President
805 327-9101

The California State Colleges

The California State Colleges are a unique development of the democratic concept of tax-supported public higher education for all qualified students.

Spanning the state from Humboldt County in the north to San Diego in the south, the 18 campuses of the California State Colleges (with another campus soon to be constructed) represent the largest system of public higher education in the Western Hemisphere and one of the largest in the world. Current enrollment exceeds 188,000 full and part-time students. The faculty and administrative staff numbers approximately 10,000.

The individual colleges, each with a geographic, curricular and academic character of its own, offer a solid basic program in the liberal arts. Beyond this, each college is noted for its individuality in academic emphasis which makes for a diversified system. Course offerings leading to the bachelor's and master's degree are designed to satisfy existing student interests and to serve the technical and professional manpower requirements of the state.

The California State Colleges are dedicated to rigorous academic standards. Constant striving for academic excellence is at the heart of the system. The primary responsibility of each faculty within the system is the instructional process on the teacher-student level, with appropriate recognition of the necessary and constructive role of research in any institution of higher education.

Responsibility for the California State Colleges is vested in the Board of Trustees, which is appointed by the Governor, and the Board's administrative arm, the Chancellor. The Trustees and the Chancellor set broad policy for the colleges while delegating considerable independent responsibility for implementation at the college level. A statewide Academic Senate, made up of representatives elected by the faculty at each college, acts as a consultative body to the Chancellor in the area of academic affairs.

Although the oldest of the colleges, San Jose State College, dates back a century, the California State College system under an independent Board of Trustees was created by the Donahoe Act of 1960. Formerly, the colleges were under the jurisdiction of the State Board of Education.

Today, the California State Colleges are in a particularly dynamic period of their development. Prior to World War II, there were seven State Colleges with a peak total enrollment of some 13,000. Since 1947, eleven new colleges have been established and sites have been selected for new colleges in Kern, Ventura, San Mateo and Contra Costa counties. Enrollment in the system is expected to reach 225,000 by 1970..

STANISLAUS STATE COLLEGE

ADVISORY BOARD

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Otto R. Zentner	Los Banos

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William Logan	Patterson
Frank Peluso	Los Banos
Stanley T. Wilson	Palm Springs

ADMINISTRATION

EXECUTIVE

President	Alexander Capurso, Ph.D., Mus.D., LL.D.
Assistant to the President	
Secretary to the President	E. Lorraine Johnson, C.P.S.
Dean of the College	Maurice K. Townsend, Ph.D.
Executive Dean	Gerard J. Crowley, Ed.M.
Assistant to the Executive Dean—Facilities	Lloyd L. Cockrell, Ed.D.

ACADEMIC AFFAIRS

Associate Dean, Curriculum	Joseph E. Brewer, Ph.D.
Associate Dean, Educational Services and Summer Sessions	
	Richard B. Farnsworth, M.A.
Coordinator, A-V Services	Melvin R. Nickerson, Ph.D.
Coordinator of Credential Programs	William F. McClintock, Ph.D.
Chairman, Department of Biological Sciences	Steve J. Grillos, Ph.D.

Administration

Chairman, Department of Business Administration	Thomas P. Barrett, M.A.
Chairman, Department of Communication Arts and Sciences	Randall C. Ruechelle, Ph.D.
Chairman, Department of Education	James C. Cole, Ed.D.
Chairman, Department of English	James P. Jensen, Ph.D.
Chairman, Department of Fine Art	Ralf Parton, M.A.
Chairman, Department of History	David B. Stenzel, Ph.D.
Chairman, Department of Mathematics	James N. Javaher, Sc.D.
Chairman, Department of Physical Sciences	Vladimir S. Tuman, Ph.D.
Chairman, Department of Psychology	Lloyd H. Ahlem, Ed.D.
Chairman, Division of Arts and Sciences	Frederick E. Kottke, Ph.D.
College Librarian	R. Dean Galloway, M.A.

STUDENT AFFAIRS

Dean of Student Affairs	Joseph E. Bruggman, Ed.D.
Associate Dean, Counseling and Testing	Jerome J. Beamish, Ph.D.
Associate Dean, Activities and Housing	Thomas C. Watling, Ph.D.
Counselor-Test Officer	Betty D. McManus, M.Ed.
Counselor, Financial Aids/Foreign Students	Richard G. Fisher, M.A.

ADMISSIONS AND RECORDS

Director of Admissions and Records	Edward J. Aubert, M.B.A.
Registrar	C. W. Quinley, Jr., A.B.

BUSINESS MANAGEMENT

College Business Manager	Frank C. Balbo, B.S.
Accounting Officer	Staten M. Johnson, A.A.
Administrative Assistant	Francis B. Harrison, M.B.A.
Business Services Officer	Thomas J. White, A.B.
Personnel Officer	
Supervisor of Buildings and Grounds	John L. Foster, B.S.

LIBRARY

Technical Services Librarian	Miriam C. Maloy, A.B.
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.
Acquisitions Librarian	Jo P. Bell, M.A.

GENERAL INFORMATION

HISTORY OF THE COLLEGE

The College is one of eighteen institutions comprising the California State College system. Dr. J. Burton Vasche was appointed first president of the College. The College opened its doors for the first time on September 19, 1960, in temporary facilities at the Stanislaus County Fairgrounds in Turlock. The College, which in its first years limited enrollment to juniors and seniors, admitted its first freshman class in the fall of 1965.

Gerard J. Crowley, upon the death of President Vasche, became acting president in June, 1962.

Dr. Alexander Capurso was appointed president of the College in March, 1963, by the Board of Trustees of the California State College system and assumed this post July, 1963.

The College moved to its new campus in June, 1965. New air-conditioned facilities, including a Library Building and Classroom Building, provide well-equipped facilities for the sciences, arts, and music, in addition to lecture and seminar rooms in other disciplines. Effort has been made to develop a campus outstanding in efficiency and beauty through the use of distinctive features, both in interior and exterior design. The master plan for the campus has been designed for an eventual enrollment of 12,000 students. Enrollment for the next decade is estimated not to exceed 3,000.

PHILOSOPHY AND OBJECTIVES OF THE COLLEGE

The objectives of the College are two-fold:

1. To offer a liberal arts program of outstanding academic merit.
2. To provide professional training of high quality in areas such as Education and Business Administration.

In pursuing these objectives the College espouses certain basic principles:

Effective learning demands active participation and total commitment.

Learning is more than a quantitative acquisition of facts. In a liberal arts college it becomes ideally an imaginative recreation of knowledge with student and instructor cooperating in a free exchange of informed and responsible points of view.

General Information

A liberal arts education stresses principles and theories of knowledge. Though specific information and skills are necessary in modern education, they are best understood within a broad intellectual framework.

The liberal arts properly lay emphasis upon the interrelatedness of knowledge without minimizing the importance of scholarly fields of intensive specialization. The College encourages students and faculty to cross departmental lines where possible.

The liberal arts combine a body of learning with an attitude of mind. The body of learning provides a basis for later specialization as well as wide involvement with academic and moral values. As an attitude of mind, through the joint efforts of several disciplines probing fundamental concepts, the liberal arts develop tools for more effective thinking, analytical judgment, critical evaluation, aesthetic appreciation, and sound choice making. The College does not consider the academic process as a categorical imperative: learning either for immediate ends or for long range self-development. Rather it views education as a comprehensive whole, necessary both for professional competence and for the fulfillment of individual potential.

The faculty and administration of the College hold that a true liberal arts program must be rigorous, exacting, stimulating, exciting, rewarding, and intellectually satisfying.

THE LIBERAL ARTS BASE

The Liberal Arts base is designed to give knowledge of our cultural heritage, of the basic principles of science, and of the intellectual processes that underlie the fulfillment of a total college education. This base, more broadly known as General Education, is built upon the notion that over two or more years of college knowledge in some academic disciplines will be required eventually of all entering freshmen, while a choice of acquiring knowledge in certain other academic disciplines will be permitted in order to develop further the maturing process in those freshmen. All entering freshmen must be prepared to complete in that time span, however, specific amounts of required units of credit in the broad disciplinary families of social sciences, natural sciences, the humanities, and the arts. This liberal arts base, once completed, insures a beginning in the realization of the philosophy and objectives of the College.

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.

General Information

The programs of study leading to the Standard Teaching Credential with a Specialization in Elementary Teaching are fully accredited by the California State Board of Education.

Courses and degrees for the Standard Teaching Credential with a Specialization in Secondary Teaching are accepted by the Credentials Office of the California State Department of Education.

DEGREE AND CREDENTIAL PROGRAMS

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

The College offers programs leading to the following school credentials: †

Elementary Teaching Credential
Secondary Teaching Credential

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. The quarter calendar will allow the College to move into year-round operation by simply adding a fourth quarter. The typical student enrolls in four four-unit courses each term, enabling him to concentrate his efforts on fewer courses during a single term than normal under the semester system.

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 equipped to house 72,000 volumes and 350 readers. It features an outdoor reading area, 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 70,000 volumes and about 1,000 periodicals. Backfiles of most of these periodicals are avail-

† Courses are offered which may be applied toward the satisfaction of credential requirements as set forth by the California State Board of Education. See Education section. For further information inquire at the College Credential Office.

General Information

able. The Library has recently become 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 new Library Building. 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 Center Depositories through which it obtains two copies of all curriculum materials published by the county schools of California. A model collection of about 900 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 all 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 see Admission to the College.

For information refer to the Office of the Associate Dean, Educational Services and Summer Session.

INTERNATIONAL PROGRAMS

The California State Colleges offer academic year programs of study at a number of distinguished universities abroad. For 1968-69 the cooperating universities are: University of Aix-Marseille, France; Free University of Berlin and University of Heidelberg, Germany; University of Florence, Italy; Waseda University, Tokyo, Japan; University of Granada and University of Madrid, Spain; University of Stockholm and University of Uppsala, Sweden; National University, Taiwan. Academic work successfully completed at the cooperating universities abroad may be applied toward the degree requirements of the College in accordance with college regulations.

Admission to the College

A selection among applicants from all California State Colleges is made on the basis of academic, linguistic and personal qualifications. The criteria are:

- 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.

Cost to the student includes round trip transportation from San Francisco to the host university, room and board for the academic year, and medical insurance. In 1968-69 these costs are: France, Germany, Spain, \$2,070; Italy, Japan, \$2,170; Sweden, \$2,370; Taiwan, \$1,770. Payments may be scheduled throughout the year.

Programs in 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.

Application for the 1969-70 academic year should be made early in the fall quarter of 1968. Detailed information may be obtained at the College Office of the Dean of Student Affairs, or by writing to the Office of International Programs, The California State Colleges, 1600 Holloway Avenue, San Francisco, California 94132.

ADMISSION TO THE COLLEGE

The College admits qualified high school graduates, transfer students from junior 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* as amended by the Board of Trustees of the California State Colleges on January 21, 1965. 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) is required.

Admission to the College

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

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

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

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

Business Administration: Mathematics, 4 years; English, 4 years.

Chemistry: Mathematics, 4 years; foreign language, 2 years (German preferred); chemistry, 1 year; physics, 1 year.

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.

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 and 2 years German preferred; music, as much private study as possible and as much participation in both vocal and instrumental music as possible.

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

Admission to the College

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

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

Psychology: Biology, 1 year; chemistry, 1 year; physics, 1 year; mathematics, 4 years.

Social Science Interdepartmental Major: History and/or social science, 4 years preferred; foreign language, 4 years preferred.

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

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

Speech: Courses in speech and 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 score on the SAT 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 Needed
3.21 and above	Eligible with any score
3.10	592
3.00	672
2.90	752
2.80	832
2.70	912
2.60	992
2.50	1072
2.40	1152
2.00	1472
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. 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 and is calculated as in the previous section.

* The minimum eligibility index is 3072. It is computed by multiplying grade point average by 800 and adding it to the total SAT score.

Admission to the College

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 of 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. Regular application procedures are not applicable.

The Advanced Placement Program is intended to supplement the curriculum available to qualified high school students by opening college courses to them, to provide these students with the opportunity for a gradual transition to college, and to extend qualified students to the utmost limits of their intellectual capacities at as young an age as is practicable. A high school student admitted to this program may enroll in any lower division course providing he has satisfied all course prerequisites. Regular college credit will be awarded providing credit is not required for high school graduation. Inquiries should be directed to the Director of Admissions and Records.

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

Admission to the College

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.

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 Dean of the College for master's degree programs or to the College Credentials Office 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.

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.

Admission to the College

Students Seeking Enrollment for Fewer than 7 Units. Students seeking to enroll in a fall, winter, or spring quarter for fewer than seven quarter units 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, 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 Admissions and Records Office March 1 for the fall quarter, November 15 for the winter quarter and February 15 for the spring quarter. Although applications will be accepted after the due date, the College cannot *guarantee* admissions processing for students who complete the application procedure after these due dates.

Although the College anticipates that it will be able to accommodate all students who are expected to enroll, it is possible that control of enrollment on a first-come, first-serve basis will be necessary because of budgetary limitations imposed on the California State Colleges. For this reason, and because priority in registration will be assigned based on the date a student completes the admission procedure, all applicants for admission are urged to apply as early as possible.

APPLICATION FEE

A fee of ten dollars (\$10) 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) for-

Admission to the College

mer 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 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 a master's degree or credential program must *also* request that complete official transcripts be sent directly to the Office of the Dean of the College or College Credentials Office, 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.

Admission to the College

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 College requires the SAT, eligibility for admission may be based instead on American College Test (ACT) scores upon an applicant's written request.

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 \$5.50, payable at the time of application to take the test.

Saturday, May 4, 1968

Saturday, July 13, 1968

Saturday, November 2, 1968

Saturday, December 7, 1968

Saturday, January 11, 1969

Saturday, March 1, 1969

Saturday, May 3, 1969

Saturday, July 12, 1969

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 Entrance 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 Office of the Associate Dean, Counseling and Testing, 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

Admission to the College

the College during any of the three quarters immediately preceding. 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 elect to graduate under the degree requirements in effect at the time of his admission, 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

Admission to the College

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.

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.

ACADEMIC ADVISEMENT

Academic advising is primarily the responsibility of faculty members in the specific academic areas. Upon admission a student is referred to

Admission to the College

an adviser in his declared major field of study. Freshmen, however, must first arrange an initial advisement conference through the Counseling and Testing Center. The Counseling and Testing staff, along with a group of faculty advisers will provide assistance through the medium of testing and counseling for students who are uncertain concerning their choice of major and/or its concomitant vocational choice, as well as for students requiring only verification of an existing choice. 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. Students are encouraged to consult their 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 those new and continuing students who need to consult their adviser for assistance in determining their program of courses for the approaching term.

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), SSC grade reports, and a program planning form (if issued).

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, if needed, should 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. A student may not receive credit in any course for which he is not registered. 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 STANDARDS

DEANS' LIST OF HONOR STUDENTS

Each quarter the Dean of the College and the Dean of Student Affairs jointly publish a list of undergraduate honor students. To qualify for the Deans' 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
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
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.

SCHOLARSHIP STANDARDS

Good Standing: “Good Standing” indicates that a student is eligible to continue in attendance and is not under academic disqualification or disciplinary suspension from the College.

Probation: Probation designates a student whose academic achievement has been unsatisfactory. A student whose undergraduate or grad-

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uate grade point average is below 2.0 (C), based upon all course work attempted at the College and/or other colleges, is placed on probation. A student on probation is eligible to continue his attendance at the College.

Disqualification: Poor academic achievement may lead to disqualification. A disqualified student is not eligible to continue his attendance at the College. A student will be subject to disqualification if he:

- 1) Accrues, as a lower division student (less than 90 quarter units of college work completed), an overall or SSC grade point deficiency of 23 grade points or more.
- 2) Accrues, as a junior (90-134½ quarter units of college work completed), an overall or SSC grade point deficiency of 14 grade points or more.
- 3) Accrues, as a senior (135 quarter units of college work completed or more) or a graduate student, an overall or SSC or graduate grade point deficiency of 9 grade points or more.
- 4) Fails to earn a 2.0 (C) grade point average while on probation.
- 5) Does not earn at least a 1.0 (D) grade point average during any quarter.
- 6) Neglects to remove any grade point deficiency within three quarters of admission on probation or of the quarter in which the grade point deficiency was incurred.

Reinstatement After Disqualification: After completion of the period of disqualification and after fulfillment of any other requirements stipulated, a student may apply for readmission and reinstatement through the Admissions and Records Office.

STANDARDS FOR ORAL AND WRITTEN EXPRESSION

Students are expected to demonstrate an appropriate standard of English in all of their college work. Failure to do so may be considered in their final evaluation.

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

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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.

ATTENDANCE OF CLASSES

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. The Veterans Administration requires notification when students under its program become irregular in attendance.

AUDITORS

Admitted students may register in courses as auditors without credit with permission of the instructor provided there is room. An auditor must pay the same registration fees as other students and may not change his registration to obtain credit after the last day to add a course. A student registered for credit may not change to audit status after the last day to drop a course 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

A matriculated undergraduate student or a graduate 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 and from the Registrar. Approval will be granted only when the course(s) is not offered by the College. Request for Approval of Concurrent Enrollment forms are available at the Admissions and Records Office forms rack. Credit may not be granted for units earned during concurrent enrollment unless prior approval is obtained. Such approval is necessary even though the student is not enrolled in resident courses at the College during the same quarter in which he is enrolled at another institution or for the College's extension courses. Although approval for concurrent enrollment may be granted, the acceptance of credit depends on evaluation policy. (See Evaluation and Acceptance of Credit.)

OFFICIAL PROGRAM LIMITS

A student electing during fall, winter, or spring quarter to carry a course load in excess of 18 units, including audit, incomplete courses,

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and concurrent enrollment courses, must submit a petition approved by his major adviser to the Student Affairs Office. Registration for excess units must be approved by the Dean of the College. 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 from the Student Affairs Office.

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

Policies and Procedures

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.

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 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 prolonged 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

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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

GRADE REPORTS TO STUDENTS

A report of final grades in all courses will be mailed to a student's local address after the conclusion of each quarter and summer session. A student who desires his grades mailed to a different address 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.

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.

FEEES 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.

Fees and Refunds

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)	\$29.00
Limited Students (1 to 6 units)	15.00

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.

OTHER FEES AND CHARGES (in addition to registration fees)

Nonresident tuition—(maximum \$240.00 per quarter) subject to change

Per unit, as follows:

For the first 15 units (per quarter)	\$16.00
For the 16th unit and over	None
Application Fee (nontransferable and nonrefundable)	10.00
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	1.00 to 6.00
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	14.00
Extension Courses—per unit:	
Lecture and Discussion Courses	11.00
Activity Courses	14.25
Science Laboratory Courses	22.00

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

Fees and Refunds

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.

The rate of tuition to be paid by each nonresident student shall be \$720.00 per year (\$240.00 per quarter; \$16.00 per unit for the first 15 units per quarter; for the 16th unit and over—no charge).

EXCEPT THAT: The rate of tuition to be paid by each nonresident student who is a citizen and resident of a foreign country shall be \$255.00 per "academic" year (\$85.00 per quarter) per unit, as follows:

For the first 14 units, per quarter	\$5.75
For the 15th unit, per quarter	4.50
For the 16th unit and over, per quarter	None

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.

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 90% will be refunded the 2nd week, 70% the 3rd week, 50% the 4th week, 30% the 5th week, 20% the 6th week. There will be no refund after the 7th 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 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 AFFAIRS

Services are available to aid students in evaluating their own capabilities and objectives and to assist them in selecting activities which will help them gain maximum benefit from their college experience. These and other services are coordinated by the Dean of Student Affairs and include orientation, counseling, group and individual testing, placement, part-time jobs and summer work, student health and welfare, loans and scholarships, student activities, housing, and alumni.

COUNSELING AND TESTING SERVICE

The Counseling and Testing Service provides a variety of services to students and faculty members of the College. These services may be broadly defined as psychological in character and related to problems of student adjustment and evaluation in an academic environment. The Counseling and Testing Service, under the direction of the Associate Dean, Counseling and Testing, is primarily responsible for assisting those students with problems of vocational choice, the selection of an appropriate academic major (in consultation with the student's academic adviser), educational weaknesses, and personal-social-emotional adjustment. More specifically, the Counseling and Testing Service is able to assist students with problems which can be broadly classified into such categories as: personality and social adjustment, educational, vocational, financial, and health. Examination of these problem categories will make it readily apparent that they are an attempt to describe difficulties arising from the individual's attempt to cope with his total environment.

The Counseling and Testing Service is also able to provide administration, scoring, and interpretation in connection with a wide variety of psychological tests, the results of which can serve such purposes as: admission of students to the College; acceptance and placement of students into particular academic programs; providing information for both student and counselor as a basis for counseling on educational, vocational, and personal problems.

Student Affairs

Students are urged to take advantage of the services offered by the Counseling and Testing Service as soon as it becomes apparent that a problem exists which may adversely effect their ability to cope satisfactorily with their environment.

The Counseling and Testing Service is located in the Library Building, Room 102. The office is open Monday through Friday during the entire year.

ADMISSIONS COUNSELING

The Director of Admissions and Records assists students in interpreting admissions requirements and in filing applications for admission. Problems concerning evaluation of transcripts should be directed to the Admissions and Records Office.

ACADEMIC ADVISING

Academic advising is primarily the responsibility of faculty members in the specific academic areas. The Counseling and Testing staff, along with a group of faculty advisers will provide assistance through the medium of testing and counseling for students who are uncertain concerning their choice of major and/or its concomitant of vocational choice, as well as for students requiring only verification of an *existing* choice. Any student who is uncertain of his choice of academic major may, of course, avail himself of the assistance offered by the Counseling and Testing Service until a definite academic goal is chosen. (See Academic Advisement and Registration.)

INTERNATIONAL STUDENTS

Special services for international students are coordinated by the Counselor-Financial Aids/Foreign Students. 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 Counselor for Financial Aids and Foreign Students.

STUDENT FINANCIAL ASSISTANCE

Scholarships. A number of scholarships and awards are offered each year to new and enrolled students on the basis of scholastic attainment, financial need, character, and professional promise. Some scholarships

are limited to a particular field of study. These funds, in general, are administered by the Student Affairs Committee and the Financial Aids Coordinator. In addition many high schools and service clubs make awards available directly to deserving individuals.

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 part, or all, of the loan is possible for those students entering the teaching profession.

Inquiries should be directed to the Financial Aids Office.

Guaranteed Reduced Interest Loan. Undergraduate students may borrow up to \$1,000.00 a year from a commercial lending institution; graduates may borrow up to \$1,500.00 a year. 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 and half of the interest while the loan is being repaid. Applications are available from participating lending institutions or the Financial Aids 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 and middle 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 Aids Office.

Educational Opportunity Grant. Stanislaus State College participates in the Federal Grant Program as provided for in the Higher Education Act of 1965. Deserving students may be awarded a grant of from \$200.00 to \$800.00 a year. Inquiries should be directed to the Financial Aids Office.

Part-Time Employment. The Financial Aids Office maintains a listing of part-time employment from area employers. Following registration all interested students should complete an Employment Reference Card used for referral and placement. In addition to the Employment Reference Card a constant check of the employment board should be maintained.

Student Affairs

Waivers of Non-Resident Fees. Students attending on F type visas are regularly assessed the reduced fee indicated in the Schedule of Fees.

With verification, children or spouses of California State College academic or administrative employees, who are not yet legal residents of California, may be eligible for non-resident fee waiver.

Eligible certificated California school district employees who are not yet legal residents of California may be exempted from non-resident fees.

Other Sources of Student Aid. The programs listed are programs which Stanislaus State College administers and are by no means the end of aid possibilities, for all available programs in the United States are too numerous to mention. Additional information may 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.

More detailed information on scholarships, loans, and work opportunities offered at Stanislaus State College may be obtained by securing the *Financial Aids Program Announcement* from the Financial Aids Office, Stanislaus State College, Turlock, California 95380.

Student Loan Funds

Beta Delta Subchapter of Alpha Delta Kappa—Teachers Honorary
California Retired Teachers Association—Laura Settle
Walter A. Fisher Memorial
Edwin O. and Mae M. Jones Memorial
Livingston Lions Club
Merced Venture Club
Sorooptimist Club of Turlock
Stanislaus State College Faculty Women's Club
Turlock Refrigeration Company
J. Burton Vasche Memorial Scholarship Fund
White Scholarship and Loan

Scholarship Funds

American Assyrian Civic Club
California Congress of Parents and Teachers Elementary Education
Art Club
Epsilon Nu of Delta Kappa Gamma
Femmes Club
Gamma Phi Beta Province XIII
Stanislaus Branch of the Association for Childhood Education
International
Los Companeros Club
Stanislaus State College Newman Club
American Association of University Women, Stockton Branch

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.

On January 31, 1965, benefits for Korean veterans, Public Law 550, were terminated.

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

HOUSING

Yosemite Hall, a College approved and privately owned co-educational dormitory for students of the College, is located immediately adjacent to the campus. Accommodating 168 students, Yosemite Hall is supervised by an adult Head Resident who is assisted by student Resident Assistants. Living regulations and a code of conduct are prepared and administered by the dormitory council under the guidance of the Head Resident and the student Resident Assistants.

Information concerning accommodations in Yosemite Hall, including a schedule of rates and application forms, can be obtained by writing to: Student Residence Incorporated, 3500 Geer Road, Turlock, California 95380. Because of limited accommodations, students wishing to live in Yosemite Hall should make application as early as possible.

As a general policy of the College, unmarried students under twenty-one years of age, not living with their parents or legal guardians are required to live in the dormitory unless exempted by the College. Such exemption must be requested by a parent or guardian on forms available in the Office of the Dean of Student Affairs.

The College maintains a listing of off-campus rooms, apartments, and houses. These accommodations are neither inspected nor supervised by the College. Students along with their parents are expected to take responsibility for insuring the adequacy and desirability of these accommodations.

Students interested in locating housing are encouraged to contact the Student Affairs Office at the College as early as possible making their needs known, so that maximum assistance can be provided. No charge is made for housing locator service.

FOOD SERVICES

Food services are available at the College Cafeteria. Meals are served from 7:30 a.m. to 6:30 p.m. five days a week. Meals may be purchased on a per meal basis or quarterly meal ticket. Meals purchased on the quarterly basis cost approximately \$2.20 per day.

STUDENT HEALTH

The objective of Student Health Services is to assist the student in maintaining an optimum state of health, both physical and mental, 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 quarters immediately preceding. 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 has a Health Center in Room 117A of the Classroom Building, which makes available emergency medical services to all students. *Referral Services:* Health or medical problems beyond the ability of the Health Center staff to treat are referred to physicians in the community. Basic out-patient medical services are provided as part of the materials and services fee paid by each regular student (more than 6 units) upon his enrollment in the College.

HEALTH INSURANCE PLAN

Additional supplemental hospital/surgical coverage will be available to all regular students through the Associated Students at a cost of \$34.92 * for a full calendar year. Students living in College-approved housing, and foreign students will be required to carry the supplemental coverage or to furnish satisfactory proof of equivalent coverage.

The College urges that all students be covered by some form of hospital/surgical plan, as the campus Health Center is not equipped with an infirmary.

Detailed information is available at the Health Center, or in the Office of the Dean of Student Affairs.

STUDENT ACTIVITIES

A program of activities is planned to satisfy a broad range of student interests. A representative student government serves as the official voice of the student body in its relations with the faculty and the administration. Student activities are closely coordinated with the academic program of the College and provide opportunities for the development of responsibility, leadership, and maturity. Membership in student organizations is determined without regard for race, color, religion, or national ancestry. Inquiries pertaining to student activities may be directed to the President of the Associated Students or to the Dean of Student Affairs.

* Fee is subject to change upon notice from the insuring company.

Student Affairs

The following student groups have attained full status as campus organizations: Associated Men Students, Associated Women Students, Astrodynamic Society, Biological Science Society, Campus Christian Fellowship, Collegium Musicum, Community for New Dissent, Fine Art Club, French Club, International Club, Los Companeros, Newman Club, Ski Club, Speakers Forum, Theatre Society, Tri Tau, and Young Republicans.

STUDENT CONDUCT AND RESPONSIBILITY

Each student is assumed to be responsible for that high level of personal conduct expected of mature college students; he is expected to adhere to the highest standards of honesty and integrity. Any action by a student which is detrimental to the best interests of the College may be grounds for disciplinary action and could result in suspension, or expulsion. Enrollment in the College constitutes agreement to abide by the principles set forth in this statement and to comply with established College regulations.

PLACEMENT

The College provides placement services to assist qualified students and alumni in securing appropriate full-time or part-time employment. Placement services include: testing and counseling on vocational choice and selection; counseling on proper techniques for applying for a position; assistance with the preparation of placement packets and forwarding them to prospective employers; listing of available positions, and arranging interviews. Responsibility for preparation of the placement packet and for actually seeking a position rests with the individual.

TEACHER PLACEMENT

As a general rule a student becomes eligible for teacher placement when he has been accepted into a credential program, has completed a minimum number of units at the College, is recognized as having had the equivalent of student teaching experience at the College and is recommended for placement services by the Division of Education. Other students may be eligible, under exceptional circumstances and at the discretion of the Associate Dean, Counseling and Testing. Confidential placement files must be initiated by the student during the quarter preceding student teaching. Prospective candidates may obtain an informational brochure entitled *Teacher Placement Service Announcement*, as well as assistance in completing the placement packet at the Office of the Associate Dean, Room 102 in the Library Building.

BUSINESS AND PROFESSIONAL PLACEMENT

Placement services are available to students who have received degrees from the College, or who will have completed a minimum of 36 quar-

ter units at the College and are recommended by the chairman of their department or division. It is recommended that students register for business and professional placement upon attaining senior standing. Prospective candidates may obtain assistance in completing the placement packet at the Office of the Associate Dean, Room 102 in the Library Building.

PART-TIME AND SUMMER EMPLOYMENT

A list of part-time job opportunities is maintained on a current basis throughout the academic year as a part of the College's Student Aid Program. Directories and other data concerning summer employment opportunities for college students are also available. The College attempts to assist students in locating jobs as closely related as possible to their major interests. Students anticipating the need for part-time or summer employment are encouraged to contact the Office of the Associate Dean, Counseling and Testing, Room 102 in the Library Building, as early as possible so that maximum assistance can be provided.

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: biology, business, chemistry, economics, education, engineering, French, geography, geology, government, history, literature, mathematics, music, philosophy, physical education, physics, psychology, sociology, Spanish, and speech.

The Graduate Record Examinations will be administered on a national basis in the following months during 1968 and 1969:

April 27, 1968	January 18, 1969
July 13, 1968	February 22, 1969
October 26, 1968	April 26, 1969
December 14, 1968	July 12, 1969

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 Office of the Associate Dean, Counseling and Testing or by letter from the Educational Testing Service, 1947 Center Street, Berkeley, California 94701.

General Requirements for Degrees

ALUMNI

The Alumni Association maintains a close tie with the College. It is organized for the following purposes:

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 alumni activities may be directed to the Stanislaus State College Alumni Association, in care of the Dean of Student Affairs.

THE COLLEGE FOUNDATION

The College Foundation has been organized to provide essential services which cannot be provided from State appropriations. On behalf of the College, the Foundation receives private gifts and public grants. These include contributions to loan and scholarship funds, the library, laboratories, and special collections, as well as research grants and general donations. The Foundation also maintains the College Bookstore and the College food service.

GENERAL REQUIREMENTS FOR DEGREES

The College is authorized to grant the Bachelor of Arts degree, the Bachelor of Education and the Master of Arts. The Bachelor of Education and the Bachelor of Arts with a major in Education are being discontinued; students have not been admitted to these curricular programs since June 6, 1964.

Election of Regulations. A matriculated student who remains in continuous enrollment pursuing the same objective may elect to meet the graduation requirements in effect either at the time of his entering the College and a degree program or at the time of his graduation. (See Evaluation and Acceptance of Credit.)

General Requirements for Degrees

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 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 of 186 quarter units is required. At least 60 units completed after advancement to junior standing 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 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 program will stress the interrelatedness of the major fields of knowledge and will form the foundation for specializations. Courses which are

General Requirements for Degrees

taken to fulfill General Education requirements will not also be counted toward fulfillment of major requirements.

	Semester Units	Quarter Units
Social Sciences	11	16
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		
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		
b. ECON 250. Principles of Economics I, 4 units		
ECON 251. Principles of Economics II, 4 units		
ECON 310. Economic History of Western Civilization, 4 units		
c. HIST 101. Western Civilization I, 4 units		
HIST 102. Western Civilization II, 4 units		
HIST 364. Contemporary America, 4 units		
d. PSCI 213. Comparative Government, 4 units		
PSCI 331. International Relations, 4 units		
e. SOCL 201. Introduction to Sociology, 4 units		
SOCL 301. Race and Ethnic Group Relations, 4 units		
SOCL 331. Social Stratification, 4 units		
Natural Sciences	9	14
At least one course from each of the following groups; at least one laboratory course required:		
1. BIOL 101. Principles of Biology, 5 units		
ZOO 102. Principles of Zoology, 5 units		
BOT 103. Principles of Botany, 5 units		
ENTO 300. Principles of Entomology, 4 units		
2. CHEM 101. Principles of Chemistry I, 5 units		
CHEM 102. Principles of Chemistry II, 5 units		
PHSC 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		
GEOL 200. Principles of Geology I, 4 units		
GEOL 201. Principles of Geology II, 4 units		
Oral Expression *	2	4
One basic course in oral expression: †		
SPCH 200. Speech Communication, 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.

† The College recommends that transfer students entering during 1968-69 with sophomore or higher standing complete all requirements as stated. However, for these transfers the following substitutions are acceptable:

1. Social Science. Any course applicable under Additional Courses for the fourth social science course provided at least 14 quarter (9 semester) units are completed in acceptable social science courses.
2. Oral and Written Expression. One additional literature or philosophy course plus 9 quarter (6 semester) units of English composition and oral expression courses including one English composition course for the oral and written expression courses.
3. Health and Physical Education. Two semester or three quarter units in health and/or physical education activity courses for the health and physical education courses.

General Requirements for Degrees

	Semester Units	Quarter Units
Written Expression	6	9
The following English composition courses:		
ENGL 101. Composition and World Literature I, 3 units		
ENGL 102. Composition and World Literature II, 3 units		
ENGL 103. Composition and World Literature III, 3 units		
Literature, Philosophy and the Arts	6	8
One course from each of the following groups:		
1. ENGL 201. Introduction to Literature, 4 units		
ENGL 231. British and American Literature I, 4 units		
ENGL 232. British and American Literature II, 4 units		
ENGL 233. British and American Literature III, 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		
MUS 100. Introduction to Music, 4 units		
MUS 241. Chorus, 1 unit (must be taken for 3 consecutive quarters for credit to be applicable)		
MUS 242. Choral Ensemble, 1 unit (must be taken for 3 consecutive quarters for credit to be applicable)		
MUS 243. Instrumental Ensemble, 1 unit (must be taken for 3 consecutive quarters for credit to be applicable)		
Psychology	3	4
One course in general psychology:		
PSYC 201. Introduction to Psychology, 4 units		
Health and Physical Education †	2	3½
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		

† The College recommends that transfer students entering during 1968-69 with sophomore or higher standing complete all requirements as stated. However, for these transfers the following substitutions are acceptable:

1. Social Science. Any course applicable under Additional Courses for the fourth social science course provided at least 14 quarter (9 semester) units are completed in acceptable social science courses.
2. Oral and Written Expression. One additional literature or philosophy course plus 9 quarter (6 semester) units of English composition and oral expression courses including one English composition course for the oral and written expression courses.
3. Health and Physical Education. Two semester or three quarter units in health and/or physical education activity courses for the health and physical education courses.

‡ 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 Dean of the College in lieu of the required health course.
2. A student may be exempted by the Dean of the College 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

	Semester Units	Quarter Units
Additional Courses (Courses outside the major field of study)	8	12
Courses listed above or from the following:		
CHEM 103. Principles of Chemistry III, 5 units		
DRAM 220. Introduction to Theatre, 4 units		
DRAM 230. Theatre Workshop, 2 units		
DRAM 421. History of the Theatre, 4 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 I, 5 units		
MATH 101. Math for Liberal Arts Students II, 4 units		
MATH 110. College Algebra and Trigonometry, 5 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		
Any of the courses specified in the foregoing sections of the General Education program.		
Total units	47	70½

MAJOR

The major consists of a pattern of upper division courses which are prescribed by the department or division 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, except in foreign languages which has a minimum of 32 units. More than one major may be completed by a student.

General Requirements for Degrees

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

Biological Sciences	History	Psychology
Business Administration	Mathematics	Sociology
Chemistry	Music	Social Sciences
Economics	Physical Sciences	Spanish
English	Physics	Speech
Fine Art	Political Science	

NOTE: The Bachelor of Arts degree program with a major in Elementary Education is being discontinued; students seeking teaching credentials are advised to select a subject matter major. (See Department of Education.) The Bachelor of Arts program with a social sciences interdepartmental major has been retained. (See Social Sciences.)

As the College grows new majors will be added. Freshmen admitted in 1968-69 may claim any additional majors developed and offered in 1970-71 for upper division students.

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 (except in physics) and a minimum of 22 quarter units (except in physics) 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.

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

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

As the College grows, new minors will be added. Freshmen admitted in 1968-69 may also claim any additional minors developed and offered in 1970-71 for upper division students.

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.

General Requirements for Degrees

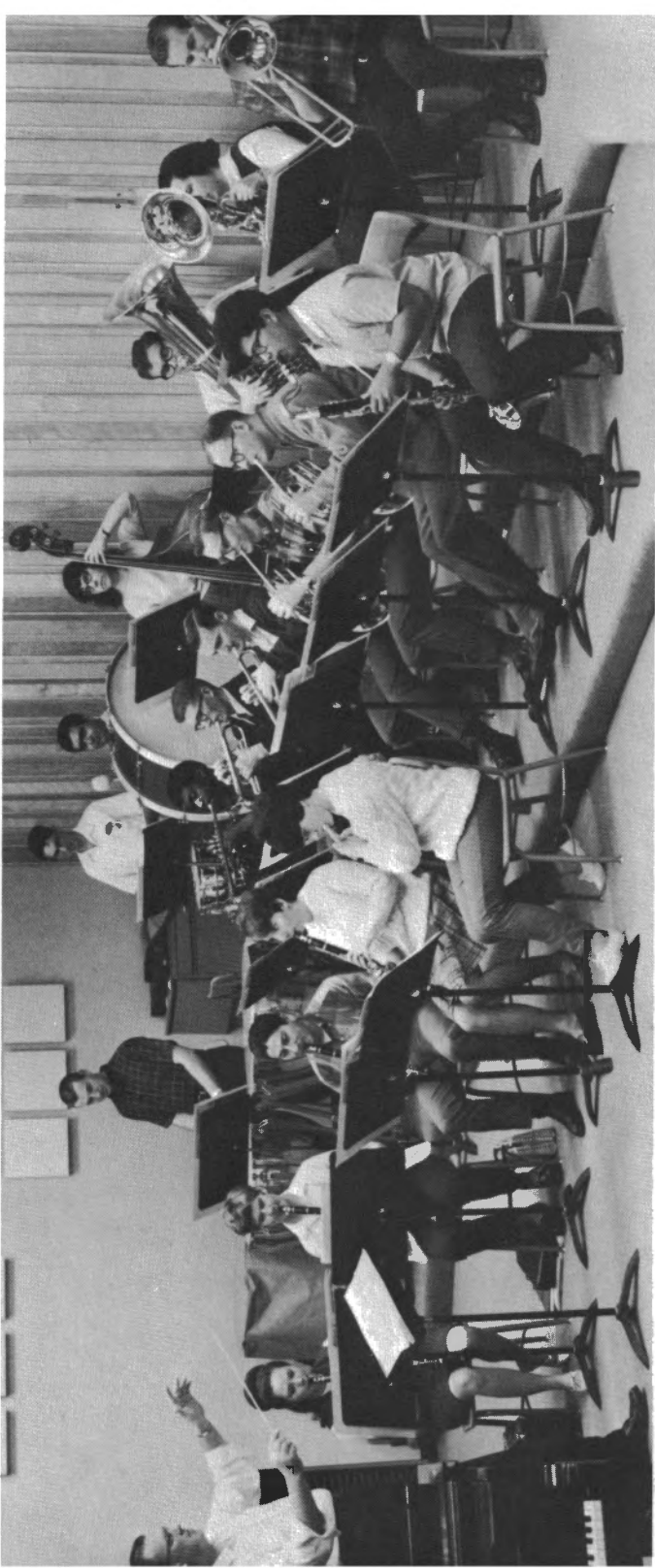
REQUIREMENTS FOR AN ADDITIONAL BACCALAUREATE DEGREE *

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 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.





Concert Band

ANNOUNCEMENT OF COURSES

COURSE NUMBERING SYSTEM

DEPARTMENTAL REQUIREMENTS

COURSE DESCRIPTIONS

COURSE NUMBERING SYSTEM

PRESENT NUMBERING SYSTEM

- 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.

FORMER NUMBERING SYSTEM

Prior to fall semester 1963, the course numbering system was as follows:

- 3000-4999 Upper division courses designed primarily for juniors and seniors, and for graduate students.
5000-5999 Graduate courses, open to those with bachelor degrees and adequate preparation.

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

SPECIAL COURSE NUMBERS

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

492, 592 and 692	Workshops
494, 594 and 694	Field Work
495 and 595	Selected Topics
496	Senior Seminars
498, 598 and 698	Individual Study
499 and 599	Thesis

EXPLANATION OF COURSE NOTATIONS

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

1. The figure in parentheses following the course title indicates the number of quarter units for the course. Courses offered for varying units are indicated as (2-4), (1-6), etc.
2. A notation such as (Formerly 450), at the end of a course description indicates the course was previously numbered 450.
3. Courses graded "Pass" or "Fail" are so indicated in the course description.

International Study Courses

Students enrolled at Stanislaus State College under the California State College's International Study Programs register concurrently at Stanislaus State College and at the host institution abroad. Credit for work taken abroad is in terms of Stanislaus State College courses. If the student studying abroad finds no counterpart courses at Stanislaus State College, he should register for one of the courses listed below.

- INST 293. Projects in Study Abroad: (Subject)** No maximum number of units
Open only to students in California State College's International Study Program.
- INST 493. Projects in Study Abroad: (Subject)** No maximum number of units
Open only to students in California State College's International Study Program.
- INST 593. Projects in Study Abroad: (Subject)** No maximum number of units
Open only to students in California State College's International Study Program.

Anthropology

Alfred W. Bowers, Ph.D., Visiting Lecturer in Anthropology
Nancy J. Schmidt, Ph.D., Assistant Professor

The Division of Arts and Sciences offers a degree minor in anthropology. Anthropology may also be used as a subordinate field for the degree Bachelor of Arts, Social Sciences. (For further information, see Social Sciences.)

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE, SOCIAL SCIENCES

See Social Sciences, Requirements for Bachelor of Arts.

DEGREE MINOR IN ANTHROPOLOGY

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

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. Beginning with the fall quarter 1969 this course or its equivalent will be 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.

* 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.

Anthropology

Upper Division

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 beginning in 1969.

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 beginning in 1969.

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 beginning in 1969.

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 beginning in 1969.

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 beginning in 1969.

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 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 beginning in 1969.

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 beginning in 1969.

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 beginning in 1969.

ANTH 411. Community Studies (4)

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

ANTH 421. Cultural Change (4)

Cultural stability and change; with reference to geographical base, innovation, invention, and technology. Prerequisite: ANTH 206 or consent of instructor.

Anthropology

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 (3-4)

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.

Biological Sciences

Steve J. Grillos, Ph.D., Professor, Chairman
Glenn A. Hackwell, Ph.D., Associate Professor
James C. Hanson, Ph.D., Associate Professor
Perpetuo S. Mayol, M.S., Assistant Professor
Bobby J. Neal, Ph.D., Assistant Professor

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

REQUIREMENTS FOR THE BACHELOR OF ARTS, BIOLOGICAL SCIENCES

Biological sciences majors are to:

1. Complete the Requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 36 upper division units, including course requirements as specified for the major.
4. Completion of a minor is not required.

DEGREE MAJOR IN BIOLOGICAL SCIENCES

Prerequisites to the Major

Required courses in major field:

- 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 363. Ecology	4
BIOL 496. Seminar in Biology.....	3
Course in botany (upper division) as approved by major adviser.....	4
Course in physiology (upper division animal or plant) as approved by major adviser	4
Courses in zoology (upper division) as approved by major adviser.....	4
† Courses as approved by major adviser	28
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 postgraduate work and receive approval 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

† 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

conservation movement and present day conservation problems such as air and water pollution. (Lecture 3 hours) Prerequisite: None.

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 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 381. Evolution (3)

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

BIOL 451. Histological and Cytological Techniques (4)

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

BIOL 495. 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 496. Seminar in Biology (1)

Presentations and discussions of selected biological phenomena through study of biological literature. (Discussion, 1 hour) May be repeated for a total of 4 units. Prerequisite: Consent of instructor.

BIOL 498. Individual Study (3-4)

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 (3-5)

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

Biological Sciences

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) No prerequisite; BIOL 101 recommended.

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 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 (4)

Microscopic study of structure and development of plant tissues, with emphasis upon tissues of seed plants. (Lecture, 3 hours; laboratory, 3 hours) Prerequisites: BOTY 103 and 312, or equivalent.

BOTY 420. Plant Physiology (4)

Selected topics pertaining to metabolism, nutrition, and growth of plants. (Lecture, 3 hours; laboratory, 3 hours) Prerequisite: BOTY 103 or equivalent; organic chemistry is recommended.

BOTY 495. Selected Topics in Botany (Topics to be specified in Class Schedule) (2-4)

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 (4)

Classification, life history, structure, and basic physiology of insects. (Lecture, 2 hours; laboratory, 6 hours; field trips) Prerequisite: BIOL 101 or ZOOL 102, 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, 2 hours; laboratory, 6 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) (2-4)

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) No prerequisite; BIOL 101 recommended.

Upper Division**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.

ZOOL 321. Anatomy and Physiology I (5)

Functional anatomy and physiology of the integumentary, skeletal, neuromuscular, digestive, and circulatory systems with special reference to human physiology. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: BIOL 101 or ZOOL 102 or equivalent.

ZOOL 322. Anatomy and Physiology II ((5)

Continuation of ZOOL 321. Functional anatomy and physiology of the respiratory, urinary, reproductive, and endocrine systems with special reference to human physiology. (Lecture, 3 hours; laboratory, 6 hours) Prerequisite: ZOOL 321.

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.

Biological Sciences

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 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) (2-4)

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

Robert W. Lambright, D.B.A., Professor

Kenneth G. Young, M.B.A., C.P.A., Professor

John H. Norris, M.B.A., Lecturer

The Department of Business Administration offers curricula designed to provide (1) professional preparation for those planning to seek careers in the business community; (2) a firm educational foundation for those planning to undertake graduate study; (3) a sound education in business subjects for those planning to enter the teaching profession. To accomplish these objectives, the curricula offered by the Department of Business Administration are specifically 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. A degree of specialized training in a selected area of concentration.

RECOMMENDED LOWER DIVISION PREPARATION

Prospective Business Administration majors should emphasize General Education during the first two years, thus laying a foundation upon which the professional program can be built.

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

REQUIREMENTS FOR THE BACHELOR OF ARTS, BUSINESS ADMINISTRATION

Students seeking the Bachelor of Arts, Business Administration must:

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

DEGREE MAJOR IN BUSINESS ADMINISTRATION

Prerequisites to the Major

Required courses in major field:

BUS 211, 212. Principles of Accounting I-II, 8 units

Required courses in supporting fields:

ENGL 101, 102, 103. Composition and World Literature I-III, 9 units

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

MATH 210. Finite Mathematics, 4 units

MATH 160. Statistics, 4 units or ECON 320. Quantitative Analysis

PSYC 201. Introduction to Psychology, 4 units

SPCH 200. Speech Communication, 4 units

Completion of General Education requirements in history and government.

Business Administration

The Major

Required course in supporting field:

ECON 331. Managerial Economics, 4 units

Required courses in major field:

	Accounting	Administration	Finance	Marketing
BUS 301. Readings in Business Administration	-	4	-	-
BUS 303. Business and its Environment	4	4	4	4
BUS 311. Intermediate Accounting I	4	-	-	-
BUS 312. Intermediate Accounting II	4	-	-	-
BUS 313. Managerial Accounting	-	4	4	4
BUS 314. Cost Analysis I	4	-	-	-
BUS 322. Business Finance I	4	4	4	4
BUS 323. Business Finance II	4	4	4	4
BUS 324. Financial Institutions	-	-	4	-
BUS 331. The Administrative Process	4	4	4	4
BUS 334. Administrative Organizations	4	4	4	4
BUS 341. Basic Marketing	4	4	4	4
BUS 342. Marketing Strategy	-	-	-	4
BUS 408. Business Policy	4	4	4	4
BUS 411. Advanced Accounting	4	-	-	-
BUS 414. Income Tax Accounting	-	-	4	-
BUS 421. Investments	-	-	4	-
BUS 431. Personnel Administration	-	4	-	-
BUS 433. Production Administration	-	4	-	-
BUS 435. Administrative Action	-	4	-	-
BUS 441. Marketing Institutions	-	-	-	4
BUS 442. Marketing Research	-	-	-	4
BUS 443. Sales Management	-	-	-	4
ECON 332. Money and Banking	-	-	4	-

One course from the following as approved by major adviser:

BUS 315. Cost Analysis II
 BUS 317. Legal Factors in Business
 BUS 412. Auditing
 BUS 414. Income Tax Accounting
 BUS 415. Seminar in Accounting Theory

	4	-	-	-
Total	48	48	48	48

DEGREE MINOR IN BUSINESS ADMINISTRATION

(30 units, to include at least 26 units in upper division)

Lower Division

Required course in minor field:

BUS 211. Principles of Accounting I, 4 units

Required courses in supporting field:

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

Business Administration

Upper Division

Required course in supporting field:

ECON 331. Managerial Economics, 4 units

Required courses in minor field:

BUS 301. Readings in Business Administration, 2 units

BUS 303. Business and its Environment, 4 units

BUS 313. Managerial Accounting, 4 units

BUS 322. Business Finance I, 4 units

BUS 334. Administrative Organizations, 4 units

BUS 341. Basic Marketing, 4 units

BUS 441. Marketing Institutions, 4 units

COURSE DESCRIPTIONS

Lower Division

BUS 211. Principles of Accounting I (4)

An introduction to the principles of analyzing, recording, summarizing, communicating, and interpreting business data. Prerequisite: Sophomore standing.

BUS 212. Principles of Accounting II (4)

Continuation of BUS 211; introduction to the use of accounting information in solving business problems. Prerequisite: BUS 211.

Upper Division

BUS 301. Readings in Business Administration (1)

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

BUS 303. Business and its Environment (4)

Continuing interaction and adaptation of business and its legal, economic, political, and social environment. Prerequisites: ECON 251 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 and 212.

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 (4)

Analysis and use of accounting and financial data by management for planning, control and decision making. Primarily designed for student who is pursuing a concentration in administration; credit not applicable to concentration in accounting. Prerequisites: BUS 211 and 212.

BUS 314. Cost Analysis I (4)

Principles and objectives of cost accounting, including budgeting, estimated and standard costs, distribution and administrative costs, differential costs, profit planning, direct costs, and pricing policies. (Formerly 316) Prerequisites: BUS 211 and 212.

Business Administration

BUS 315. Cost Analysis II (4)

Continuation of BUS 314; emphasis on production and interpretation of cost data. Prerequisite: BUS 314.

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.

BUS 322. Business Finance I (4)

Problems of business financial management. Finance function, sources and uses of funds, capital structure. Prerequisites: ECON 331; BUS 311 or 313.

BUS 323. Business Finance II (4)

Continuation of Business Finance I. Analysis of alternative security issues, dividend policy, leasing, cost of capital, long-term financing, mergers, recapitalization, reorganization. Prerequisite: BUS 322.

BUS 324. 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. Prerequisites: BUS 322 or ECON 332.

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 334.

BUS 334. Administrative Organizations (4)

Formal and informal organizations: functions, structure and behavior. The organization and the individual. The organization is treated as the framework of administration. Prerequisite: PSYC 201.

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 and PSYC 201.

BUS 342. Marketing Strategy (4)

Analysis of marketing tasks of the firm. Work of the marketing manager, role of research, elements of marketing strategy: price, product, promotion and channel policies. Prerequisite: BUS 341.

BUS 408. Business Policy (4)

Problems of the business enterprise from standpoint of chief executive. Consideration of major company objectives, policies, and programs. Prerequisite: Completion or concurrent enrollment in all other courses required for business major.

BUS 411. Advanced Accounting (4)

Accounting principles applied to accounting for partnership, installment sales, consignments, insolvency, estates, trusts, and business combinations. Prerequisite: BUS 312.

Business Administration

BUS 412. Auditing (4)

Standards and procedures broadly applied to examination of financial statements, including a consideration of field of public accounting, professional ethics, internal controls, preparation of working papers, and audit reports. Prerequisites: BUS 312, and 314.

BUS 414. Income Tax Accounting (4)

History and philosophy of federal income tax law and regulations and procedures for determining income tax liability of individuals and business firms. Prerequisites: BUS 211, and 212.

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 421. Investments (4)

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

BUS 431. Personnel Administration (4)

Policies and practices designed to provide and maintain human resources of the organization. Job and manpower requirements, recruitment, selection and training, performance appraisal, wage and salary administration, personnel audits, etc. Prerequisite: BUS 331.

BUS 433. Production 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. Prerequisites: BUS 331, and ECON 331.

BUS 435. Administrative Action (4)

Development of managerial skills in areas of decision making, communications, and leadership. Extensive use of case problems. Prerequisite: BUS 331 or consent of instructor.

BUS 441. Marketing Institutions (4)

Wholesale and retail institutions: role and functions each performs in national economy in distribution of goods from producer to consumer. Prerequisite: BUS 341.

BUS 442. Marketing Research (4)

Focus on the management of marketing information as a part of the decision-making process. Emphasis on application of research concepts, methods of analysis and knowledge of the behavioral and quantitative disciplines in establishing an overall marketing program. Prerequisites: BUS 341; ECON 320 or MATH 160.

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.

Chemistry

Vladimir S. Tuman, Ph.D., Professor of Physics, Chairman,
Department of Physical Sciences

Hobart J. Hamilton, Ph.D., Assistant Professor of Chemistry

Glen O. Hultgren, Ph.D., Assistant Professor of Chemistry

Evan M. Thompson, Ph.D., Assistant Professor of Chemistry

The Department of Physical Sciences offers study in chemistry for students seeking a Bachelor of Arts degree. Additional electives in chemistry, mathematics and physics are provided for students 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. Students 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 101. Mechanics and Heat, 5 units

PHYS 102. Electricity and Optics, 5 units

PHYS 103. Modern Physics, 5 units

MATH 119. Analytical Geometry and Matrices, 4 units

MATH 120, 221. Calculus I-II, 8 units

The Major

	Units
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	12

* Students planning to attend graduate school or work in industry should complete PHYS 221, 222, and 223; MATH 222 and 223 and one year of German.

The Major—Continued

At least two of the following courses as approved by major adviser:

CHEM 427. Advanced Organic Chemistry	
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 postgraduate 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 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.

Chemistry

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 (4)

Chemical thermodynamics, colligative properties, equilibrium, phase rule, kinetics, and other physical phenomena. (Lecture, 3 hours; laboratory, 3 hours). Prerequisite: MATH 222 and PHYS 103.

CHEM 462. Physical Chemistry II (4)

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

CHEM 463. Physical Chemistry III (4)

Continuation of CHEM 462. (Lecture, 3 hours, laboratory, 3 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.

CHEM 495. Selected Topics in Chemistry (Topic to be specified in the Class Schedule) (2-5)

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

Chemistry

CHEM 498. Individual Study (3-4)

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.

Graduate

CHEM 598. Individual Study (3-5)

For qualified graduate student in need of advanced or 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., Associate Professor

Bruce D. Hood, M.A., Assistant Professor

The Department of Communication Arts and Sciences offers the Bachelor 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 both speech and drama 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. 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 364. Speech and Hearing Science	4

* On sabbatical leave 1968-69.

Speech-Drama

The Major—Continued	Units
SPCH 400. Communication Theory	4
SPCH 410. Group Communication	4
Upper division courses in speech as approved by major adviser; DRAM 421, DRAM 440, and SPAN 468 may be applied	16
Total	40

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. 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.

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, 440; SPCH 240, 340, 341.

TEACHING CREDENTIALS *

Standard Teaching Credential Specialization in Elementary or Secondary Education with Academic major in Speech (administered by the Department of Education).

Students majoring in speech who are planning careers in professional education as general elementary teachers or teachers of speech arts in the secondary schools, should select a program of study leading to the Standard Teaching Credential with Specialization in Elementary or Secondary Education.

1. General Requirements

a. Completion of the academic major in Speech for the Bachelors Degree.

b. Completion of General Education requirements as outlined by the Education Department.

2. Specific Education Requirements

a. Completion of the following professional education requirements for elementary or secondary specialization (Reference Education Department)

Specific Education Requirements

	<i>Elementary</i>	<i>Secondary</i>
Foundations	Educ 411 (4) Educ 412 (4)	Educ 411 (4) Educ 412 (4)

* See Education.

Speech-Drama

	<i>Elementary</i>	<i>Secondary</i>
Curriculum and Instruction (Fifth Year)		
1st Quarter	Educ 425 (4)	Educ 448 (4)
	Educ 426 (4)	Educ 671 (4)
	Educ 441 (4)	
2nd Quarter	Educ 427 (4)	Educ 449 (4)
	Educ 428 (4)	Educ 672 (4)
	Educ 442 (4)	
3rd Quarter	Educ 443 (10)	Educ 673 (8)
Total Units	42	32

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 Standard 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 masters degree in speech and satisfactory completion of an Oral Communication Skills Examination.

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, 432, 435, and 471; EDUC 411, 482, 632, and 676.

COURSE DESCRIPTIONS

DRAMA

Lower Division

DRAM 200. Expression for the Performing Artist (4)

Principles and practice of stage speech, movement and non-verbal communication for the actor, singer and performer.

DRAM 220. Introduction to Theatre (4)

Comprehensive view of theatrical art; the theater as a cultural force; fundamentals of dramaturgy and theatrical production.

* Legal requirements are set forth in the California Administrative Code, Title 5, Education.

Speech-Drama

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 6 units. (Formerly 320)

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 310. Stagecraft and Scenic Design (4)

Principles and practice in the techniques of building, painting and mounting stage scenery; stage lighting; introduction to theatrical design.

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 organizing and staging all types of performances in the theatrical environment. Designed to give the student necessary background for directing the work of others and in achieving attractive and successful mounting of activities in the theatre-auditorium.

DRAM 421. History of the Theatre (4)

Historical analysis of dramatic and theatrical activity from Ancient Greece to present-day America.

DRAM 430. Theatre Workshop II (2)

Participation in student directed experimental production of dramatic scripts. May be repeated for a total of 4 units.

DRAM 440. Reader's Theatre (4)

Cutting, arranging, and performing all forms of literature in the theatrical setting. (Formerly SPCH 440) Prerequisite: Consent of instructor.

DRAM 498. Individual Study (3-4)

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.

SPEECH

Lower Division

SPCH 200. Speech Communication (4)

Fundamentals of public speaking with emphasis on the nature of logical discourse. Functions and practices of oral communication applied to preparation and presentation of speeches.

SPCH 210. Discussion (4)

Organization and conduct of group discussion. Designed to give the student an understanding of the processes of group problem solving and decision making.

SPCH 240. Oral Interpretation (4)

Fundamentals of theory; techniques and practices in communicating from the printed page.

Speech-Drama

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 310. Forensics (2)

Planning and participation under faculty supervision in college-wide sponsored speech and forensics activities. May be repeated for a total of 6 quarter units. Prerequisite: Consent of instructor.

SPCH 312. Speech Composition (4)

Advanced study of fundamentals of oral communication as applied to public address. Factors determining audience reaction, methods of thought development and organization in establishing a basis for understanding problems inherent in communicating with audiences of various kinds. 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 Behavior and 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. (Formerly 465)

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 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 as tools in a democracy. Procedures for effecting problem solving through group interaction in education, industry and community affairs. Prerequisite: SPCH 210 or equivalent.

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. Practicum 6 hours per week involving case history taking, administration of diagnostic tests, interviews, reporting, and parent-teacher counseling. May be repeated for a total of 6 units. Prerequisites: SPCH 360, 361, or equivalents.

SPCH 461. Communication Disorders I (Language) (3)

Symposia on disorders related to the symbolizing processes. Relationship to the language and speech problems of the multiply handicapped child. Prerequisite: SPCH 361 on consent of instructor.

SPCH 462. Communication Disorders II (Speech) (3)

Symposia on speech 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. 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 470 (1 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 reha-

Speech-Drama

bilitation. 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 and Phonology (4)

Phonemic, morphemic and syntactic linguistic structures. Comparative study of the phonemic structures of principal English, Romanic and Germanic dialects. Prerequisite: SPCH 300 or SPAN 468 or consent of instructor.

SPCH 470. Clinical Practice in Communication 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 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 (3-4)

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.

SPCH 500. Psycholinguistics (5)

Study of the process of communication as the sciences of incoding 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. 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.

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 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.

SPCH 598. Individual Study (3-5)

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. Practicum in Communication Disorders in the Public Schools (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 (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.

Economics

Frederick E. Kottke, Ph.D., Professor, Coordinator

Klaus H. Kalb, Ph.D., Associate Professor

Abdul Al-Ameen, M.A., 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) the economics major will enable the department to enhance its course offerings for the prospective business administrative major, vocational objectives in government and industry.

The College also offers the degree Bachelor of Arts, Social Sciences. The student seeking this degree may select their interdepartmental major in economics and any other discipline 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- and macroeconomics (ECON 331 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

DEGREE MINOR IN ECONOMICS

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

TEACHING CREDENTIALS

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

1. Degree major in economics.
2. Secondary credential students must complete 9 units in courses in economics as postgraduate 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 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 310. Economic History of Western Civilization (4)

Analysis of economic development of United States and Europe; economic theories of growth as applied to Western Culture. May be counted for credit in history major and minor.

ECON 320. Quantitative Analysis (4)

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

ECON 330. Economic Fluctuations (4)

Measurement of economic fluctuations; theories of economic cycles; economic forecasting. Prerequisite: Course in 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.

Economics

ECON 333. Money and Banking II (4)

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

ECONOMIC THEORY AND DOCTRINES

ECON 331. Managerial Economics (Microtheory) (4)

Microeconomics and its application to the business firm; demand and supply analysis, price procedures, market structures, and case studies. Prerequisite: Basic course in economics or consent of instructor.

ECON 400. Intermediate Theory (4)

Macroanalysis; income levels, expenditures, prices, and employment; application to depression and inflation. Prerequisite: Course in 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.

LABOR ECONOMICS

ECON 410. Labor Economics (4)

Development of labor movement in United States; wages and wage theory; productivity measurement; unemployment and price stability.

ECON 411. Collective Bargaining (4)

Laws and regulations effecting labor relations; conciliation, mediation, and arbitration procedures and responsibilities.

INTERNATIONAL ECONOMICS

ECON 405. Comparative Economic Systems (4)

Capitalism and alternative economic systems; differences and comparative performance.

ECON 440. Economic Development (4)

Measurement of economic growth; economic development of contemporary underdeveloped countries; case studies; economic theories and policies for accelerated growth.

ECON 441. International Trade (4)

Concepts of international exchange; exchange rates, balance of payments, free versus regulated trade, and international investment.

ECON 442. Soviet Economics (4)

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

ECON 443. International Economics Policies (4)

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

ECON 444. Case Study in Economic Underdevelopment (4)

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

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.

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.

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.

* * * * *

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 (3-4)

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.

Education

James C. Cole, Ed.D., Associate Professor, Chairman
William F. McClintock, Ph.D., Professor
Charles R. Farrar, Ed.D., Associate Professor
Richard V. Jones, Ed.D., Associate Professor
Haig A. Rushdoony, Ed.D., Associate Professor
Lorna M. Swain, Ed.D., Associate Professor
Edward R. Credell, Ph.D., Assistant Professor
R. J. Moriconi, Ed.D., Assistant Professor
Priscilla R. Smith, 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 education to prepare teachers for elementary and secondary schools. The Department of Education also offers courses which are designed to promote the professional growth of in-service teachers and curriculum supervisors.

PROFESSIONAL PROGRAMS IN EDUCATION

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. Required courses in professional education leading to elementary and secondary teaching credentials for students admitted to credential programs under this catalog are listed in the tables on pages 95-100. The courses in this table are presently accepted by the California State Board of Education in fulfillment of certification regulations.*

ADMISSION TO CREDENTIALS PROGRAM †

To be eligible for admission to the elementary and secondary teaching credential program the fully matriculated student 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.

* The California State Board of Education is empowered to change credential requirements without prior notice. The College will make changes in programs leading to credentials whenever revisions are reported to it in the *California Administrative Code, Title 5, Education* or by other official notifications.

† Students who currently hold valid regular teaching credentials and are not seeking another teaching credential may register for courses in education without approval for admission to the credential program.

Admission to the College is *not* admission to credential programs. Students are subject to the requirements of the catalog current at the time they are *admitted to a credential program*. Hence, students are urged to seek admission to credential programs at the beginning of the junior year in order to plan the program of studies leading to the credential.†

Students who are eligible (see above) are advised to submit application for admission to the credential program at the beginning of the junior year. Candidates for the secondary teaching credential should confer with the Coordinator of Secondary Education for the purpose of planning a program of studies leading to the credential. An applicant with graduate standing (other than a graduate of the College) must request complete official transcripts, from each college and university at which he registered, to be sent directly to the Credentials Office. Printed informational materials and application forms may be obtained at the Credentials Office.

Students must obtain approval for admission to the credential program prior to or during the quarter in which they are enrolled in their *first* credential course. Admission to the credentials program is prerequisite to: (1) all courses which follow the first one for which the student registers, (2) placement in field work experiences, (3) recommendation by the College for issuance of a credential, (4) recommendation for renewal of a provisional credential, and (5) referral to and by the College placement service.

Policies pertaining to requirements and procedures for admission to the credentials program are formulated by the Credentials Admissions Committee (CAC). This committee reviews and acts on all applications for admission to the credentials program. Admission to a teaching credential program is approved when the student is adjudged qualified under standards set forth in the *California Administrative Code, Title 5, Education*. Section 41101 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. (Detailed informational material is available in the Credentials Office.)

CONTINUANCE IN CREDENTIAL PROGRAM

Retention in a teaching credential program is based upon continuous satisfactory student performance as evaluated by the Credentials Admissions Committee. An overall grade point average of 2.5 must be maintained while in program.

† Courses completed as lower division professional education or courses completed more than 10 years prior to admission to the credentials program are not accepted toward fulfillment of professional education requirements.

Education

ADMISSION TO STUDENT TEACHING *

1. Elementary

To be eligible for admission to student teaching in the Elementary Program a student must:

- a. Complete EDUC 411 and 412, and be approved by his credential adviser.
- b. Have received a grade of C or better in each required professional course.
- c. Maintain a 2.50 grade point average in all required professional education courses leading to the credential for which he is a candidate.

2. Secondary

To be eligible for admission to student teaching in the Secondary Program a student must:

- a. Complete EDUC 411 and 412, and be approved by his credential adviser.
- b. Be recommended in terms of his subject matter competence by the departments of his major and minor teaching fields.
- c. Maintain a 2.75 grade point average in the major and minor, or have compensating abilities and skills.

Transfer students must fulfill all requirements for Admission to Student Teaching, and must enroll in at least one course in Education at this College prior to admission to student teaching.

Application for student teaching must be submitted by the student to the Education Office no later than the second week of the quarter preceding the quarter in which student teaching is to commence.

Admission to student teaching is granted by the Credentials Admissions Committee following review of the recommendations received from the student's credential adviser. Adequacy of preparation, appropriate placement for student teaching, and the student's school and non-school activities are considered before placement in a school is made.

SUBSTITUTION OF TEACHING EXPERIENCE FOR STUDENT TEACHING

A candidate for a teaching credential who has prior teaching experience may request approval from the Credentials Admissions Committee (through his credential adviser) to substitute an equivalent number of units in approved electives for a portion or all of the student teaching unit requirement. Substitution will be considered in cases in which the candidate has:

1. Been admitted to the credentials program.
2. Completed courses prerequisite to student teaching.
3. Placed on file in the Credentials Office an official letter certifying satisfactory teaching experience as prescribed by law. (The law requires two years full-time teaching at an approved school verified as satisfactory by a school official.)
4. Teaching experience in school settings equivalent to standards established by Education for the placement of student teachers,

* Students seeking enrollment in the elementary or secondary teaching credential program with an accompanying specialization in the area of speech and hearing handicapped must adhere to these same standards.

or is currently teaching in the immediate vicinity of the College so that on-the-job evaluations may be carried out by appropriate faculty.

FINAL EVALUATION BY CREDENTIALS ADMISSIONS COMMITTEE

The teaching credential candidate's file and all required records are subject to final review prior to qualifying for recommendations by Education.

STANISLAUS STATE COLLEGE REQUIREMENTS FOR THE STANDARD TEACHING CREDENTIAL WITH A SPECIALIZATION IN ELEMENTARY TEACHING *†

1. **Degree.** Bachelor's degree plus 45 quarter units of postgraduate work in courses at the upper division or graduate level.
2. **General Education.** California credential regulations require 67½ quarter units of General Education, including 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 English composition *or* three quarters of English course work, and in addition, the passing of a special examination in English composition.

The undergraduate student who intends to become a candidate for an elementary teaching credential may fulfill these requirements by a careful selection of courses in the options provided in the General Education requirements as stated on pages 51-54. The student must fulfill the legal requirements for the elementary teaching credential and is advised to include in his program of study courses recommended by Education as follows: ‡

Social Sciences

Recommended:

One anthropology or sociology course in cultural-social-institutional studies, ANTH 206, SOCL 201.
Principles of Economics, ECON 250, 251, or 252.

Natural Sciences

No additional courses required.

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

† The Standard Teaching Credential with a Specialization in Elementary Teaching is also offered through an internship program, see page 89.

‡ Legal requirements are set forth in the *California Administrative Code, Title 5, Education*. Recommended courses are to develop skills and knowledge vital to effective classroom teaching. Proficiency in these areas is expected of teaching candidates.

Education

Literature, Philosophy, and the Arts

Recommended:

ART 100, MUS 100

One or more studio or performance courses in art and music.

One course in each of the following: modern philosophies, PHIL 101, 102, 103; and American literature, ENGL 231, 232, 233.

Oral and Written Expression

Required by law:

Four quarters of English course work including a course in English composition or three quarters of English course work, and in addition, the passing of a special examination in English composition.

Recommended:

SPCH 200.

Health and Physical Education

Required by law.

A course or satisfactory score on a test covering narcotics, alcohol, and safety, HLTH 220.

Mathematics

Required by law:

A college level mathematics course (3 semester hours or 5 quarter hours) is required for elementary teaching credential. (MATH 100)

3. **Major.*** Completion of a major in one of the following disciplines (see Departmental listing of requirements)

Single Subject	History	Sociology
Biological Sciences	Mathematics	Spanish
Chemistry	Music	Speech
Economics	Physics	Interdepartmental
English	Political Science	Physical Sciences
Fine Art	Psychology	Social Sciences

4. **Professional Education.** Undergraduates are encouraged to include EDUC 200 in their program of study as early as possible. The education courses listed below are required to gain College recommendation for the elementary 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

EDUC 411. Social Foundations	Units	4
EDUC 412. Psychological Foundations of Education		4

Curriculum and Instruction

First Quarter

EDUC 425. Reading in Elementary Schools	Units	4
EDUC 426. Social Studies in Elementary Schools		4
EDUC 441. Student Teaching in Elementary Schools I		4

* No minor is required.

Second Quarter

EDUC 427.	Language Arts in Elementary Schools	4
EDUC 428.	Mathematics in Elementary Schools	4
EDUC 442.	Student Teaching in Elementary Schools II	4

Third Quarter

EDUC 443.	Student Teaching in Elementary Schools III	10
Total units		42

5. **Electives.** The following are recommended professional electives; credential advisers will assist students in selecting professional electives from the following courses:

a. *Subject Preparation:* Credential candidates must demonstrate competency to teach subjects required by statute and by the regulations of the State Board of Education.

- EDUC 429. Science in Elementary Schools (4)
- EDUC 430. Health and P.E. in Elementary Schools (4)
- MUS 335. Music in Elementary Schools (3)

b. *Other Professional Electives*

- EDUC 421. Principles of Elementary Education (4)
- EDUC 436. Selection and Use of Instructional Materials (3)
- EDUC 632. Counseling and Community Resources (4)
- EDUC 675. Tests, Measurement and Evaluation (4)
- EDUC 676. Exceptional Children and Youth (4)
- EDUC 677. Counseling and Guidance (4)

**STANISLAUS STATE COLLEGE REQUIREMENTS
FOR THE STANDARD TEACHING CREDENTIAL WITH A
SPECIALIZATION IN SECONDARY TEACHING *†**

1. **Degree.** Bachelor's degree plus 45 quarter units of postgraduate work in courses at the upper division or graduate level.
2. **General Education.** California credential regulations require 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 humanities must include either four quarters of English course work including a course in English composition or three quarters of English course work, and in addition, the passing of a special examination in English composition.

The undergraduate student who intends to become a candidate for a secondary teaching credential may fulfill these requirements by a careful selection of courses in the options provided in the General Education requirements as stated on pages

* 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.

† Legal requirements are set forth in the *California Administrative Code, Title 5, Education*. Recommended courses are to develop skills and knowledge vital to effective classroom teaching. Proficiency in these areas is expected of teacher candidates.

Education

51-54. The student must fulfill the legal requirements for the secondary teaching credential and is advised to include in his program courses recommended by Education as follows: †

Social Sciences

Recommended:

One anthropology or sociology course in cultural-social-institutional studies, ANTH 206, SOCL 201.

Principles of Economics, ECON 250, 251, or 252.

Natural Sciences

No additional course required.

Literature, Philosophy, and the Arts

Recommended:

ART 100, MUS 100.

One or more studio or performance courses in art and music.

One or more courses in each of the following: modern philosophies, PHIL 101, 102, 103; and American literature, ENGL 221, 232, 233.

Oral and Written Expression

Required by law:

Four quarters of English course work including a course in English composition or three quarters of English course work, and in addition, the passing of a special examination in English composition.

Recommended:

SPCH 200

Health and Physical Education

Required by law:

A course or satisfactory score on a test covering narcotics, alcohol, and safety, HLTH 220.

3. **Major.** Completion of a major in one of the following disciplines.* For a single subject major, complete 9 quarter units in courses in the major taken as postgraduate work as recommended by the major adviser and approved by the credential adviser.

Single Subject	History	Spanish
Biological Sciences	Mathematics	Speech
Chemistry	Music	
Economics	Physics	Interdepartmental
English	Political Science	Physical Sciences
Fine Art	Psychology	Social Sciences
	Sociology	

4. **Minor.** 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.

† Legal requirements are set forth in the *California Administrative Code, Title 5, Education*. Recommended courses are to develop skills and knowledge vital to effective classroom teaching. Proficiency in these areas is expected of teacher candidates.

* The California State Board of Education has ruled that these disciplines are acceptable under the term "Academic subject commonly taught in public high schools".

Education

The following bachelor of arts degree minors are acceptable as academic credential minors.*:

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

Students completing a non-academic major must complete a 30-unit academic minor which includes 18 upper division units. Business Administration is the only non-academic major offered by the College.

5. **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 re-arranged in consultation with a credential adviser.

<i>Foundations</i>	Units
EDUC 411. Social Foundations of Education	4
EDUC 412. Psychological Foundations of Education	4
<i>Curriculum and Instruction (Fifth Year)</i>	
First Quarter	
EDUC 448. Introduction to Secondary Education	4
EDUC 671. Student Teaching in Secondary Schools I	4
Second Quarter	
EDUC 449. Curriculum Planning in Secondary Schools	4
EDUC 672. Student Teaching in Secondary Schools II	4
Third Quarter	
EDUC 673. Student Teaching in Secondary Schools III	8
Total units	32

6. Recommended Electives

- EDUC 436. Selection and Use of Instructional Materials (3)
- EDUC 604. Philosophies of Education (4)
- EDUC 605. Methods of Research in Education (4)
- EDUC 632. Counseling and Community Resources (4)
- EDUC 675. Tests, Measurement and Evaluation (4)
- EDUC 676. Exceptional Children and Youth (4)
- EDUC 677. Counseling and Guidance (4)
- EDUC 680. Legal Aspects of Education (4)
- EDUC 681. Educational and Occupational Information (4)

SPECIALIZED PREPARATION TO TEACH EXCEPTIONAL CHILDREN

The College offers specialized preparation in the area of the speech and hearing handicapped. See Communication Arts and Sciences Department in this catalog.

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

Education

INTERNSHIP PROGRAM IN ELEMENTARY TEACHING

The College offers an Internship Program in elementary teaching. This makes available to selected and highly qualified teacher candidates an alternate program for completing requirements for a Standard Teaching Credential with a Specialization in Elementary Teaching. The Internship Program is intended for the student who has completed the baccalaureate degree. Interns are salaried and are supervised by the school district and college supervisors.

Requirements and Procedures for the Internship Program

1. Unclassified Internship Candidate
 - a. Declaration of intent to be a candidate for elementary internship.
 - b. Admission to Stanislaus State College Elementary Credential Program.
 - c. Successful completion of:
 - EDUC 441. Student Teaching in Elementary Schools I (4)
2. Classified Internship Candidate
 - a. A minimum of 12 units in residence at Stanislaus State College.
 - b. GPA of 2.7 earned in residence work and in required professional studies (or Education recommendation).
 - c. Approval by college internship screening committee.
3. Advancement to Internship Status
 - a. Baccalaureate degree.
 - b. A college approved one-year internship arrangement for a salaried full-time elementary teaching position.
 - c. Final college concurrence with school district's placement of intern.
 - d. Successful completion of EDUC 425. Reading in Elementary Schools (4)
 - e. Successful completion of eight (8) units selected from the following:
 - (1) EDUC 421. Principles of Elementary Education (4)
 - (2) EDUC 426. Social Studies in Elementary Schools (4)
 - (3) EDUC 427. Language Arts in Elementary Schools (4)
 - (4) EDUC 428. Mathematics in Elementary Schools (4)
 - f. Successful application for internship certification.
4. The Internship Program
 - a. Successful completion of the following to total eighteen (18) units of student teaching and/or internship:
 - (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. Successful completion of all other requirements leading to institutional recommendation for the Standard Teaching Credential with Specialization in Elementary Teaching.

COURSE DESCRIPTIONS

Lower Division

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 ele-

mentary, 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 AND SCHOOL SERVICES

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.

EDUC 477. Counseling Theory (4)

Consideration of the major theories of counseling. Demonstrations, and reviews of current literature. (Formerly EDUC 482) Same as PSYC 477. Prerequisite: PSYC 321 or 432; consent of instructor.

Professional Postgraduate

EDUC 578. Advanced Counseling (4)

Counseling practices including commonly used methods of psychotherapy. Practice in techniques of counseling. (Formerly 631) Same as PSYC 578. Prerequisite: EDUC 477.

EDUC 604. Philosophies of Education (4)

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. (Formerly 603) Prerequisites: EDUC 411 or equivalent, and consent of instructor.

EDUC 605. Methods of Research in Education (4)

Application of methods of research to problems in education. Emphasis on research methodology of the social and behavioral sciences. Prerequisites: Teaching experience and consent of instructor.

EDUC 632. 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 SOCL 525) Prerequisite: EDUC 479, SOCL 313, or consent of instructor.

EDUC 633. 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 SOCL 528) Prerequisite: Consent of instructor.

EDUC 675. 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 475) Prerequisites: EDUC 411 and 412.

Education

EDUC 676. Exceptional Children and Youth (4)

Physical, intellectual, social, and emotional deviations among children and youth; community resources; educational adjustments. (Formerly 485) Prerequisite: Consent of instructor.

EDUC 677. Counseling and Guidance (3)

Introduction to counseling and guidance; theory and techniques. (Formerly 479) Prerequisite: EDUC 411, 412, and consent of credential adviser.

EDUC 681. 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 SOCL 427 and EDUC 481) Prerequisite: Consent of instructor.

CURRICULUM AND INSTRUCTION

Upper Division

EDUC 421. Principles of Elementary Education (4)

Introduction to teaching in the modern elementary school. If directed observation is included, the enrollment is for 4 units. Prerequisites: EDUC 411 and 412.

EDUC 425. Reading in Elementary Schools (4)

Teaching reading in grades K-9; concepts and applications of reading skills 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 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 and correlation of reading with total curriculum of elementary schools, K-9. Prerequisite: 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 (4)

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

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.

STUDENT TEACHING

Upper Division

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

Supervised observation-participation and student teaching in public elementary school settings. A minimum of 20 clock hours of actual classroom teaching. 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. (Formerly 440) Prerequisites: Completion of or concurrent enrollment in two curriculum courses.

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

Supervised observation-participation and student teaching in public elementary school settings. A minimum of 20 clock hours of actual classroom teaching. Includes a weekly two hour on-campus meeting dealing with professional ethics and activities, use of instructional materials, and student teaching problems. P or F grade is given. (Formerly 440) Prerequisite: EDUC 441.

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

Supervised observation-participation and student teaching in public elementary school settings. A minimum of 140 clock hours of actual classroom teaching. Full-day assignments. Includes a weekly two-hour seminar dealing with teaching topics and problems. P or F grade is given. (Formerly 440) Prerequisite: Education approval.

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: Completion of or concurrent enrollment in EDUC 412.

Professional Postgraduate

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. (Formerly 460 and 471) Prerequisites: EDUC 411 and 412, completion of or concurrent enrollment in EDUC 448, and consent of credential adviser.

Education

EDUC 672. Student Teaching in Secondary Schools II (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, instructional materials, and problems encountered during the student teaching experience. P or F grade is given. (Formerly 460 and 472) Prerequisites: EDUC 671, and completion of or concurrent enrollment in EDUC 449.

EDUC 673. Student Teaching in Secondary Schools III (8)

Supervised observation-participation in student teaching in public secondary school settings. A minimum of 80 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. (Formerly 460 and 473) Prerequisite: EDUC 672.

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. (Formerly 478)

SEMINARS, SUPERVISION AND SPECIAL STUDIES

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 635. Pupil Personnel Services Seminar (3)

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

EDUC 680. Legal Aspects of Education (4)

Legal principles related to education as defined by laws and judicial interpretations, with special reference to the *Education Code* of California. (Formerly 480) Prerequisite: Consent of instructor.

EDUC 683. School Supervision and Administration Seminar (3)

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

EDUC 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 687. Seminar in New Developments in Education (3)

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

EDUC 698. Individual Study (3-5)

For qualified graduate student 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. (Formerly 598) Prerequisite: Consent of instructor.

INTERNSHIP PROGRAM **Professional Postgraduate**

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

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 (4-6)

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 (4-6)

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 651. Internship Seminar I—Elementary (2)

Problems seminar with focus on elementary school classroom planning, organization, department 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.

English

James P. Jensen, Ph.D., Associate Professor, Chairman
Lawrence D. Berkoben, Ph.D., Associate Professor
James J. Antonich, M.A., Assistant Professor
Richard D. Bretz, M.A., Assistant Professor
Laurence H. Jacobs, M.A., Assistant Professor
Lola V. Johnson, M.A., Assistant Professor
* Jean H. Riddle, M.A., Assistant Professor
Michael L. Baumann, M.A., Visiting Lecturer

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 broad range of course selection to aid him 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.

DEGREE MAJOR IN ENGLISH

Prerequisites to the Major

ENG 101, 102, 103. Composition and World Literature I-III, 9 units

ENG 201. Introduction to Literature, 4 units

Two of the following as approved by major adviser, 8 units:

ENG 231, 232, 233. British and American Literature I-III

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. Transfer students who earn junior or higher standing at Stanislaus State College by spring 1970 are exempt from this requirement.

The Major

Units

Two courses in two of the following sequences as approved by major adviser, with one sequence to be selected from the first three sequences listed below:

ENGL 315, 316. Eighteenth Century Literature I-II

ENGL 331, 332. Literature of the Romantic Period I-II

ENGL 413, 414. Seventeenth Century Literature I-II

ENGL 335, 336. Literature of the Victorian Period I-II

ENGL 344, 345, 442. American literature 16

* On leave of absence 1968-69.

English

	<i>Units</i>
One course in each of the following sequences as approved by major adviser:	
ENGL 416, 417. Milton I-II	
ENGL 405, 406. Chaucer I-II	8
Two courses in the following sequence as approved by major adviser:	
ENGL 421, 422, 423. Shakespeare I-III	8
Courses in English as approved by major adviser	16
	—
	48

DEGREE MINOR IN ENGLISH

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

Lower Division

ENGL 101, 102, 103. Composition and World Literature I-III, 9 units

ENGL 201. Introduction to Literature, 4 units

One of the following courses as approved by minor adviser, 4 units

ENGL 202. Introduction to Fiction

ENGL 203. Introduction to Drama

Upper Division

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. ENGL 361 Advanced Composition-Usage is recommended as an elective.
2. Secondary credential candidates must complete 9 units in courses in English as postgraduate work and receive approval of English Department as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTIONS

Lower Division

ENGL 101. Composition and World Literature I (3)

Grammar and syntax, with collateral readings in world literature of the Western tradition. Homer, Sophocles, and Virgil.

ENGL 102. Composition and World Literature II (3)

Language and semantics, collateral readings in world literature. Dante, Shakespeare, and Voltaire.

ENGL 103. Composition and World Literature III (3)

Rhetoric, with collateral readings in world literature of the Western tradition. Dostoevski, Camus, Flaubert, and Stendahl.

ENGL 201. Introduction to Literature (4)

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

English

ENGL 202. Introduction to Fiction (4)

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

ENGL 203. Introduction to Drama (4)

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

ENGL 231. British and American Literature I (4)

Chaucer, Shakespeare, Donne, Milton, Pope, Swift.

ENGL 232. British and American Literature II (4)

Wordsworth, Keats, Emerson, Hawthorne, Melville, Tennyson, Browning.

ENGL 233. British and American Literature III (4)

Whitman, Dickinson, Twain, Hardy, Conrad, James, Yeats.

Upper Division

ENGL 315. Eighteenth Century Literature I (4)

Literature of the Restoration; emphasis on Restoration drama and Dryden. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 316. Eighteenth Century Literature II (4)

Literature of the Augustan period; emphasis on Pope, Swift, and Johnson. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

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) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

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

Byron, Shelley, and Keats. (Formerly 319) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

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

Carlyle, Tennyson, Browning, Arnold. (Formerly 320) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

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

Pre-Raphaelites, Swinburne, Housman, Hardy. (Formerly 320) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 344. Early Nineteenth Century American Literature (4)

Hawthorne, Emerson, Thoreau, and Melville. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 345. Late Nineteenth Century American Literature (4)

Whitman, Dickinson, James, and Twain. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 361. Advanced Composition-Usage (4)

Grammar, composition, and rhetorical analysis. (Formerly 260) Prerequisite: ENGL 101, 102, 103 or equivalent.

ENGL 401. History of the English Language (4)

A study of the English language from its earliest origins to its present form. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 402. Introduction to Linguistics (4)

Modern approaches and methods in the study of language. Prerequisite: Junior standing.

ENGL 405. Chaucer I (4)

Troilus and Criseyde and the Minor Poems. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 406. Chaucer II (4)

The Canterbury Tales. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 408. Medieval Literature (4)

Medieval literature, exclusive of Chaucer: Piers Plowman, Sir Gawain and the Green Knight, The Pearl. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 410. Renaissance Literature (4)

Sidney, Spenser, Wyatt, and Surrey. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 413. Seventeenth Century Literature I (4)

Donne, Jonson, Webster, and Herbert. (Formerly 435) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 414. Seventeenth Century Literature II (4)

Marvell, Vaughn, and Burton. (Formerly 413) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 416. Milton I (4)

Minor poetry and prose. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 417. Milton II (4)

Major poetry and selected prose. (Formerly 415 and 435) Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

English

ENGL 420. Elizabethan and Jacobean Drama (4)

Non-Shakespearean drama. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

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; Joyce, Lawrence, Yeats, Forster, Shaw. (Formerly 324)

ENGL 440. Modern British Literature II (4)

Since 1930; Huxley, Green, Greene, Waugh, and others.

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 446. Major American Poetry (4)

Whitman, Dickinson, Eliot, Frost, Cummings. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 447. American Literature to 1800 (4)

Literature of the colonies and the new nation. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

ENGL 450. Literary Criticism (4)

Aristotle, Horace, Sidney, Dryden, Johnson, Richards. Prerequisites: Completion of or concurrent enrollment in ENGL 201 and 231; and ENGL 232 or 233; or consent of English adviser.

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 495. Advanced Studies in English (Topic to be specified in Class Schedule) (4)

Intensified study of a major figure, area, or topic in English. (Formerly 496) May be repeated for a total of 8 units. Prerequisite: Consent of instructor.

ENGL 498. Individual Study (3-4)

For student 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 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.

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

This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 10 units.

ENGL 550. Seminar: American Literature (5)

This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 10 units.

ENGL 560. Seminar: Twentieth Century Literature (5)

This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 10 units.

ENGL 570. Seminar: Literary Criticism (5)

This seminar will focus upon the works of one or more major authors. Since the particular authors to be studied will vary each time the seminar is offered, this course may be repeated for a total of 10 units.

ENGL 598. Individual Study (3-5)

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

Fine Art

Ralf Parton, M.A., Associate Professor, Chairman
Martin L. Camarata, M.A., Associate Professor
Richard Gubernick, M.F.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 48 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 AND MINOR

1. No particular pattern of high school art courses are 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 or minor in fine art during the final quarter of the sophomore year. Students entering as transfers at the upper division level will be evaluated for acceptance as majors or minors in fine art during the latter part of the first quarter in which they enroll in fine art courses in the College. Evaluation will be based upon lower division course work completed in fine art and a portfolio to include work done on the student's own initiative and work done under class supervision.
3. The Department of Fine Art reserves the right to retain student art works and slides for temporary or permanent exhibitions.

4. All fine art majors are required during their senior year to present a portfolio, and to participate in a group or one-man show in the College Art Gallery.

DEGREE MAJOR IN FINE ART

Prerequisites to the Major

- ART 100. Introduction to Art, 4 units
- ART 101. Anatomical Drawing, 4 units
- ART 102. Pictorial Perspective, 4 units
- ART 210. Relief Printing I, 4 units
- ART 220. Oil Painting I, 4 units
- ART 230. Modeling I, 4 units

The Major

	Units
ART 311. Intaglio Printing I	4
ART 312. Lithography I	4
ART 321. Water Color Painting I	4
ART 323. Mixed Media I	4
ART 331. Metal Sculpture I	4
ART 332. Carving I	4
ART 342. Art History III or ART 345. Contemporary Art	4
One other course selected from ART 340, 341, 343, 344, 346, 347	4
Studio courses as approved by major adviser	16
Total	48

DEGREE MINOR IN FINE ART

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

Lower Division

- ART 100. Introduction to Art, 4 units
- ART 101. Anatomical Drawing, 4 units
- ART 102. Pictorial Perspective, 4 units
- ART 210. Relief Printing I, 4 units
- ART 220. Oil Painting I, 4 units
- ART 230. Modeling I, 4 units

Upper Division

- ART 340, 341, 342. 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. Secondary credential candidates must complete a minimum of 9 units in studio courses in Fine Art as postgraduate work and receive approval of the Department of Fine Art as to subject matter competence.
3. Complete requirements for credential as presented by the Education Department.

* See Education.

Fine Art

COURSE DESCRIPTIONS

DRAWING

Lower Division

ART 100. Introduction to Art (4)

Drawing as a means of visual expression; observation and representation of still life and the human form; various drawing media will be used.

ART 101. Anatomical Drawing (4)

Structure of individual objects; emphasis on the human form. Further development of calligraphic techniques.

ART 102. Pictorial Perspective (4)

Forms and their relationship to pictorial space. Various space concepts as related to the development of a personal pictorial language.

Upper Division

ART 300. Life Drawing I (4)

Further investigation of visual language. Problems in figure and drapery, still life, and landscape, using a variety of drawing media. Emphasis on group studies and composition. May be repeated for a total of 8 units. Prerequisite: ART 101, 102, or consent of instructor.

ART 301. Figure Drawing I (4)

Drawing the draped and undraped figure with an emphasis on proportion, structure, anatomy, and compositional possibilities; insertion and articulation of the bone, joint, and muscle structure. May be repeated for a total of 8 units. Prerequisite: ART 101 or 102, or consent of instructor.

ART 400. Life Drawing II (4)

Advanced problems in composition, emphasis on landscape and still life. Development of personal pictorial language. May be repeated for a total of 8 units. Prerequisite: ART 300 or consent of instructor.

ART 401. Figure Drawing II (4)

Advanced study of the figure as an element in drawing. Emphasis on the human form as personal symbol. May be repeated for a total of 8 units. Prerequisite: ART 301 or consent of instructor.

PRINTMAKING

Lower Division

ART 210. Relief Printing I (4)

Fundamental theories and practices involved in the process of relief printmaking. Emphasis on materials, techniques, tools, and craftsmanship. (Formerly 362)

Upper Division

ART 311. Intaglio Printing I (4)

Techniques of intaglio printmaking; emphasis on techniques and their relation to the graphic image. Prerequisite: ART 210 or consent of instructor.

ART 312. Lithography I (4)

Lithographic printmaking; emphasis on techniques and their relationship to the graphic image. Utilization of the techniques of stone and metal printing. Prerequisite: ART 210 or consent of instructor.

ART 410. Relief Printing II (4)

Advanced theories and practices involved in the process of relief printing. Emphasis on color printing and new techniques. May be repeated for a total of 8 units. Prerequisite: ART 210 or consent of instructor.

ART 411. Intaglio Printing II (4)

Advanced problems and new techniques in intaglio printmaking, wood engraving; concentration on printing editions. May be repeated for a total of 8 units. Prerequisite: ART 311, or consent of instructor.

ART 412. Lithography II (4)

Advanced problems in lithographic printmaking; concentration on printing editions. May be repeated for a total of 8 units. Prerequisite: ART 312, or consent of instructor.

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

Fundamental theories and practices involved in the painting processes; emphasis on materials, techniques, tools, and craftsmanship. Problems in the oil medium.

Upper Division**ART 321. Watercolor Painting I (4)**

Techniques of aqueous painting including watercolor, casein, gouache, and egg tempera; concentration upon techniques as they relate to expression. Prerequisite: ART 220, or consent of instructor.

ART 323. Mixed Media I (4)

Techniques of casein, gouache, tempera, collage, acrylic; intermixing of oil and water-base media. Prerequisite: ART 220 or consent of instructor.

ART 395. Painting and Drawing in Mexico (9) Summer Session Only

Drawing and painting direct from nature utilizing the cultural and physical environment of Mexico. Beginning and advanced techniques will be offered. May be repeated. A maximum of 9 units may apply toward the electives in the art major.

ART 420. Oil Painting II (4)

Advanced techniques in oil or acrylic painting; studio problems relating to the development of a personal language. May be repeated for a total of 8 units. (Formerly 422) Prerequisite: ART 220 or consent of instructor.

ART 421. Watercolor Painting II (4)

Advanced problems in aqueous painting with emphasis on the development of a personal language in watercolor, gouache, egg tempera, or casein. May be repeated for a total of 8 units. Prerequisite: ART 321 or consent of instructor.

ART 423. Mixed Media II (4)

Advanced problems in pictorial composition with emphasis on further exploration of mixed media. May be repeated for a total of 8 units. Prerequisite: ART 323 or consent of instructor.

Postbaccalaureate**ART 695. Painting and Drawing in Mexico (9) Summer Session Only**

Drawing and painting direct from nature utilizing the cultural and physical environment of Mexico. Beginning and advanced techniques will be offered. May be repeated. A maximum of 9 units may apply toward the electives in the art major.

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 480. Art Education in Secondary Schools (4)

Contemporary trends in art education. Development, selection, and organization of teaching materials and procedures towards building art curriculum on secondary levels; observation and participation.

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

Lowell G. Richardson, Ph.D., Assistant Professor

George H. Yu, Ph.D., Assistant Professor

Margaret L. Wilson, M.A., Instructor

The Communication Arts and Sciences offers the Bachelor of Arts, Spanish. Minors are offered 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, as well as those who have need for foreign languages to support an academic discipline or profession. Lower division German is offered.

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, SPANISH

Spanish majors are to:

1. Complete the Requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 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

* 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

The Major—Continued

One of the following as approved by major adviser:

	Units
SPAN 343. Spanish-American Literature I	
SPAN 344. Spanish-American Literature II	4
Courses as approved by major adviser	8
Total	32

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

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 Oral and Written Composition, 4 units
One of the following as approved by minor adviser, 4 units:
FREN 341. French Literature I
FREN 342. French Literature II

TEACHING CREDENTIALS †

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

1. Degree minor in French.

* 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.

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

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.

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 Oral and Written Composition (4)

Intensive review of grammar, writing and speaking of current idiomatic French. Prerequisite: FREN 311 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 422. French Novel of the Nineteenth Century (4)

Decisive currents 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 311, 312, 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. Prerequisites: FREN 311, 312 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 dialectal differences and comparison with English. Prerequisite: Consent of instructor.

FREN 498. Individual Study (3-5)

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.

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.

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.

Foreign Languages

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)

Readings in contemporary Spanish prose and poetry, idiomatic written and oral expression. Prerequisite: two years of lower division Spanish or consent of instructor.

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.

SPAN 421. Mexican Literature (4)

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

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.

Foreign Languages

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 498. Individual Study (3-4)

For student 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

SPAN 598. Individual Study (3-5)

For 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.

History

David Bentheim Stenzel, Ph.D., Professor, Chairman
John E. Caswell, Ph.D., Professor
J. W. Smurr, Ph.D., Professor
Franklin B. Holder, Ph.D., Associate Professor
John P. Rasmussen, Ph.D., Associate Professor
Britten Dean, M.A., Assistant Professor
Curtis R. Grant, M.A., 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 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, as well as teaching.

The Department of History offers the degree Bachelor of Arts, History. The College also offers the degree Bachelor of Arts, Social Sciences. The student seeking a Bachelor of Arts, Social Sciences may select an interdepartmental major in history and any other discipline within the social sciences (for the latter, see Social Sciences).*

REQUIREMENTS FOR BACHELOR OF ARTS, HISTORY

History majors are to:

1. Complete the Requirements for the Bachelor of Arts Degree.
2. Complete prerequisites to the major.
3. Complete the major of not less than 40 upper division units.
4. Complete 36 units of course work in addition to the General Education requirements upon advisement from liberal arts fields outside of history, which support their major program.

DEGREE MAJOR IN HISTORY

Prerequisites to the Major

Required courses in the major field:

HIST 101, 102, 103. Western Civilization I-III, 12 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 History, may be acceptable. Transfer students who earn junior or higher standing at Stanislaus State College by spring 1970 are exempt from this requirement!

* Students will be admitted to the Social Sciences interdepartmental program only by advisement and only through the spring 1969 registration period.

History

The Major

Units

Two of the following as approved by major adviser:

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

Two of the following as approved by major adviser:

HIST 311.	Hellenic Civilization I	
HIST 312.	Hellenic Civilization II	
HIST 314.	Medieval Europe I	
HIST 315.	Medieval Europe II	
HIST 320.	Early Modern Europe	
HIST 323.	Nineteenth Century Europe	
HIST 324.	Twentieth Century Europe	8

Two of the following as approved by major adviser:

HIST 365.	Modern Latin America	
HIST 380.	East Asia before 1600	
HIST 381.	East Asia from 1600-1900	
HIST 382.	East Asia in the Twentieth Century	
HIST 403.	Age of Exploration	
HIST 404.	Rise and Fall of European Colonial Systems	
HIST 480.	Modern China	
HIST 484.	Modern Japan	8

Completion of the following:

HIST 496.	Senior Seminar	4
Electives on advisement		12

Total 40

DEGREE MINOR IN HISTORY

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

The courses for the degree minor in history are selected in consultation with and approved by the minor adviser.

TEACHING CREDENTIALS

Major in history for elementary and secondary credentials must fulfill the following requirements:

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

**COURSE DESCRIPTIONS
HISTORY OF CIVILIZATION SERIES****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.

HIST 103. Western Civilization III (4)

Continuation of HIST 102; the modern world since the Enlightenment. Meets General Education requirement in U.S. History.

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 320. Europe from 1500 to 1800 (4)

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.

HISTORY OF AMERICA SERIES**Upper Division****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. Prerequisites: Sophomore standing and one year of college level history.

HIST 362. Ante-Bellum America (4)

United States, 1783-1789. 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.

History

HIST 363. America After Civil War (4)

United States, 1865–1914. Reconstruction through Progressivism: development of a complex urban-industrial society; coming of world power. Meets General Education requirement in U.S. history. Prerequisite: sophomore standing.

HIST 364. Contemporary America (4)

United States, since 1914. World War I to present: America's role as a great power; problems of welfare capitalism. Prerequisite: Sophomore standing and one year of college level history.

HISTORY OF ASIA SERIES

Upper Division

HIST 380. East Asia Before 1600 (4)

The origins and development of the principal institutions and cultural patterns of China, Japan, and Korea from earliest times to about 1600. Prerequisites: Sophomore standing and one year of college level history.

HIST 381. East Asia From 1600 to 1900 (4)

The response of China, Japan, and Korea to the impact of the West, against the background of indigenous institutions and cultural patterns. Prerequisites: Sophomore standing and one year of college level history.

HIST 382. East Asia in the Twentieth Century (4)

The disintegration of the traditional civilizations of China, Japan, and Korea, and their subsequent reintegration. Prerequisites: Sophomore standing and one year of college level history.

HIST 389. East Asian Intellectual History (4)

Historical survey of the major works of Chinese and Japanese thought. Prerequisites: Sophomore standing and one year of college level history.

SPECIALIZED STUDIES

Upper Division

HIST 365. Hispanic America (4)

From European conquest to the present, a rapid survey of colonial institutions, the independence movements, and the development of national states. Prerequisites: Sophomore standing and HIST 101, 102, and 103 or equivalent.

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 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 and Fall of European Colonial Systems I (4)

New colonialism of the nineteenth century in Asia and Africa. Prerequisites: Junior standing and one year of college level history.

HIST 405. Rise and Fall of European Colonial Systems II (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 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. Germany Since 1648 (4)

Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 442. Russia Since 1689 (4)

Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 446. Modern Britain (4)

Tudor era to present: evolution from medieval kingdom to modern state. Prerequisites: Junior standing and HIST 101, 102 and 103 or equivalent.

HIST 470. American Diplomatic History (4)

U.S. foreign relations from colonial period to present. Prerequisites: Junior standing and one year of college level history to include a course in American history.

HIST 474. Constitutional History of the United States (4)

The theory of limited government, and how the American people have applied it. Prerequisites: Junior standing and one year of college level history to include two courses in United States history.

HIST 476. American Religious History (4)

History of American religious institutions and thought from colonial origins to present; importance of European backgrounds and American environment in producing a unique American religious tradition; impact of religion upon American social and cultural development. Prerequisites: Junior standing and two courses in American history.

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.

History

HIST 480. Modern China (4)

Development of China; emphasis on the period 1839 to present. Prerequisites: Junior standing and one year of college level history. HIST 380, 381, and 382 recommended.

HIST 484. Modern Japan (4)

Development of Japan; emphasis on the period 1853 to present. Prerequisites: Junior standing and one year of college level history. HIST 380, 381 and 382 recommended.

HIST 496. Senior Seminar (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 10 units. Prerequisites: Senior standing, advanced course work in history, and consent of instructor.

HIST 498. Individual Study (3-4)

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.

Graduate

HIST 523. Colloquium in Modern European History (5) Not to be offered 1968-69

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 598. Individual Study (3-5)

For qualified graduate student in need of advanced and specialized study. May be repeated for a total of 9 units. Prerequisites: Consent of instructor.

Mathematics

James N. Javaher, Sc.D., Professor, Chairman
 Rudolph B. Merkel, Ph.D., Associate Professor
 Louis A. Feldman, M.A., Assistant Professor
 Narendra L. Maria, M.A., Associate Professor

Courses in mathematics are designed primarily to provide thorough undergraduate training in pure and applied mathematics, and to serve the needs of majors in mathematics, science, and other departments. 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

Prerequisite to the Major

MATH 119. Analytic Geometry and Matrices, 4 units.

MATH 120, 221, 222, 223. Calculus I-IV, 16 units.

The Major

Units

Two of the following sequences:

MATH 311, 312, 313. Advanced Calculus I-III

MATH 321, 322, 323. Differential Equations I-III

MATH 351, 352, 353. Modern Algebra I-II; Linear Algebra

MATH 400, 440. Mathematical Logic; Theory of Numbers

MATH 420, 460. Vector Analysis; Complex Variables 18-24

Courses in mathematics as approved by major adviser 22-16

Total 40

Mathematics

DEGREE MINOR IN MATHEMATICS

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

Lower Division

MATH 119, 120, 221. Analytic Geometry and Matrices; Calculus I-II, 12 units.

Upper Division

MATH 351. Modern Algebra I, 4 units (Physical Science majors may substitute with MATH 321, 420 or 460)

Courses as approved by minor adviser, 12 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 and 302, Foundations of Mathematics, may be taken as a part of the 16-22 units approved by the major adviser in the degree major in mathematics.
3. Secondary credential candidate must complete 9 units in courses in mathematics as postgraduate work and receive approval of Mathematics as to subject matter competence.
4. Complete requirements for credential as presented by the Education Department.

COURSE DESCRIPTIONS *

Lower Division

MATH 100. Math for Liberal Arts Students I (5)

Sets, relations, structure of number systems, systems of numerations, modular arithmetic, properties of the sets of natural numbers, integers, rational and irrational numbers, real numbers, applications. 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 101. Math for Liberal Arts Students II (4)

Continuation of MATH 100. Euclidian geometry, solid figures, measurements, polyhedra, functions and graphs, cartesian coordinates, inequalities, logic, mathematical patterns, and mathematical systems. Recommended for general students and those seeking a junior high school teaching credential. Not open to students who have had MATH 120 or equivalent. Credit not applicable to major or minor in mathematics. Prerequisite: MATH 100 or consent of instructor.

MATH 110. College Algebra and Trigonometry (5)

Binominal theorem, inequalities, theory of equations, quadratic systems, determinants, probability, trigonometric functions; solution of triangles, graphing, inverse functions, complex numbers, polar coordinates, trigonometric series, hyperbolic functions, application to practical problems. Recommended for students of applied sciences. Prerequisite: Two years of high school algebra.

* It is required that the student have earned a grade of C or better in all mathematics courses which are listed as prerequisites.

MATH 119. Analytic Geometry and Matrices (4)

Euclidian plane, coordinate system, functions, analytic trigonometry, properties of vectors, set of complex numbers, analytic geometry and conic sections, matrices, change of coordinate systems, real euclidian space. 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 set theory, axioms of the real-number system, mathematical induction, basic ideas of Cartesian geometry, partitions and step functions, integral for step function, integral of more general functions, technique and theory of integration, basic properties of integral, trigonometric functions, polar coordinates, applications of integration, continuous functions. Prerequisite: MATH 119.

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: One year of high school algebra.

MATH 210. Finite Mathematics (4)

Laws of deductive reasoning, the algebra of sets, partitions and counting, probability, the algebra of vectors and matrices. Applications to linear programming and the behavioral sciences.

MATH 221. Calculus II (4)

Derivatives of a function, algebra of derivatives, chain rule for composite functions, mean-value theorem for derivatives, applications of the mean-value theorem, primitive functions, integration by substitution, integration by parts, the logarithm, the exponential, and the inverse trigonometric functions, polynomial approximations to functions, Taylor's formula, L' Hopital's rule. Prerequisite: MATH 120.

MATH 222. Calculus III (4)

Introduction to differential equations, first-order linear differential equations, linear equations of second order with constant coefficients, integral curves and direction fields, complex numbers, complex-valued functions, sequences, infinite series, improper integrals, convergence tests of Dirichlet and Abel, sequence and series of functions. Prerequisite: MATH 221.

MATH 223. Calculus IV (4)

Vector algebra, applications of vector algebra to analytic geometry, calculus of vector-valued functions, linear spaces, inner products, Euclidian spaces, construction of orthogonal sets, the Gram-Schmidt process, linear transformations and matrices. 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)

Review of basic principles, numerals and systems of numeration, sets, relations and their properties, system of whole numbers, integers, rational numbers, and real numbers. Recommended for elementary and junior high school teachers seeking an advanced course in mathematics. Prerequisite: MATH 110, or consent of instructor.

Mathematics

MATH 302. Foundations of Mathematics II (4)

Selected topics from complex numbers, sets, group and fields, logic, algebra, matrix techniques. Theory of numbers, probability, geometries, and topology. Recommended for secondary school teachers. Prerequisite: Math 301 or consent of instructor.

MATH 311. Advanced Calculus I (4)

Real number system. Point set topology. Metric spaces. Compactness. Bolzano-Weierstrass theorem. Limit and continuity. Rolle's theorem. Mean value theorem. Taylor's theorem. Partial differentiation. Complex variables. Cauchy-Riemann conditions. Implicit function theorem. Lagrange multipliers. Riemann integral. Lebesgue integral on the real line. Multiple integrals and line integrals, Green's theorem, vector analysis, Stokes theorem. Infinite series and infinite products, sequences of functions, improper Riemann-Stieltjes integrals, Fourier series and Fourier integrals. Cauchy's theorem and the residue calculus. Prerequisite: MATH 223.

MATH 312. Advanced Calculus II (4)

Continuation of MATH 311. Prerequisite: MATH 311.

MATH 313. Advanced Calculus III (4)

Continuation of MATH 312. Prerequisite: MATH 312.

MATH 321. Differential Equations I (4)

Exact equations. Linear equations. Laplace transforms and operational methods for linear differential equations. Linear systems. Existence and uniqueness of solutions. Picard's method of successive approximations. Series solutions. Bessel's equation and function. Legendre equation and polynomials. Introduction to partial differential equations. Boundary value problems for elliptic and parabolic equations. Initial value problems for hyperbolic equations. Prerequisite: MATH 221 or consent of instructor.

MATH 322. Differential Equations II (4)

Continuation of MATH 321. Prerequisite: MATH 321.

MATH 323. Differential Equations III (4)

Continuation of Math 322. Prerequisite: MATH 322.

MATH 331. Modern Geometry (4)

Foundations of geometry and the interconnections between geometries. Selected topics in Euclidean geometry, synthetic and analytic projective geometry, and an introduction to basic ideas of non-Euclidean geometrics as developed from an investigation of Euclid's Fifth Postulate and the projective approach. Prerequisite: MATH 120.

MATH 332. Advanced Geometry (4)

A brief discussion of 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 311 (could be taken concurrently with MATH 332).

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 312 (could be taken concurrently with MATH 333).

MATH 351. Modern Algebra I (4)

Elementary properties of groups, rings, integral domains, and fields. Prerequisites: Junior standing and consent of instructor.

MATH 352. Modern Algebra II (4)

Introduction to the theory of vectors and vector spaces. Prerequisite: MATH 351.

MATH 353. Linear Algebra (4)

Algebra of matrices and determinants, linear transformation. Prerequisite: Junior standing and consent of instructor.

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 (5)

The logical rules of proof governing sentential connectives and universal and existential quantifiers with applications. May be applicable to minor in philosophy. Prerequisite: MATH 120.

MATH 420. Vector and Tensor Analysis (5)

Vector Algebra, differentiation of vectors, gradient, divergence, and curl. Applications to geometry and physics. Prerequisite: MATH 222.

MATH 431. Numerical Analysis I (4)

Newton, Lagrange and Chebyshev approximation of functions. Inverse interpolation, numerical evaluation of roots and definite 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 312.

Mathematics

MATH 498. Individual Study (3-4)

For student capable of independent work and in need of advanced and specialized study. May be repeated for a total of 9 units. Prerequisites: Senior standing and consent of instructor.

Graduate

MATH 598. Individual Study (3-5)

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

Professional Postgraduate

MATH 600. Structure of Real Number System (5)

Sets, relations, systems of numerations, modular arithmetics, properties of the sets of natural numbers, integers, rational and irrational numbers, real numbers. 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. Euclidian geometry, solid figures, measurements, polyhedra, functions and graphs, cartesian coordinates, and mathematical systems. Recommended for elementary and junior high school teachers.

Music

Giòvanni Camajani, Ph.D., Associate Professor, Coordinator

Gene C. Wisler, Ed.D., Professor

Sylvia M. Ghiglieri, M.M., Assistant 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 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 Coordinator 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 36 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.

Music

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, 124. Foundational Theory I-III, 9 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 221, 222, 223. 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 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

36

Students preparing for the Credential Program in Music are advised to include courses in String, Woodwind, and Brass Techniques.

DEGREE MINOR IN MUSIC

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

Lower Division

MUS 122, 123, 124. Foundational Theory I-III, 9 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 241 or 242 or 243 or 244. Group Performance (chorus, choral or instrumental ensemble, concert band), 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 15 units in music courses as postgraduate 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 and a Survey of the Oratorio. Music also welcomes general student participation in its group performance courses (chorus, ensembles and concert band). These presume an ability to read music and a degree of performance skill.

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.

Music

COURSE DESCRIPTIONS

THEORY

Lower Division

MUS 101. Solfege I (2)

Study of the rudiments of rhythm, intervals, notation and sight-reading. Students who major or minor in music may enroll for the solfege courses to be taken concurrently with Foundational Theory. Units are not credited to the major or minor, but may be credited towards graduation. No prerequisites.

MUS 102. Solfege II (2)

Continuation of MUS 101. Two-part exercises and elaboration of rhythmic and chromatic difficulties. Prerequisite: MUS 101.

MUS 103. Solfege III (2)

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)

Scales, intervals, all triads and inversions, cadences, chord connections, and four-part writing. Ear training, sight singing, analysis, and keyboard harmony. Prerequisite: Ability to read music.

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 124. Foundational Theory III (3)

Continuation of MUS 122. Secondary dominants, diminished seventh chord, modulation and dominant ninth chord. Ear training, sight-singing, analysis and keyboard harmony. Prerequisite: MUS 123.

MUS 221. Intermediate Theory I (3)

Continuation of MUS 124. Seventh chords and inversions, sequence and non-dominant ninth, eleventh and thirteenth chord. Ear training, sight singing, analysis and keyboard harmony. Prerequisite: MUS 124.

MUS 222. Intermediate Theory II (3)

Continuation of MUS 221. 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 221.

MUS 223. Intermediate Theory III (3)

Continuation of MUS 222. 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 222.

Upper Division

MUS 321. Analysis and Composition in Small Forms (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 small forms. Prerequisite: MUS 223.

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 223 or consent of instructor.

MUS 325. Conducting (3)

A study of basic baton technique and score reading. Prerequisite: MUS 223 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 (3)

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.

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 320. The World of Opera (3)

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. Prerequisite: MUS 100.

MUS 340. American Music (3)

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.

Music

MUS 350. Survey of the Oratorio (3)

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.

Upper Division

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.

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.

MUS 481. Advanced Studio Piano (1)

Individual instruction in piano for advanced students. May be repeated for a total of 12 units. (Formerly 371) Prerequisite: Consent of instructor.

MUS 484. Advanced Studio Voice (1)

Intensive individual study of German lieder, French and Italian repertoire, and introduction to operatic roles and small scenes. May be repeated for a total of 12 units. Prerequisite: Consent of instructor.

MUS 487. Advanced Studio Orchestral Instruments (1)

Individual advanced instruction in orchestral instruments: strings, woodwinds, and brasses. The student is advised to consult a music adviser as to the availability of instruction on his particular instrument. May be repeated for a total of 12 units. 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. P or F grade is given. 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. P or F grade is given. 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. P or F grade is given. 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. P or F grade is given. 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. P or F grade is given. 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. P or F grade is given. 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. P or F grade is given. 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. P or F grade is given. May be repeated for a total of 6 units. Prerequisite: An acceptable degree of performance skill.

Music

MUSIC EDUCATION

Upper Division

MUS 335. Music in Elementary Schools (3)

Application of music to the elementary classroom. Problems, methods and materials covering such areas as singing, rhythms, creative music, music reading and music appreciation. Not open to lower division students.

MUS 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 498. Individual Study (3-4)

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.

MUS 598. Individual Study (3-5)

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

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.

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 3 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 3 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 3 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 3 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.

MUS 281. Intermediate Studio Piano (1)

Individual instruction in piano for intermediate level students. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MUS 284. Intermediate Studio Voice (1)

Individual instruction in singing; introduction to repertoire in English and Italian. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

MUS 287. Intermediate Studio Orchestral Instruments (1)

Individual instruction in orchestral instruments: strings, woodwinds, and brasses. The student is advised to consult a music adviser as to the availability of instruction on his particular instrument. May be repeated for a total of 6 units. Prerequisite: Consent of instructor.

Philosophy

Catherine D. Rau, Ph.D., Professor, Coordinator

DEGREE MINOR IN PHILOSOPHY

Six to twelve units in lower division, as approved by the minor adviser and programmed over at least three quarters. Eighteen to 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 302. Philosophy of Religion I (4)

Critical study of the traditional arguments for the existence of God. Prerequisite: Nine to 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: Nine to 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: Nine to 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: Nine to 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 380. Plato (4)

Critical study of a selection of the *Dialogues* of Plato. Prerequisite: Nine to twelve units in lower division courses in philosophy.

PHIL 381. Aristotle (4)

Critical study of selected works of Aristotle. Prerequisite: PHIL 380.

PHIL 401. Philosophy in Literature (4)

Examination of philosophic attitudes or issues as expressed in poetry, novel, and drama. Aristotelian formalism and classicism, Kantian idealism and romanticism, realism and naturalism, existentialism. Prerequisite: (English majors excepted) Nine to 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) Nine to twelve units in lower division courses in philosophy and senior standing.

PHIL 498. Individual Study (3-4)

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.

Courses in Related Fields

The following course is applicable as elective units in the philosophy minor as approved by minor adviser:

MATH 400. Mathematical Logic (5)

Physical Education and Health

Zaki I. Habashi, Ed.D., Assistant Professor, Coordinator
James K. Hanny, M.A., Assistant Professor
Janet C. Harris, M.S., Instructor

DEGREE MINOR IN PHYSICAL EDUCATION

(27½ units, to include at least 20 upper division units)

Lower Division

- PHED 102. Lifetime Activities, ½ unit (In addition to General Education requirements)
- PHED 103. Team Activities, ½ unit (In addition to General Education requirements)
- HLTH 201. First Aid and Safety, 3 units
- HLTH 220. Health and Society, 3 units
- PHED 251. Intercollegiate Athletics, ½ unit

Upper Division

Required course in supporting field:

- ZOOL 321. Anatomy and Physiology I, 4 units

Required courses in major field:

- HLTH 310. Prevention and Care of Athletic Injuries, 3 units
- PHED 310. Foundations of Physical Education, 4 units
- PHED 325. Analysis of Movement, 3 units
- PHED 460. Administration and Organization of Physical Education, 4 units

Two of the following as approved by minor adviser, 6 units

- PHED 320. Theory and Practice of Team Sports
- PHED 321. Theory and Practice of Individual Sports
- PHED 324. Theory and Practice of Social Dance

TEACHING CREDENTIALS *

Minor in physical education seeking elementary and secondary credentials must complete the following:

1. Degree minor in physical education.
2. Secondary credential candidate must receive approval of minor adviser as to subject matter competence.

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.

* See Education.

Physical Education

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, 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, 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, and track. 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: ZOO 321.

PHED 360. Intramural Programs for Schools (3)

The organization, administration and motivation of intramural activities for schools including practical field experience.

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 498. Individual Study (3-4)

For student 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.

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: ZOO 321.

Physical Sciences

Vladimir S. Tuman, Ph.D., Professor of Physics, Chairman
Ervin C. Schwarcz, Ph.D., Associate Professor of Physics
James M. Goodwin, M.S., Assistant Professor of Physics
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Glen O. Hultgren, Ph.D., Assistant Professor of Chemistry
Evan M. Thompson, Ph.D., Assistant Professor of Chemistry

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, chemistry, 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 37 upper division units.
4. Complete a minor to be selected in consultation with the major adviser. A minor in mathematics is recommended.

DEGREE MAJOR IN PHYSICAL SCIENCE

Prerequisites to the Major

Required courses in major field:

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

CHEM 211. Analytic Chemistry I, 4 units

PHYS 101. Mechanics and Heat, 5 units

PHYS 102. Electricity and Optics, 5 units

PHYS 103. Modern Physics, 5 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. Analytic Geometry and Matrices, 4 units;

MATH 120. Calculus I, 4 units

The Major

Units

PHYS 311. Analytical Mechanics I	3
PHYS 322. Electromagnetism	3
PHYS 372. Modern Physics	4

Physical Sciences

The Major—Continued

Units

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:	
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	
CHEM 322, 323, 325, 326. Organic Chemistry	
CHEM 461, 462, 463. Physical Chemistry	19-12
Total	37

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 postgraduate work and receive approval 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.

COURSE DESCRIPTIONS

ASTRONOMY

Lower Division

ASTR 200. Descriptive Astronomy (4)

Topics in development of astronomy: solar system and stars. Lectures, observations, and field trips. (Formerly 300)

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.

Physical Sciences

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

GEOL 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)

GEOL 201. Principles of Geology II (4)

Continuation of GEOL 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: GEOL 200 or consent of instructor.

GEOL 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

GEOL 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)

PHYSICAL SCIENCE

Lower Division

PHSC 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.

Upper Division

PHSC 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.

Postbaccalaureate

PHSC 600. Physical Sciences (4)

Elementary concepts of physics and chemistry: atoms and molecules; mechanical, chemical and electrical properties of matter. (Lecture, 3 hours; laboratory, 2 hours)

Physics

Vladimir S. Tuman, Ph.D., Professor of Physics, Chairman,
Department of Physical Sciences

Ervin C. Schwarcz, Ph.D., Associate Professor of Physics

James M. Goodwin, M.S., 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 or chemistry is recommended.

DEGREE MAJOR IN PHYSICS

Prerequisites to the Major

Required courses in major field:

PHYS 101. Mechanics and Heat, 5 units

PHYS 102. Electricity and Optics, 5 units

PHYS 103. Modern Physics, 5 units

PHYS 221, 222, 223. Intermediate Physics I-III, 15 units

Required courses in supporting field:

(These courses may also apply towards the minor)

MATH 119. Analytic Geometry and Matrices, 4 units

MATH 120, 221. Calculus I-II, 8 units

MATH 321, 322, 323. Differential Equations I-III, 12 units

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

The Major

	Units
PHYS 301, 302, 303. Advanced Laboratory I-III	3
PHYS 311, 312. Analytical Mechanics I-II	6
PHYS 322, 323. Fundamentals of Electrodynamics I-II	6

Physics

The Major—continued

	Units
PHYS 330. Introduction to Electronics	2
PHYS 372. Modern Physics	3
PHYS 373, 374. Quantum Mechanics I-II	6
PHYS 401, 402, 403. Advanced Laboratory IV-VI	3
PHYS 451. Thermodynamics	3
PHYS 452. Introduction to Statistical Mechanics	3
A minimum of six 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	6
Total	41-43

DEGREE MINOR IN PHYSICS

Consists of 21 units in physics as approved by the minor adviser, to include at least 9 units in upper division.

COURSE DESCRIPTIONS

Lower Division

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. Intermediate Physics I (5)

Modern laboratory techniques to study the problems of mechanics; such as, displacement, velocity acceleration of an electron, oscillations, and exponential relaxation. (Lecture, 3 hours; discussion 1 hour; laboratory, 3 hours) Prerequisites: PHYS 101 and completion of or concurrent enrollment in MATH 221.

PHYS 222. Intermediate Physics II (5)

Continuation of PHYS 221. Modern laboratory techniques to study the problems of electricity and magnetism, and solid state physics. Use of transistors, oscilloscope, power supply oscillators, coupled oscillators, periodic structure. (Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours) Prerequisites: PHYS 102, 221, and MATH 221.

PHYS 223. Intermediate Physics III (5)

Continuation of PHYS 222. Modern physics and quantum mechanics utilizing modern laboratory techniques. Electron diffraction, Franck-Hertz experiment, radioactive decay, random processes. (Lecture, 3 hours; discussion 1 hour; laboratory, 3 hours) Prerequisites: PHYS 103, 222, and MATH 221.

Physics

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 (3)

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. Prerequisites: MATH 224 and PHYS 102.

PHYS 312. Analytical Mechanics II (3)

Continuation of PHYS 311. (Formerly 311) Prerequisite: PHYS 311.

PHYS 322. Electromagnetism I (3)

Fundamental principles, their application to both direct current and alternating current circuit theory. Introduction to Maxwell's electromagnetic theory of light and radio waves. Prerequisites: MATH 321 and PHYS 102.

PHYS 323. Electromagnetism II (3)

Continuation of PHYS 322. (Formerly 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 (2)

Fundamental principles and theory of rectifiers; amplifiers; oscillators, oscilloscope and other resonant circuits and A.C. bridges. Prerequisites: PHYS 222 or concurrent enrollment or consent of instructor.

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 325.

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. (Formerly Modern Physics II) 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 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. (Formerly 351) 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. (Formerly 382) 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, bond 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.

Physics

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 498. Individual Study (3-4)

For student 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 (3-5)

For qualified graduate student 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., Assistant Professor, Coordinator
Young Hang Chang, Ph.D., Assistant Professor
Stanley W. Moore, B.A., 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 201. American Government, 4 units
- PSCI 213. Comparative Government, 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

Students are strongly encouraged to take an introductory course in statistics.

The Major

Three courses required in supporting fields as approved by major adviser.

Required courses in Political Science

Units

PSCI 312. Comparative Politics	4
PSCI 321. Ancient and Medieval Political Thought	4
PSCI 322. Modern Political Thought	4
PSCI 331. International Relations	4

Political Science

Required courses in Political Science—continued	Units
PSCI 350. Basic Factors in American Politics	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 postgraduate work and receive approval 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 213. Comparative European Government (4)

Survey of governments and politics of France, Germany, Great Britain, and the Soviet Union. (Formerly 301)

Upper Division

COMPARATIVE POLITICAL SYSTEMS

PSCI 311. Anglo Political Systems (4)

Organization and operation of the government of Great Britain with particular reference to contemporary British political issues. Prerequisites: PSCI 202 and 213.

PSCI 312. Comparative Politics (4)

Creates a frame of reference for the analysis of political systems in diverse social settings. Prerequisites: PSCI 202 and 213.

PSCI 313. Totalitarian Political Systems (4)

An analysis of the essential functions characteristic of totalitarian political systems. Prerequisites: PSCI 202 and 213.

PSCI 314. Politics in the Developing Areas (4)

Comparative analysis of nation-building as a political process. Prerequisites: PSCI 202 and 213.

PSCI 315. Comparative Politics of Asia (4)

Survey of governments and politics of Japan, China, India, and countries in Southeast Asia.

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 213.

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 213.

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 213.

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 213.

PSCI 324. Problems in Political Theory (4)

Analysis and discussion of selected issues and/or systems in Western political thought. Prerequisites: PSCI 202 and 213.

PSCI 421. Political Change: A Study of Revolution (4)

A systematic and analytic study of revolution as one form of political change. Prerequisites: PSCI 202 and 213.

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 213.

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 213.

PSCI 335. International Law (4)

Problems, principles and development of international law. Prerequisites: PSCI 202 or equivalent.

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 213.

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 213 or consent of instructor.

Political Science

AMERICAN POLITICS

PSCI 350. Basic Factors in American Politics (4)

Organization and conduct of political life in the United States. Prerequisites: PSCI 202 and 213.

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 213.

PSCI 352. Political Behavior (4)

American voting behavior, political attitude and opinion formation. Prerequisites: PSCI 202 and 213.

PSCI 354. Legislative Process (4)

Leadership, voting, and work groups in the legislature; legislative-executive relations. Prerequisites: PSCI 202 and 213.

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.

PSCI 496. Senior Seminar (4)

Investigation and analysis of questions with immediate relevancy to the problems of war and peace. Prerequisites: Senior standing or consent of instructor.

PSCI 498. Individual Study (3-4)

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.

Psychology

Lloyd H. Ahlem, Ed.D., Professor, Chairman
Louise F. Bronson, Ph.D., Assistant Professor
W. Mack Goldsmith, Ph.D., Assistant Professor
Arthur W. Webber, Ph.D., 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, (2) plan to enter a profession or occupation in which a strong background in psychology is necessary, or (3) wish to prepare for graduate work in psychology.

The 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 36 upper division units, as approved by the major adviser.
4. Completion of a minor or a special program in lieu of a minor with approval of the major adviser.

DEGREE MAJOR IN PSYCHOLOGY

Prerequisites to the Major

PSYC 201. Introduction to Psychology, 4 units

Recommended courses in supporting fields:

BIOL 101. Principles of Biology, 5 units

ZOOL 102. Principles of Zoology, 5 units

ANTH 206. Cultural Anthropology, 4 units

SOCL 201. Introduction to Sociology, 4 units

Required courses in supporting fields:

One of the following or equivalent, 4-5 units:

MATH 100, 101. Math for Liberal Arts Students I, II

MATH 110. College Algebra and Trigonometry

MATH 120. Calculus I

Psychology

The Major

	Units
PSYC 304. Experimental Methods in Psychology I.....	5
PSYC 305. Experimental Methods in Psychology II.....	5
PSYC 490. Psychological Research Design	5
PSYC 496. Senior Seminar	4
Courses in psychology as approved by major adviser *	17
Total	36

* SOCL 361 The Small Group, may be applied to the major program if it is not included in a minor in sociology or anthropology.

DEGREE MINOR IN PSYCHOLOGY

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

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.

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 300 and 400 level courses in psychology.

PSYC 205. Applied Psychology (3)

Application of psychological principles to medicine, law, advertising, salesmanship, religion, esthetics, business and personnel relations. Prerequisite: PSYC 201.

Upper Division

PSYC 300. Psychology of Marriage (4)

Psychological and ethical aspects of courtship, marriage and family life. Prerequisite: PSYC 201, junior standing or consent of instructor.

* 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.

PSYC 304. Experimental Methods in Psychology I (5)

Introduction to methodology in psychological research: psychophysical methods, scaling; application of psychological measurement in conjunction with laboratory experiments. (Lecture, 4 hours; laboratory, 3 hours) (Formerly 331). Prerequisites: PSYC 201, MATH 100 or equivalent, or consent of instructor (MATH 110 or equivalent preferred to MATH 100).

PSYC 305. Experimental Methods in Psychology II (5)

Continuation of PSYC 304. Conditioning, learning, and group processes correlated with methodology on sampling distributions and techniques of inference. (Lecture, 4 hours; laboratory, 3 hours) Prerequisite: PSYC 304.

PSYC 309. Comparative Psychology (4)

The comparative method in the study of psychological problems; evolution of behavior and its mechanisms from protozoa to man. Prerequisites: PSYC 201 and consent of instructor.

PSYC 310. Physiological Psychology (4)

Relationship of behavioral aspects to biological processes. Prerequisites: PSYC 201 and consent of instructor.

PSYC 313. Human Development (5)

The psychology of development: infancy, childhood, adolescence, maturity and old age. Not open to students who have had PSYC 311. Prerequisite: PSYC 201.

PSYC 321. Mental Hygiene (3)

Principles of mental hygiene; maintenance and enhancement of mental health. Theories of human adaptation. Prerequisite: PSYC 201.

PSYC 402. History of Psychology (4)

Trends of thought and speculation from ancient times leading into the development of psychology as a separate discipline with its own issues, leaders, and schools. Prerequisites: PSYC 201 or equivalent, and three upper division psychology courses or consent of instructor.

PSYC 413. Mental Deficiency (4)

The etiology, diagnosis and remediation of mental deficiency. Prerequisites: PSYC 311 or 313 or 321 or 431 or 432 or consent of instructor.

PSYC 431. Social Psychology (4)

Interpersonal relations, dynamics from the interpersonal point of view, social attitudes, language, society and culture, group dynamics. Prerequisite: PSYC 201.

PSYC 432. Psychology of Personality (4)

Survey of theories of personality. Prerequisites: PSYC 201 and consent of instructor.

PSYC 435. Abnormal Psychology (4)

Psychology of abnormal behavior: neurosis and psychosis, stressing etiology, symptoms, dynamics, diagnosis and treatment. (Formerly 421) Prerequisite: three courses in psychology.

PSYC 441. Industrial Psychology (3)

Application of psychological principles to business and industry. Prerequisites: PSYC 304, 431, 432, or consent of instructor.

Psychology

PSYC 461. Group Psychological Testing (4)

Basic concepts of psychological measurement as applied in construction, evaluation, and use of group-administered psychological tests. (Formerly 561) Prerequisite: PSYC 304.

PSYC 471. Theory and Research in Learning (4)

Contemporary theories of learning, major aspects of the learning process and a broad spectrum of learning situations, together with a description of perceptual, verbal, emotional, and motor habits. Prerequisites: PSYC 304 and 305.

PSYC 477. Counseling Theory (4)

Consideration of the major theories of counseling. Demonstrations and reviews of current literature. See EDUC 477. Prerequisite: PSYC 321 or 432 or 435.

PSYC 478. Psychology of Motivation (4)

Biological, social aspects of motivation; techniques of assessment; motivation as a variable in psychological research. Prerequisites: PSYC 201 and at least one upper division course in psychology.

PSYC 481. Advanced Social Psychology (4)

Advanced study of social behavior. Perception, motivation, attitudes and values applied to critical social issues. Prerequisite: PSYC 431 or 432 or consent of instructor.

PSYC 490. Psychological Research Design (4)

Application of basic design and inferential procedures in psychological research. Prerequisites: PSYC 304, 305, and senior standing.

PSYC 496. Senior Seminar (4)

Review and discussion of current literature and general psychological topics. In addition, each student will report on an individual project. Course may be repeated for a total of 8 units. Prerequisite: PSYC 304 and senior standing.

PSYC 498. Individual Study (3-4)

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.

Graduate

PSYC 578. Advanced Counseling (4)

Counseling practices including commonly used methods of psychotherapy practice in techniques of counseling. See EDUC 578. Prerequisite: PSYC 477.

PSYC 598. Individual Study (3-5)

For qualified graduate student 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., Chairman, Division of Arts and Sciences

The central problem basic to the various social science disciplines is the study of man in society. Study in the social sciences is pertinent to the liberal arts background for all students.

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 the central element of a liberal arts education, as the academic major for the teaching credential, as preparation for a variety of professions, or as preparation for specialization in graduate study.

REQUIREMENTS FOR BACHELOR OF ARTS, SOCIAL SCIENCES

Social Science Interdepartmental majors are to:

1. Complete the Requirements for the Bachelor of Arts Degree.
2. Complete the major of not less than 40 upper division units approved by the major adviser in two of the following disciplines: anthropology (subordinate field only), economics, history, political science, psychology, and sociology. Of these 40 units, at least 24 units must be in a principal field and at least 16 units must be in a subordinate field. Prerequisites to the major are a minimum of 4 lower division units in each of the two disciplines selected for the major.
3. Complete a minor to be selected in consultation with the major adviser.
4. Recommendation: Two years of college level foreign language or equivalent.

DEGREE MINOR IN SOCIAL SCIENCES

A divisional minor in social sciences is not offered. For requirements for minors in the social sciences, see sections of this catalog pertaining to anthropology, economics, history, political science, psychology, and sociology.

TEACHING CREDENTIALS

Majors in social sciences seeking elementary and secondary credentials:

1. For students seeking the General Elementary teaching credential, the Inter-Departmental Major in social sciences is recommended.
2. For students seeking the General Secondary teaching credential, the degree major in history is recommended.
3. Students seeking the General Secondary teaching credential who elect the interdepartmental major must have at least 20 upper division units in history or political science.

* Students will be admitted to the social sciences interdepartmental program only through the spring 1969 registration period.

Sociology

Antonio Donini, Ph.D., Assistant Professor, Coordinator
Harriet C. Stull, Ph.D., Associate Professor

The Division of Arts and Sciences 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

ANTH 206. Introduction to Cultural Anthropology, 4 units

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

The Major

A minimum of 36 upper division units distributed as follows:

Social Organizations and institutions.....	8
Social Processes	8
Theory and Methodology.....	8

The Major—Continued	Units
† Electives from Sociology.....	12
Total	36

† The elective units should be selected in consultation with and approved by the major adviser. PSYC 431, 432 and 441, 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.

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.

Upper Division

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.

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.

* 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.

Sociology

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 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.

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.

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 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 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.

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 (3-4)

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.

Faculty

- Capurso, Alexander (1963) President;
 Professor of Humanities and Fine Arts
 Pennsylvania State University, 1930-31; Temple University, 1931-32; B.S., 1933;
 M.A., 1934; Ph.D., 1938, University of Kentucky; Doctor of Music (*Honoris
 Causa*), 1957, Philadelphia Musical Academy; Doctor of Laws (*Honoris Causa*),
 1968, Oklahoma City University
- Ahlem, Lloyd H. (1962) Professor of Psychology
 A.B., 1952; M.A., 1955 San Jose State College; Ed.D., 1962, University of Southern
 California; Certified Psychologist, 1959, State of California
- Antonich, James J. (1967) Assistant Professor of English
 B.A., 1962; M.A., 1964, University of Montana
- Aubert, Edward J. (1961) Director of Admissions and Records
 B.S., 1956, University of San Francisco; M.B.A., 1961, University of California,
 Berkeley
- Balbo, Frank C. (1964) Business Manager
 B.S., 1937, University of California, Berkeley
- Barrett, Thomas P. (1961) Associate Professor of Business Administration
 B.A., 1954, Northeastern University; M.A., 1958, Michigan State University
- Beamish, Jerome J. (1964) Associate Dean, Counseling and Testing
 Instructor in Psychology
 B.A., 1957, Sir George Williams University; M.A., 1958; Ph.D., 1962, Columbia
 University
- Bell, Jo P. (1968) Acquisitions Librarian
 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
- 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
- Bowers, Alfred W. (1967) Visiting Lecturer in Anthropology
 B.S., 1928, Beloit College; M.A., 1929, Ph.D., 1948, University of Chicago
- Brewer, Joseph E. Associate Dean, Curriculum, Associate Professor of English
 B.A., 1947, University of Akron; M.A., 1948, University of Cincinnati; Ph.D.,
 1954, Western Reserve University
- Bruggman, Joseph E. (1960) Dean of Student Affairs;
 Professor of Music
 B.A., 1941, San Jose State College; M.A., 1947; Ed.D., 1949, Columbia University
- Camajani, Giovanni (1964) Associate Professor of Music
 B.S., 1937; M.A., 1942; Ph.D., 1945, New York University; Fellow, 1945, Trinity
 College, London

Faculty

- Camarata, Martin L. (1964).....Associate Professor of Art
B.S., 1956, New York State University College at Buffalo; M.A., 1957, New York University
- Caswell, John E. (1960).....Professor of History
B.A., 1934; M.A., 1937, University of Oregon; Ph.D., 1952, Stanford University
- Chang, Young H. (1967).....Assistant Professor of Political Science
B.A., 1960, Kyung Hee University; M.A., 1962, Graduate School of Kyung Hee University; M.I.S.; Ph.D., 1967, Claremont Graduate School.
- 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).....Associate Professor of Education
A.B., 1947; M.A., 1948, Stanford University; Ed.D., 1956, Teachers College Columbia University
- Credell, Edward R. (1967).....Assistant Professor of Education
A.B., 1949, Fresno State College; M.S., 1956; M.Ed., 1960, University of Southern California; Ph.D., 1967, Northwestern University.
- Crowley, Gerard J. (1960).....Executive Dean;
Professor of Management
A.B., 1942, Loyola College; Ed.M., 1951, Boston University
- Dean, Britten (1967).....Assistant Professor of History
A.B., 1957, Brown University; M.A., 1962, Columbia University.
- Donini, Antonio (1966).....Assistant Professor of Sociology
A.B., 1941, Institute of Classical Literature and Humanities, Cordoba, Argentina; M.A., 1945, Faculty of Philosophy, San Miguel, Buenos Aires, Argentina; M.A., 1957; Ph.D., 1960, Institute of Social Sciences in the Gregorian University, Rome, Italy
- Farnsworth, Richard B. (1967).....Associate Dean, Educational Services and
Summer Session, Lecturer in Education
B.A., 1935, University of Montana; M.A., 1942, Stanford University
- Farrar, Charles R. (1960).....Associate 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, University of California, Berkeley
- Fisher, Richard G. (1967).....Counselor, Financial Aids/Foreign Students
B.A., 1963, University of Dubuque; M.A., 1965, University of Iowa
- 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).....Assistant 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.

Faculty

- Goldsmith, W. Mack (1966) Assistant Professor of Psychology
A.B., 1957, Ripon College; Ph.D., 1966, Cornell University
- Grant, Curtis R. (1966) Assistant Professor of History
A.B., 1960, Stanford University; M.A., 1961, University of California, Berkeley
- 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.
- Gubernick, Richard (1968) Assistant Professor of Art
B.S., 1955, New York State University College at Buffalo; M.F.A., 1968, Univer-
sity of Massachusetts
- Habashi, Zaki I. (1965) Assistant 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
- Hamilton, Hobart G. (1968) Assistant Professor of Chemistry
B.S., 1961, University of Texas; M.S., 1963; Ph.D., 1967, New Mexico State Uni-
versity
- Hanny, James K. (1966) Assistant Professor of Physical Education
B.A., 1949; M.A., 1957, College of 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
- Harris, Janet C. (1967) Instructor of Physical Education
B.S., 1965; M.S., 1966, University of California, Los Angeles
- Harrison, Francis B. (1968) Administrative Assistant
B.S., 1938, U.S. Military Academy; M.B.A., 1953 Syracuse 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) Assistant Professor of Drama
B.F.A., 1959, University of New Mexico; M.A., 1966, San Francisco State College
- Jacobs, Laurence H. (1967) Assistant Professor of English
B.A., 1963; M.A., 1964, University of California, Berkeley
- 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; Sc.D.,
1960, University of Paris
- Jensen, James P. (1961) Associate Professor of English
B.A., 1953; M.A., 1957; Ph.D., 1964, University of Washington
- Johnson, Lola V. (1960) Assistant Professor of English
B.A., 1956; M.A., 1959, University of the Pacific
- Johnston, Staten M. (1967) Accounting Officer
- Jones, Richard V. (1966) Associate Professor of Education
B.A., 1956; M.A., 1956; Ed.D., 1966, Stanford University

Faculty

- Kalb, Klaus H. (1967) Associate Professor of Economics
Undergraduate study in Germany; M.Sc., 1961, Kansas State University; Ph.D.,
1964, Ohio State University
- Kottke, Frederick E. (1963) Professor of Economics
B.S., 1952, Pepperdine College; M.A., 1957, University of Wisconsin; Ph.D.,
1960, University of Southern California
- Magnelia, Paul F. (1966) Assistant Professor of Political Science
B.A., 1955, Washington University; M.A., 1960, University of the Americas;
Ph.D., 1967, University of Geneva
- Maloy, Miriam C. (1960) Technical Services Librarian
A.B., 1930; Librarianship Certificate, 1931, University of California, Berkeley
- Maria, Narendra L. (1968) Associate Professor of Mathematics
B.A., 1948; M.A., 1949, Punjab University, India
- Mayol, Perpetuo S. (1968) Assistant Professor of Biological Sciences
B.S.A., 1957, University of the Philippines; M.S., 1965, Oklahoma State University
- McClintock, William F. (1963) Coordinator of Credential Programs,
Professor of Education
A.B., 1937, Occidental College; M.A., 1949; Ph.D., 1957, Claremont Graduate
School
- McManus, Betty D. (1965) Counselor and Test Officer
B.A., 1948, University of Miami; M.Ed., 1960, Xavier University
- Merkel, Rudolph B. (1967) Associate Professor of Mathematics
A.B., 1949, Sacramento State College; M.A., 1957; Ph.D., 1964, University of
California at Davis
- Moore, Stanley W. (1967) Assistant Professor of Political Science
B.A., 1959, Wheaton College
- Moriconi, R. J. (1968) Assistant Professor of Education
A.B., 1955; M.A., 1957, Stanford University; Ed.D., 1967, University of Florida
- Neal, Bobby J. (1966) Assistant Professor of Biology
B.A., 1954, San Jose State College; M.A., 1957; Ph.D., 1964, University of Arizona
- Nickerson, Melvin R. (1966) Coordinator of A-V Services
A.B., 1956; A.M., 1960, University of 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
- 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
- Platt, James H. (1966) Associate 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

* On sabbatical leave 1968-69.

Faculty

- Quinley, C. W., Jr. (1962)..... Registrar
A.B., 1950, San Jose State College
- 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 at Berkeley
- Richardson, Lowell G. (1964)..... Assistant 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
- 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)..... Associate Professor of Education
A.B., 1949; M.A., 1953, San Francisco State College; Ed.D., 1961, University of California, Berkeley
- Schwarcz, Ervin H. (1967)..... Associate Professor of Physics
B.S., 1945, Ohio State University; M.S., 1948; Ph.D., 1955, University of Michigan
- Smurr, J. W. (1967)..... Professor of History
B.A., 1950; M.A., 1951, University of Montana; Ph.D., 1960, Indiana University
- 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)..... Associate 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
- Thompson, Evan M. (1965)..... Assistant 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
- Townsend, Maurice K. (1966)..... Dean of the College
Professor of Political Science
A.B., 1949, Boston University; A.M., 1950; Ph.D., 1954, University of Chicago
- 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
- Watling, Thomas C. (1967)..... Associate Dean of Activities and Housing
B.A., 1949; M.Ed., 1955, Drury College; Ph.D., 1967, University of Denver

** On leave of absence 1968-69.

Faculty

- Webber, Arthur W. (1967).....Assistant Professor of Psychology
B.A., 1962, Stanford University; Ph.D., 1968, University of Texas at Austin
- White, Thomas J. (1960).....Business Services Officer
A.B., 1950, San Diego State College
- 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

NEW APPOINTMENTS

- Al-Ameen, Abdul (1968).....Assistant Professor of Economics
B.A., 1960, Baghdad University, Iraq; M.A., 1964, University of Sheffield, England
- Baumann, Michael L. (1968).....Visiting Lecturer in English
B.A., 1950, Reed College; M.A., 1956, University of Pennsylvania
- Bretz, Richard D. (1968).....Assistant Professor of English
B.A., 1960, Cornell College; M.A., 1964, Ohio University
- Bronson, Louise F. (1968).....Assistant Professor of Psychology
B.A., 1945, University of Rochester; M.A., 1951, University of Florida; Ph.D., 1966, University of Arizona
- Goodwin, James M. (1968).....Assistant Professor of Physics
B.S., 1958, Pennsylvania State University; M.S., 1964, University of Washington
- Hultgren, Glen O. (1968).....Assistant Professor of Chemistry
B.S., 1958, University of California, Berkeley; Ph.D., 1966, California Institute of Technology
- Lambright, Robert W. (1968).....Professor of Marketing
B.A., 1952; M.B.A., 1954; D.B.A., 1966, University of Washington at Seattle
- Norris, John H. (1967).....Lecturer in Business
B.A., 1965, Stanislaus State College; M.B.A., 1967, Fresno State College
- Schmidt, Nancy J. (1968).....Assistant Professor of Anthropology
B.A., 1958, Oberlin College; M.A., 1961, University of Minnesota; Ph.D., 1965, Northwestern University
- Smith, Priscilla R. (1968).....Assistant Professor of Education
A.B., 1941, John B. Stetson University; M.Ed., 1953, National College of Education; Ed.D., 1963, University of Denver
- Wilson, Margaret L. (1968).....Instructor of Foreign Languages
A.B., 1966, Stanislaus State College; M.A., 1968, University of California, Davis

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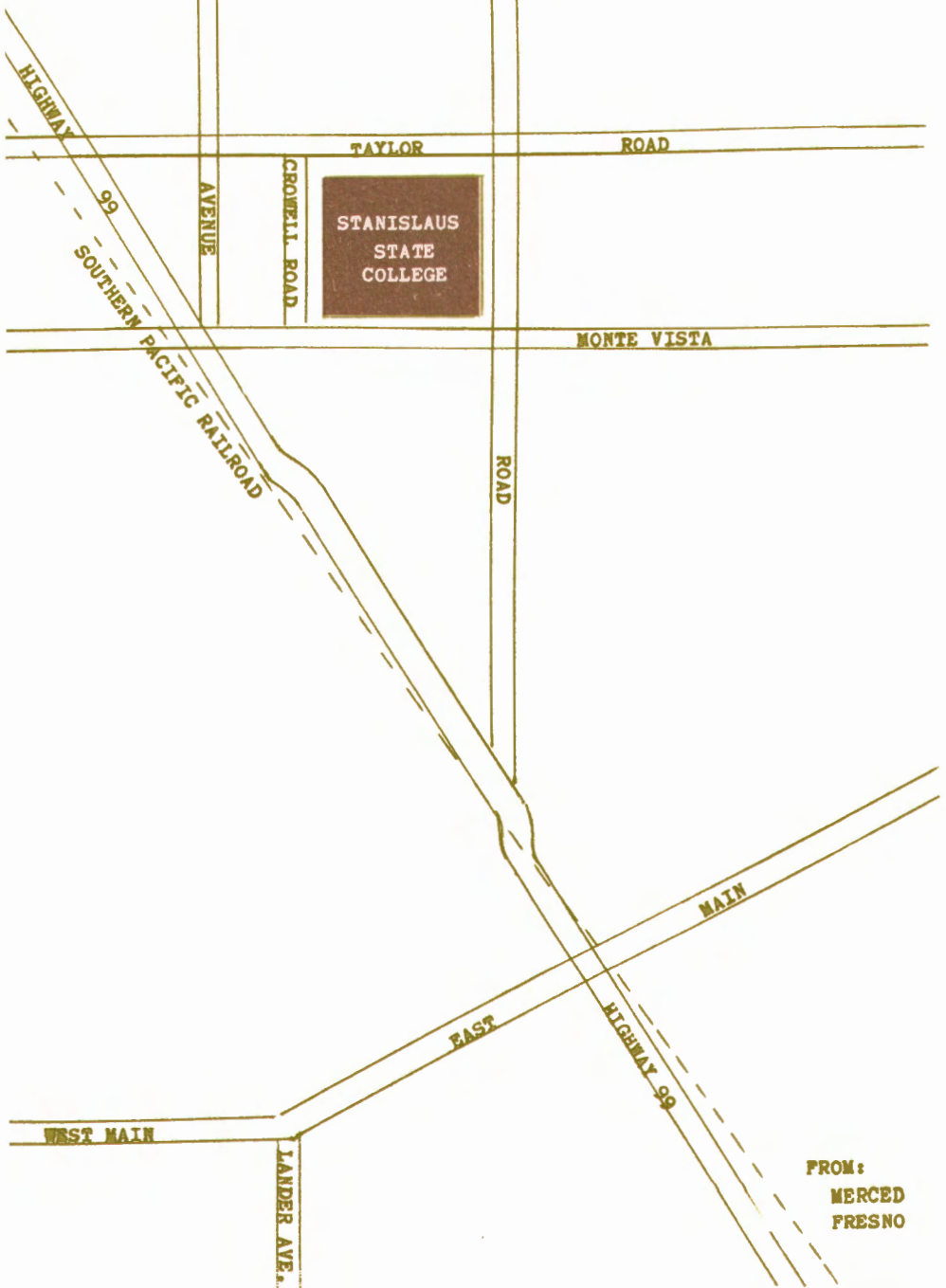
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