This Bulletin represents the College's course descriptions and requirements at the undergraduate and graduate levels. California State College, San Bernardino reserves the right to revise Bulletin provisions in accordance with official actions of the Board of Trustees of the California State University and Colleges and other governing bodies. Students are advised to consult the appropriate department, school or office for current information. Supplementary bulletins contain additional information about graduate and summer programs.

Inquiries about admission to the College should be directed to Associate Dean of Admissions, (714) 887-7301; requests for general academic information and about graduate programs may go to the Dean of Academic Planning, (714) 887-7521, California State College, San Bernardino, 5500 State College Parkway, San Bernardino, CA 92407.

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CALENDAR
1975-76

FALL TERM

Sept. 1     Labor Day, administrative holiday
Sept. 15    Beginning of the academic year
Sept. 15-19 Orientation and testing of new students
Sept. 18    Advising for juniors, seniors and graduate students
Sept. 19    Advising for freshmen and sophomores
Sept. 22-23 Registration
Sept. 25    Classes begin
            Late registration
Oct. 1      Last day to add classes
Oct. 15     Last day to drop classes
Oct. 16     Last day to file graduation check for March graduation
Nov. 27-28  Thanksgiving, academic and administrative holiday
Dec. 1-5    Advising
Dec. 5      Last day of classes
Dec. 8-10   Final examinations
Dec. 10     End of term
Dec. 25-26  Christmas, administrative holiday

WINTER TERM

Jan. 1      New Year’s Day, administrative holiday
Jan. 2 and 5 Registration
Jan. 6      Classes begin
            Late registration
Jan. 12     Last day to add classes
Jan. 26     Last day to drop classes
Jan. 27     Last day to file graduation check for June, July and August graduation
March 8-12  Advising
March 15  Last day of classes
March 16-18  Final examinations
March 18  End of term

SPRING TERM
March 25-26  Registration
March 29  Classes begin
April 2  Late registration
April 16  Last day to add classes
April 19  Last day to drop classes
April 19  Last day to file graduation check for December graduation
May 31  Memorial Day, academic and administrative holiday
June 7  Last day of classes
June 9-11  Final examinations
June 11  End of term
June 12  Commencement
June 20  End of academic year

SUMMER SESSIONS
June 18  Registration
June 21  Classes begin for 6-week session
July 2-5  Independence Day, academic and administrative holiday
July 27  Classes end for 6-week session
August 2  Classes begin for 3-week session
August 20  Classes end for 3-week session
THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act in 1960. In 1972 the system became The California State University and Colleges and 14 of the 19 campuses received the title University.

The oldest campus, San Jose State University, was founded in 1857 and became the first institution of public higher education in California. The newest campus, California State College, Bakersfield, began instruction in 1970.

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

The trustees, the chancellor and the presidents develop systemwide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of The California State University and Colleges, made up of elected representatives of the faculty from each campus, recommends academic policy to the Board of Trustees through the chancellor.

Academic excellence has been achieved by The California State University and Colleges through a distinguished faculty, whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character, all campuses, as multipurpose institutions, offer undergraduate and graduate instruction for professional and occupational goals as well as broad liberal education. All of the campuses require for graduation a basic program of "general education-breadth requirements" regardless of the type of bachelor's degree or major field selected by the student. A few doctoral degrees are offered jointly with the University of California.

Presently, under the system's "new approaches to higher education," the campuses are implementing a wide variety of innovative programs to meet the changing needs of students and society. Among pilot programs under way are instructional television projects, self-paced learning plans, minicourses and credit-by-examination alternatives. The Consortium of The California State University and Colleges fosters and sponsors local, regional and statewide external degree and certificate programs to meet the needs of individuals who find it difficult or impossible to attend classes on a campus.

Enrollments in fall 1974 totaled nearly 292,000 students, taught by a faculty of 16,000. Last year the system awarded more than 57 percent
of the bachelor's degrees and 36 percent of the master's degrees granted in California. More than 465,000 persons have been graduated from the campuses since 1960.

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SAN BERNARDINO: LOCATION AND HISTORY

The city of San Bernardino is situated at the foot of the San Bernardino Mountains, which form the northeastern boundary of the San Gabriel Valley. The valley's western terminus, 60 miles away, is the Los Angeles basin and the beaches of the Pacific Ocean.

In earlier times the San Bernardino area was the home of Serrano, Luiseno and Cahuilla Indians. The first pioneers from Mexico settled in the San Gabriel Valley in the 1770's. Mission San Gabriel was founded by Fr. Junipero Serra in 1771, ten years before pueblo Los Angeles was established. The mission built a fortified asistencia near modern San Bernardino in 1819, but this was abandoned in 1834 when newly independent Mexico secularized the missions.

In 1842 the Lugo family purchased the 37,000-acre San Bernardino Valley. A group of Mormon colonists came to the valley in 1851, purchased the Lugo Rancho and built a stockade near the present county courthouse. A village developed around the stockade and this, coupled with California statehood, led to the establishment of San Bernardino County in 1853 and the incorporation of the city of San Bernardino in 1854. Connection to the transcontinental railroad in 1885 recognized the valley's importance and insured its future growth and prosperity.

Inland Southern California

Historic San Bernardino Valley is part of inland southern California, an area encompassing all of San Bernardino and Riverside counties. The College is within the Riverside-San Bernardino-Ontario metropolitan area and serves as well more distant locations in the two counties — the Colorado River communities of Blythe and Needles; the high desert area including Victorville and Barstow; the low desert, Coachella Valley region including Palm Springs and Indio; the mountain communities of Big Bear, Lake Arrowhead and Idyllwild; the Hemet Valley, including Hemet, San Jacinto and Perris.
As it enters its second decade, California State College, San Bernar­
dino continues its development in new directions.

The College opened in 1965, offering six degree programs to just un­
der 300 students. During its initial phase of development, the College
focused upon a strong liberal arts curriculum, which by 1974 had been
expanded to 28 baccalaureate degree programs, several teaching
credential fields and various options within five M.A. degree programs.
Enrollment had topped 3,500 and was continuing its steady climb.

While continuing to emphasize the liberal arts, the College is now
implementing a number of career-oriented programs, both at the un­
dergraduate and the graduate levels.

Academic Plan

The College has adopted an academic calendar consisting of three
11-week terms which differs from the conventional quarter system in
that full-time students normally enroll in only three courses per term.
Under the three/three plan, each course normally meets four hours
per week (laboratory and studio courses are exceptions). The student
thus is in class 12 hours per week or the equivalent, instead of the
traditional 15. Such reduction of classroom time is balanced by increas­
ed assignment of written work and greater emphasis on independent
study and independent laboratory work. This academic program is
designed to afford the student the opportunity to carry on studies in
depth and in breadth, to develop abilities to work independently and
to achieve intellectual growth.

Class Size

A distinctive feature of the San Bernardino plan is that the maximum
enrollment in most classes (nearly 90 percent) is limited to 20. This small
class size increases the possibilities for discussion and for student­
faculty contacts both within and outside the classroom.

To maintain the 20-student class as the norm requires that a small
proportion of courses be offered in a large-lecture format (maximum
enrollment of 250) or in an intermediate size (enrollment of 50 to 100).

Among lower-division general education courses, those in the basic
studies area, in foreign language and in philosophy are offered mostly
through small classes, while those in other areas employ intermediate
or large-lecture classes. Upper-division general education courses are
also offered in the large-lecture format. Each department utilizes in­
termediate size classes for a small number of required or elective
courses, but the vast majority of departmental offerings are in small classes. The typical laboratory section has a maximum enrollment of 24, sometimes less.

Accreditation

The California State College, San Bernardino is accredited by the Western Association of Schools and Colleges, the official accrediting body for institutions of higher learning in the West. The teaching credential programs of the College are approved by the California State Board of Education. The Chemistry Department is accredited by the American Chemical Society.

Baccalaureate Degree Programs

In the 1975-76 academic year, the College will offer bachelor’s degrees in the following fields:

School of Administration
   Administration B.A./B.S.

School of Humanities
   Art B.A.
   Drama B.A.
   English B.A.
   French B.A.
   Humanities B.A.
   Music B.A.
   Philosophy B.A.
   Spanish B.A.

School of Natural Sciences
   Biology B.A./B.S.
   Chemistry B.A./B.S.
   Health Science B.S.
   Mathematics B.A./B.S.
   Nursing B.S.
   Physics B.A./B.S.

School of Social Sciences
   Anthropology B.A.
   Criminal Justice B.A.
   Economics B.A.
   Geography B.A.
   History B.A.
   Human Services B.A. (approval pending)
   Political Science B.A.
   Psychology B.A.
   Social Sciences B.A.
   Sociology B.A.
Interdisciplinary Programs
- Child Development: B.A.
- Environmental Studies: B.A.
- Liberal Studies: B.A.
- Special Major: B.A.
- Vocational Education: B.V.Ed. (approval pending)

Graduate Programs
In the 1975-76 academic year, the College will offer master’s degree programs in the following fields:

- Administration, M.A.
  (with options in business administration and public administration)

- Biology, M.S.

- Education, M.A.
  (with options in elementary education; history and English {for secondary teachers}; and school counseling)

- Psychology, M.A.
  (with a general option and a clinical/counseling option)

- Special Major, M.A.

Programs Under Development

Programs currently in various stages of development, and projected for implementation in the 1975 and 1976 academic years, are described below. More specific information can be obtained from the Office of Academic Planning or the appropriate schools and departments.

Community Service. An experimental course, offered again in 1975-76, is designed to meet the needs of the area served by the College and to involve students in community service. Through this course students may receive credit (up to six units) for performing tasks in such agencies as governmental, social service and educational institutions.

Comprehensive Examinations. Students now have limited opportunities to spend a full term out of the classroom while preparing for comprehensive examinations that serve as alternatives to regular instruction. Comprehensive examinations are currently available in psychology, sociology and in upper-division general education. (For a description of this particular offering, see Interdisciplinary Studies 388.) Additional examinations are under development in administration and criminal justice.

Cooperative Education. The College is developing ways in which students may earn course credit through academically related work experience. Currently available are internship courses in administration,
child development, criminal justice, education, political science and sociology.

**Human Services (B.A.)** This flexible, interdisciplinary program is designed to develop or enhance skills in interpersonal relations, including interviewing, counseling and community service.

**Public Administration (M.P.A.)** A behavioral science-oriented degree designed to prepare graduate students for professional management careers in the public service.

**Recreation Administration (B.A.)** The field of recreation and related leisure services is one of the popular and rapidly expanding areas of employment opportunities today. The program being developed will offer courses in many areas of recreation leadership and program planning for camps, schools, Scouts, parks, community agencies, as well as practical experience in the field.

**Self-Paced Courses.** An alternative mode of instruction, being developed for a few courses, enables students to set their own learning pace. Some of these, such as French 101-102-103, involve some classroom work. Others, such as French 420, Spanish 504 and Social Sciences 210, are conducted on an independent study basis made possible through the use of study guides, video tapes and other instructional resources.

**Vocational Education (B.V.Ed.)** This degree program, which is specially designed for vocational educators, will consist of two parts: academic credit for professional qualifications and work experience, and course work in general education and other academic areas.

### Facilities

The academic program is complemented by an excellent physical plant, consisting of 10 air-conditioned buildings. In addition to the expected facilities for course work in the arts, letters and sciences, the College has a number of rather distinctive facilities, such as simulation laboratories, a modern instructional center for counseling psychology, an electronic music studio, and a scanning electron microscope.

### The College Library

The College Library consists of a general collection of 225,000 books and bound periodicals. The Library subscribes to 1,600 periodicals and newspapers in addition to other serial publications. Recordings, musical scores, maps, microform and curriculum materials supplement the book collection. The Library serves as a depository for the publications of the State of California.

The Library occupies substantial portions of the Library-Classroom building. It provides individual study cubicles, listening facilities, microform readers, and photo-duplicating services, as well as seating for about 700 individuals.
The Learning Center

The Learning Center is developing a wide variety of services to assist the student. Personal assistance and direction are now available for the following programs:

- Tutoring for basic classes, algebra, statistics, foreign languages, and the research and writing of papers.
- A self-paced, individually designed program to develop study skills (listening/notetaking, time management, memory devices, exam taking, reading, library skills and use of the dictionary).
- Multimedia delivery of self-instructional programs for vocabulary, spelling, grammar, reading (speed and comprehension), basic math, algebra, statistics, accounting and independent study.
- Cassette and video tapes of specific classes and foreign languages.

Scheduling of Classes

Two basic plans are used in scheduling classes—four 50-minute periods per week or two 100-minute periods. Principal exceptions occur among laboratory and studio courses and courses which carry fewer than five units credit. The four-period, four-day-per-week format is utilized mostly for morning classes, and the two-period, two-day-per-week format for late afternoon and evening classes. The College attempts to maintain accurate information about changing student needs and to adjust its class schedule accordingly.

Late-Day Classes

Courses offered in the late afternoon and evening are in every respect the equal of courses offered earlier in the day; they have identical prerequisites and requirements and they confer equal credit. Late-day classes have proved to be of convenience to regular students, teachers, businessmen and others in the community. The proportion of late-day classes has been increasing and stands currently at about 25 percent of all classes.

Evening Services Office

The College maintains an office to serve evening students. This office provides these students with many of the services usually offered during the day, such as academic advisement, help with college regulations and the receiving of late fees and library fines. The office also makes available general information about the College and its activities such as musical and dramatic presentations, lecture series and academic programs. Further information may be obtained from the Office of Academic Planning.

Degree Completion Programs

Increasing opportunities are being developed for part-time students to complete baccalaureate and master's degree programs by attending late-day classes.
Presently offered in the late afternoon and evening is a sufficient range of upper-division course work to complete a major in administration, child development, criminal justice, economics, English, geography, health science, history, humanities, liberal studies, nursing, political science, psychology, sociology and Spanish. Also available is upper-division course work for the social sciences major with options in administration, history, psychology and sociology; the psychology option is concentrated in the area of counseling. At the graduate level, master's degree programs are available in administration, biology, education and psychology.

Students who wish to undertake a late-day degree-completion program in other fields should consult with the department of their proposed major regarding the availability of required courses and then apply for admission to the College in the usual manner. (Persons with limited study time should note that a single late-day course constitutes one-third of a full load.)

Composition of the Student Body

The student body, as at most urban campuses, is extremely diverse. Most students are under 24 years of age; but because of the large number of mature adult students, especially in the late-day classes, the average student age is 27. Nearly half of the students are married, a majority work at least part-time and many are graduates of nearby community colleges. Most students commute to the campus, but the College does have a fine residential complex on campus.

International Programs

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

Cooperating universities abroad include the University of Provence, France; the Universities of Heidelberg and Tubingen, Germany; the University of Florence, Italy; the Universidad Ibero-Americana, Mexico; the University of Uppsala, Sweden; the University of Madrid and the University of Granada, Spain; Lincoln College and Massey University, New Zealand; and Waseda University, Japan. In the United Kingdom, cooperating universities, which may vary from year to year, include Aberdeen, Dundee, Bangor, Heriot-Watt, Leicester, London, Oxford, Liverpool, Lampeter and Sheffield. In addition, California State University and Colleges students may attend a special program in Taiwan (Republic of China) or an architectural program in Copenhagen, Denmark.

Eligibility is limited to students who will have upper-division or graduate standing during their year of participation, who have a 2.5 overall grade-point average (3.0 for the United Kingdom program), who show ability to adapt to a new environment, and who, in the cases of France, Germany, Mexico and Spain, have completed two years of
Academic Program

college-level study (or the equivalent) in the language of instruction at the foreign university. Selection is made by a faculty committee on the student's home campus and by a statewide faculty committee.

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

Students accepted in the International Programs may apply for any financial aid available at their home campus, except work-study and college opportunity grants.

Application for the 1976-77 academic year must be submitted before February 13, 1976 (except for New Zealand and United Kingdom applicants who must submit application by May 16, 1975 and January 9, 1976, respectively). Applicants are notified of acceptance by April 1, 1976 (New Zealand by June 1, 1975).

Detailed information may be obtained from Dr. Mireille Rydell on campus or by writing to The California State University and Colleges International Programs, 5670 Wilshire Boulevard, Los Angeles, California 90036.

College Foundation

The Foundation of the California State College, San Bernardino, a California nonprofit corporation, was established in 1962 for the purpose of promoting and assisting the educational services of the College. The Foundation Board of Trustees establishes policies for the administration of scholarship and loan funds, federal research grants and the operations of the Commons and Bookstore.
Housing
Since its opening in 1972, Serrano Village, the College's on-campus residential facility, has become a focal point of student life. Social as well as educational activities are organized by the Village residents with the assistance of the housing staff, making the Village a center for living and learning with other students.

The Village is composed of eight attractive redwood houses. Each house has a main lounge, recreation room, kitchenette, laundry-workroom, sun deck and patio. Both single and double rooms are available. Rooms are arranged in suites so that no more than 10 students share a living room, a study room and bathroom facilities.

The Village has both indoor and outdoor recreational facilities. The indoor area contains pool tables, a ping-pong table, mail boxes and a conversational area. The outdoor recreational area contains a barbeque, patio, volleyball court, ping-pong table, paddle tennis court, sun deck and a swimming pool.

Living on campus is reasonably priced when compared to the rapidly rising costs of commuting and has the added advantage of being near the College Library and other facilities. The rates for living in the Village include meals served at the nearby College Commons. The cost of a double room and meals is approximately $1100 per year, for example. Several convenient payment options are available.

Any student needing information about housing, either on-campus or off-campus, should contact the Housing Office.

Activities
Recognizing the diverse interests, backgrounds, schedules and lifestyles of today's student, the College and its student organizations strive to provide a rich program of activities. These include fall orientation for new students, Friday night film series, rock concerts, choral concerts, guest lecture series, small group parties, dances and drama productions.

The College encourages and aids formation of organizations which add to the educational opportunities of students. Some of these organizations involve students, faculty and staff working together in professional, recreational, educational, service, religious and cultural activities. Recognized groups have full use of College facilities in planning their programs.

All students are members of the Associated Student Body, which is governed by an executive branch (ASB Cabinet) and a legislative branch (ASB Senate). In addition to participating in student government, students have the opportunity to serve on many college committees.
Planning is continuing for construction of a student union building in the near future. The new facility will house the ASB offices and the student newspaper, as well as provide a center for cocurricular activities.

The Activities Office is dedicated to total student development through participation in, and involvement with, cocurricular programs. Students are encouraged to stop by the Activities Office to express their ideas and interest concerning campus life and to learn how they may become a part of the campus community.

**Intramural Program**

All currently enrolled students, skilled or beginner, are eligible and encouraged to participate in the intramural sports program, which provides organized opportunities for vigorous competitive activities. Students, faculty and other campus community members join in leagues, tournaments and competitions conducted in badminton, basketball, bowling, flag football, golf, handball, paddleball, softball, swimming, tennis, table tennis and volleyball. Additional activities will be offered to meet varying student interests.

Specific information on the intramural program is available from the Intramural Office or the Physical Education and Recreation Department Office.

**Recreation**

The physical education facilities, playing courts and swimming pool are open daily for recreational enjoyment. All students are encouraged to make use of the gymnasium, courts, playing fields, swimming pool and weight room as long as there is no conflict with classes or other scheduled College events. Also recreational equipment for use on-campus and certain items for off-campus use can be checked out from the Department of Physical Education and Recreation, subject to College regulations.

Since the campus is located only about 45 minutes from mountains, beaches and desert, students have a unique opportunity to explore a variety of recreational activities. Because of student interest in skiing, tobogganing and skin diving, the Associated Student Body has provided equipment which may be checked out for use in these leisure time activities. Student organizations and the Department of Physical Education and Recreation offer a variety of programs that provide an opportunity to become acquainted with these recreational areas.

Questions relating to recreational use of campus facilities or scheduling of facilities for special club or campus organizational use should be directed to the Physical Education and Recreation Office.

**Career Planning and Placement**

Services of the Career Planning and Placement Office are available to all students of the College. Emphasis is on preparing one's self for
employment after graduation. Services include career exploration seminars and materials, advisement on employment and salary trends, counseling about personal satisfaction in career employment, and placement services for graduating seniors and graduate students. In addition, the Placement Office assists enrolled students who are seeking part-time and vacation employment.

The Placement Office serves as a repository for career placement files for the College's qualified degree and credential candidates who register for placement service.

Financial Aid

The Financial Aid Office administers a variety of programs to assist qualified students. Sources of aid include the federally sponsored basic and supplementary educational opportunity grants, national direct student loans and the college work-study program. Federally insured student loans are also available. Short-term loans are available for financial crises which require funds rapidly. The office also administers state grants for Educational Opportunity Program students and a federal grant program for qualified employees of law enforcement agencies (LEEP). Nursing student loans are available to students enrolled in that program.

For a student interested in working part-time, on or off campus, assistance in obtaining a job is available through the Financial Aid Office.

All applications for scholarships and financial aid must be completed and in the Financial Aid Office by April 15. Applicants are required to submit a copy of the student's or parent's most recent federal income tax return and the financial need analysis obtained through the College Scholarship Service. Necessary forms can be obtained from high schools, community colleges or the College.

Scholarships. Generally, scholarships are awarded on the basis of financial need and academic ability. Students must maintain a 3.0 (B) grade-point average. A number of scholarships are available to qualified freshmen on a renewable basis. To qualify, an applicant must have an academic grade average of 3.5 or better.

College Scholarships. The College awards a small number of scholarships each year to continuing students. The scholarships are sponsored by the Foundation of California State College, San Bernardino and are made possible by the generosity of individuals and organizations in local communities. The award amounts vary and are typically about $300.

Sponsored Scholarships and Awards. Special scholarships and awards are available to new and continuing students and are given on the same basis as college scholarships. Interested students may contact the Financial Aid Office for special eligibility requirements for the following: Cal State Faculty Wives Club Scholarship, Alfred F. and Chella D. Moore Scholarship Fund, PTA Scholarship, Riverside Foundation Scholarship.
Leslie Harris-Bennet Meyers Scholarship. A $500 four-year renewable scholarship is awarded from the memorial fund, administered by the College Foundation.

California State Scholarships, Graduate Fellowships and College Opportunity Grants. Students apply directly to the California State Scholarship and Loan Commission for these state-sponsored awards which cover the expense of required fees. Application blanks and full information on these awards are available at high schools, community colleges and California State College, San Bernardino.

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

Students with physical, emotional or other disabilities which handicap them vocationally may be eligible for the services of the State Department of Rehabilitation, including vocational counseling and guidance, training, payment of books, fees and tuition, and job placement. Under certain circumstances, they may also qualify for help with medical needs, living expenses and transportation. A representative from the Department of Rehabilitation visits the campus regularly.

A table summarizing some of the financial aid resources is on the facing page.

Counseling, Testing and Tutoring

The Counseling and Testing Center aids students in developing their personal resources and in making full use of the opportunities for growth during their college years. The services of the Center are available to all students in need of professional psychological assistance in educational, vocational or personal matters. The Center has available a variety of psychological tests and reading improvement and study skills programs to assist students.

All psychological counseling is completely confidential. Information about a student's use of the Center is not released to anyone without the written consent of the student.

The Counseling and Testing Center aids foreign students with academic and personal adjustment and with immigration requirements.

Services of the center are offered to students at no charge.

The center also administers the college entrance test of the American College Testing program (ACT) and graduate record examinations. There is a charge for tests but not for the services of the center in giving them. Information and applications for other nationally administered tests used for college or graduate school entrance also are available from the center.
### Financial Aid Chart

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<tr>
<th>Types of aid</th>
<th>Who can help</th>
<th>Determination of eligibility</th>
<th>Repayment requirement</th>
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<tr>
<td>A. Scholarships</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calif. State Scholarships, Fellowships</td>
<td>High school or college counselor</td>
<td>GPA, SAT, need</td>
<td>no</td>
</tr>
<tr>
<td>Local scholarships</td>
<td>High school or college counselor</td>
<td>GPA, need</td>
<td>no</td>
</tr>
<tr>
<td>College scholarships</td>
<td>College financial aid officer</td>
<td>GPA or GPA and need</td>
<td>no</td>
</tr>
<tr>
<td>B. Grants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>High school or college counselor</td>
<td>need</td>
<td>no</td>
</tr>
<tr>
<td>Supplemental Educational Opportunity Grant</td>
<td>College financial aid officer</td>
<td>need</td>
<td>no</td>
</tr>
<tr>
<td>College Opportunity Grant</td>
<td>High school counselor</td>
<td>need</td>
<td>no</td>
</tr>
<tr>
<td>Educational Opportunity Program Grant</td>
<td>College E.O.P. director or aid officer</td>
<td>need</td>
<td>no</td>
</tr>
<tr>
<td>Law Enforcement Educational Grants</td>
<td>College financial aid officer</td>
<td>employment status</td>
<td>no</td>
</tr>
<tr>
<td>C. Loans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>College financial aid officer</td>
<td>need</td>
<td>yes</td>
</tr>
<tr>
<td>Federally Insured Student Loan</td>
<td>College financial aid officer</td>
<td>need</td>
<td>yes</td>
</tr>
<tr>
<td>D. Work-study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College work-study program</td>
<td>College financial aid officer</td>
<td>need</td>
<td>no</td>
</tr>
<tr>
<td>E. On and off-campus part-time jobs</td>
<td>College placement advisors</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Other aid-related programs include veterans benefits, state rehabilitation, ROTC and Social Security benefits.
Educational Opportunity Program

The Educational Opportunity Program is intended to provide educational opportunities for students who are educationally and financially disadvantaged. These students normally do not meet regular entrance requirements but have the potential, with special assistance, to be successful in college.

The Educational Opportunity Program assumes a commitment to make success possible for all E.O.P. students by offering them the academic and personal guidance required. Through the Educational Opportunity Program, the student receives help in admissions, registration, financial aid, housing, curriculum planning, tutoring, counseling, job and graduate school placement, and other supportive services, depending upon individual needs.

In addition, Education 25 is offered to all E.O.P. students. This course covers such topics as how to listen, how to take notes, how to study, how to take tests, and how to research and write a paper.

Upward Bound Program

The Upward Bound Program is a pre-college preparatory program designed to identify and assist minority and low income high school students who demonstrate a potential to succeed in college.

Summer and academic year instructional programs are held in basic skills with tutorial and counseling assistance given to each student. The program also assists students desiring to continue their education by facilitating their admission into college and providing pre-counseling and orientation.

The Upward Bound Program works with six high schools: Colton, San Bernardino, Pacific, Cajon, San Gorgonio and Eisenhower.

Student Health Center

The Student Health Center provides all services normally administered in a physician’s office including lab and x-ray, minor surgery and physiotherapy. Every student is automatically covered by an insurance plan (provided by the College) which covers 24-hour emergency care at any facility and ambulance charges.

Additional insurance which will cover students and dependents is available at student rates. Students not already protected by an insurance program are urged to consider this supplementary plan. A brochure describing the coverage is given to each student at registration or may be picked up at the Student Health Center.

A cooperative plan with local pharmacies enables students to receive prescription medication at reduced rates.

In addition to the normal daytime hours, the Health Center is open several evenings per week.

Students planning to enroll at the College should submit health information forms before registration.
College Police

The College Police Department is available to protect and serve the College community. The department is staffed with trained professional police officers who provide 24-hour, seven-day-a-week police and fire protection for the College community. Each policeman is a sworn peace officer for the State of California and is responsible for preserving the peace, protecting life and property, preventing crime and enforcing vehicle regulations.

The College Police can assist with automobile battery troubles or when there is need to contact a service station because of mechanical problems.

Dean of Students

The Dean of Students Office provides general information regarding the campus and assistance with students' problems. The office can provide information concerning campus policies, procedures and regulations and can advise students on such matters.

Alumni Association

All graduates of the College are eligible to join and participate in the activities of the California State College, San Bernardino Alumni Association.

The purpose of this nonprofit association is to: assist alumni in continued cultural and educational development, further the community interests of the College, establish mutually beneficial relationships between the College and its alumni, and promote the educational goals of the College. Additional information may be obtained from the Associate Dean of Students, Placement and Financial Aid.

The Commons

The Commons, one of the social centers of the campus, serves residential and commuter students, faculty and staff. Attractive landscaping and an uncluttered view of the mountains plus the inviting decor of the two-level building provide a pleasant atmosphere for eating and relaxing.

Indoor and outdoor dining areas are provided on both levels, with a generous recreation area on the ground level.

Bookstore

Students are able to purchase or order books and supplies needed for classes from the on-campus bookstore, owned and operated by the College Foundation. The bookstore is a nonprofit operation, with proceeds used to further the educational aims of the College.
Student Responsibility

Students at the College are subject to all federal, state and local laws as are other citizens. Of particular importance are regulations established by the State of California through its Education Code. In addition, Board of Trustees and local College regulations directly affect student life on campus. Pertinent portions of these documents are made available to students at registration; complete files are available at all times in the Dean of Students office. Students are expected to be responsible for their actions and to abide by established policies and regulations.
ADMISSION
TO THE COLLEGE

Requirements for admission to the California State College, San Bern­ardino are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Administrative Code. A prospective applicant who is unsure of his status under these requirements is encouraged to consult a high school or college counselor or the Admissions Office. Applications may be obtained from the admissions office at any of the campuses of The California State University and Colleges or at any California high school or community college.

A student who is admitted to the College for a given term but who does not register in that term must file a new application form and $20 application fee when he again seeks admission and must meet the then current admission requirements.

Undergraduate Application Procedures

Prospective undergraduates, whether applying for part-time or full-time programs of study, in day or evening classes, must file a complete application including all the required forms and fees as described in the application booklet. The $20 non-refundable application fee should be in the form of a check or money order payable to The California State University and Colleges.

Undergraduate applicants may file only at their first choice campus. Alternate choice campuses and majors may be indicated on the application, but an applicant should list as alternate campuses only those campuses of The California State University and Colleges that he will attend if his first choice campus cannot accommodate him. Generally, alternate degree majors will be considered at the first choice campus before an application is redirected to an alternate choice campus. Applicants will be considered automatically at the alternate choice campus if the first choice campus cannot accommodate them. Transcripts and other supporting documents should not be submitted until requested by the campus.

Category Quotas and Systemwide Impacted Programs

Application category quotas have been established by some campuses, in some majors, where the number of applicants is expected to exceed campus resources. All applications received in the initial filing period will receive equal consideration for such categories. A small number of undergraduate programs are impacted throughout the 19-campus system. Applicants to such programs are expected to meet supplementary admission criteria for admission to these programs.
Applicants will be sent further information by the campuses about the supplementary criteria to be used. Applicants to impacted programs must apply during the initial filing period.

Postbaccalaureate Application Procedures

All applicants for any type of postbaccalaureate status (for example, master’s degrees, credentials and courses for professional growth) must file a complete application within the appropriate filing period. Candidates for second baccalaureate degrees should apply as undergraduate degree applicants. A complete application for postbaccalaureate status includes all of the materials required for undergraduate applicants plus the supplementary graduate admissions application. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to submit an application and the $20 non-refundable fee.

Since applicants for postbaccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternative campuses or later changes of campus choice will be minimal. If a postbaccalaureate applicant wishes to be assured of initial consideration by more than one campus, a separate application (including fee) must be submitted to each.

Application Filing Periods

<table>
<thead>
<tr>
<th>Term</th>
<th>Initial filing period</th>
<th>Extended filing period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>the previous February</td>
<td>March until filled</td>
</tr>
<tr>
<td>Fall</td>
<td>the previous November</td>
<td>December until filled</td>
</tr>
<tr>
<td>Winter</td>
<td>the previous June</td>
<td>July until filled</td>
</tr>
<tr>
<td>Spring</td>
<td>the previous August</td>
<td>September until filled</td>
</tr>
</tbody>
</table>

All applications postmarked or received during the initial filing period will be given equal consideration within established enrollment categories and quotas. There is no advantage in filing before the initial filing period, as applications may be returned, causing a delay in processing. With the exception of the impacted undergraduate program areas (architecture, natural resources, nursing and physical therapy), most campuses will be accepting applications well into the extended filing periods until quotas are filled.

Space Reservations

Applicants who can be accommodated within enrollment quotas will receive a space reservation. Although a space reservation is not a statement of admission, it is a commitment by the College to admit the student once eligibility has been determined. The space reservation directs the student to arrange to have appropriate records forwarded promptly to the Office of Admissions. Applicants should not request that any records be forwarded until they have received a space reservation notice.
Hardship Petitions

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

Recommended High School Preparation

Overall excellence of performance in high school subjects and evidence of academic potential provide the basis for admission to the College. While no specific course pattern is required, the applicant, to be properly prepared to undertake a full program of studies, is strongly encouraged to include the following subjects in his high school program:

College preparatory English, foreign language, college preparatory mathematics, college preparatory laboratory science, college preparatory history and/or social science, plus study in speech, music, art and other subjects contributing to a strong academic background.

Undergraduate Admission Requirements

First-time freshman eligibility is governed by an eligibility index. The index is computed using the high school grade-point average on all course work completed in the last three years of high school, exclusive of physical education and military science; and the ACT composite or the SAT total score. The table of grade-point averages, test scores and the equation by which the index are computed is reproduced on Page 221. Results of either the CEEB Scholastic Aptitude Test (SAT) or the American College Testing Program examination (ACT) are acceptable in establishing eligibility.

Registration forms and dates for either test may be obtained from school or college counselors, from the addresses below, or from the campus testing offices. For either test, submit the registration form and fee at least one month prior to the test date.

<table>
<thead>
<tr>
<th>ACT</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>American College Testing Program</td>
<td>College Entrance Examination Board</td>
</tr>
<tr>
<td>Registration Unit, P.O. Box 168</td>
<td>P.O. Box 1025</td>
</tr>
<tr>
<td>Iowa City, Iowa 52240</td>
<td>Berkeley, CA 94770</td>
</tr>
</tbody>
</table>

First-Time Freshmen (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 an eligibility index which places him among the upper one-third of California high school graduates. The minimum acceptable index for applicants using the SAT score is 3072; using the ACT score, 741.

First-Time Freshmen (high school graduates from other states and U.S. possessions)

The admissions requirements for nonresident applicants are more restrictive than those for California residents. An applicant who is a
nonresident for tuition purposes and is a graduate of a high school outside California must have an eligibility index which places him among the upper one-sixth of California high school graduates. The minimum acceptable index for nonresident applicants using the SAT score is 3402; using the ACT score, 826.

First-Time Freshmen (graduates of secondary schools in foreign countries)

An applicant who is a graduate of a secondary school in a foreign country or who has equivalent preparation in a foreign country may be admitted as a first-time freshman if his preparation and ability are such that, in the judgment of the appropriate campus authority, the probability of his academic success is equivalent to that of eligible California high school graduates.

First-Time Freshmen (high school nongraduates)

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

Undergraduate Transfers (resident and nonresident)

Transfer eligibility is now based on transferable college units attempted, rather than on all college units attempted. The California community college transfer should consult his college counselor for information on transferability of courses. An applicant in good standing at the last college attended may be admitted as an undergraduate transfer if he meets either of the following requirements:

1. He was eligible for admission in freshman standing and has earned an average grade of C (2.0 on a scale where A equals 4.0) or better in all transferable college units attempted.

2. He has completed at least 56 transferable semester units or 84 transferable quarter units with an average grade of C (2.0) or better if a California resident. Nonresidents must have a GPA of 2.4 or better.

International (foreign) Students

Applicants for admission as either graduates or undergraduates whose education has been in a foreign country should file an application for admission, official certificates and detailed transcripts of record from each secondary school and collegiate institution attended several months in advance of the opening of the quarter in which the applicant expects to attend. If certificates and transcripts are not in English, they should be accompanied by certified English translations. Credentials will be evaluated in accordance with the general regulations governing admission to California State College, San Bernardino.

An applicant whose education has been in a language other than English must take the Test of English as a Foreign Language (TOEFL). This test is administered in most foreign countries and test scores must be received by the College before admission to the College can be
Admission / 33

granted. Information as to the time and place at which this test is given may be obtained from: Educational Testing Service (TOEFL), Princeton, New Jersey 08540, U.S.A.

Arrangements for housing should be completed before the student's arrival on the campus. Detailed information regarding housing may be obtained from the Director of Housing, California State College, San Bernardino. Scholarship aid for entering students is limited; no scholarships are specifically reserved for students from another country.

Upon arrival at California State College, San Bernardino the student should obtain an appointment as early as possible with the foreign student advisor.

Admission of Postbaccalaureate and Graduate Students

Requirements pertaining to the admission of postbaccalaureate and graduate students are contained in the section on Graduate Programs, Page 39.

Returning Students

Students in good standing may be readmitted to the College after an absence of one term by filing a registration packet code sheet. The application and fee of $20 are required if the student was not enrolled in any of the three terms (excluding summer session) prior to the term for which he is seeking admission or if he was enrolled in another institution during his absence from the California State College, San Bernardino.

High School Students

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and if 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. Courses appropriate for high school seniors are scheduled at hours which will facilitate their attendance. A brochure describing the program is available from the Office of Admissions and Records.

Other Applicants

An applicant not admissible under one of the above provisions should enroll in a community 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 of the College.

Transfer of Credit

A maximum of 70 semester units (105 quarter units) of work taken at a community college can be applied toward the requirements for a
degree from the College. No upper-division credit may be allowed for courses taken in a community college. No credit may be allowed for professional courses in education taken at a community college, other than an introduction to education course.

The Office of Admissions and Records will evaluate previous college work to determine its applicability to the requirements of the College. All degree and credential candidates will be issued a credit summary, indicating requirements which remain unfilled. Once issued to a student, the credit summary remains valid as long as the student matriculates at the date specified, pursues the objective specified, and remains in continuous attendance. Students will not be held to additional graduation requirements unless such requirements become mandatory as a result of changes in the California Administrative Code or the California Education Code.

Credit for work completed at institutions of recognized accreditation will be accepted toward the satisfaction of degree requirements at the College within limitations of residence and major requirements, community college transfer maximums, and course applicability.

Advanced Placement for Entering Students

The College grants credit toward its undergraduate degrees for successful completion of examinations of the advanced placement program of the College Entrance Examination Board. Students who present scores of three or better will be granted ten quarter units of college credit. For information on taking advanced placement examinations, students should consult their high school counselors.

College credit is also awarded to students who present appropriate scores on the College Level Examination Program general examination in the areas of social sciences, mathematics, natural science and humanities. Credit is also awarded for examinations in certain subjects. A list of the subjects for which credit can be awarded is available in the Office of Admissions and Records.

Credit for Extension and Correspondence Courses

Up to 36 quarter units (24 semester units) of extension credit may be applied toward a baccalaureate degree. No credit so earned may be used to satisfy the College residence requirement, except in the case of those courses specifically designated for an external degree program.

Limitations on extension and transfer credit accepted toward graduate degrees at this College are explained in the Graduate Bulletin.

Only those units will be accepted for credit which are acceptable toward a degree or credential at the institution offering the courses.

Credit for Military Service

The College grants nine quarter units of lower-division undergraduate credit to veterans with a minimum of one year of active duty in the armed forces of the United States. This credit is applied as
electives and may not apply toward the requirements in general education.

A limited amount of additional credit may be granted to students who have completed certain service schools in addition to basic training. This credit is allowed on the basis of recommendations of the Commission on Accreditation of Service Experiences of the American Council on Education.

**Admission to Teaching Credential Programs**

Admission to the College as a student does not constitute admission to a teaching credential program. Students who intend to work toward credentials should make application to the School of Education of the College.

**Admission as an Auditor**

A student who wishes only to audit a course instead of enrolling for credit must complete a statement of residence issued by the Office of Admissions and Records. Auditors must pay the same fees as would be charged if the courses were taken for credit. Enrollment as an auditor is subject to the approval of the instructor. A student registered as an auditor may be required to participate in any or all classroom activities at the discretion of the instructor. Credit for courses audited will not be subsequently granted on the basis of the audit. Transcripts are not issued for students enrolled as auditors only.

Permission to register as an auditor is by appointment with the Registrar after the second day of registration.

**Admission to Summer Session**

Students interested in attending summer session only do not need to file an application for admission to the College. Instructions for applying for summer session only are included in the Summer Session Bulletin. Attendance at summer session does not automatically constitute admission to the College for ensuing regular terms.

**Readmission of Previously Disqualified Students**

After receiving notice of disqualification, a student may petition the Admissions and Academic Standards Committee for readmission to the College on probation. All petitions for readmission must be submitted to the Office of Admissions and Records one week before the first day of registration for the term in which the student would enroll.

**Admission on Academic Probation**

An applicant with advanced undergraduate standing who does not meet the requirements stated above is eligible for admission on probation, if, in the opinion of the proper college authorities, he is likely to succeed in college.
Ordinarily, consideration for probationary admission is granted only to the mature applicant who, while his total college record does not meet the admission requirements, has demonstrated sufficient academic ability through college work recently completed elsewhere.

Applicants who are admitted with a grade-point deficiency are given probationary status and are subject to the probation and disqualification regulations as stated on Page 56. A student admitted on probationary status may be restricted by his advisor to a limited program.

Servicemen's Opportunity College

California State College, San Bernardino has been designated a Servicemen's Opportunity College. It is one of a network of institutions throughout the nation able to provide opportunities for service men and women to pursue educational programs compatible with their duty assignments, through a combination of traditional and nontraditional means.

Individuals interested in this program are invited to contact the Office of Academic Planning for further details.

Determination of Residence

The determination of whether a student qualifies as a resident for admission and tuition purposes is made by the College after review of a residence questionnaire, designed to provide necessary information including the applicability of any exceptions. A statement summarizing the principal rules regarding residency determination and their exceptions is included in the appendix.
California State College, San Bernardino currently offers five graduate programs culminating in master’s degrees in administration, biology, education, psychology and special major.

Graduate programs at the College are designed to serve a variety of needs. Some students pursue an advanced degree or a credential program in a professional area to enhance their career mobility; others, to expand their knowledge and understanding in a chosen discipline. The College provides for the part-time, as well as the full-time, student by offering appropriate course work and research opportunities during the day, late afternoon and evening throughout the regular quarters and the summer sessions.

The M.A. in Education offers options in elementary education, English and history (for secondary teachers) and school counseling. The elementary and secondary options are open to teachers who hold valid teaching credentials or to applicants with teaching experience. No teaching experience is required for admission to the counseling option.

The M.A. in Administration provides options in business administration and public administration. The program is open to all qualified students, regardless of undergraduate major. Students who do not have a background or formal education in public or business administration can complete designated prerequisite courses or demonstrate competence through examinations.

Under the M.A. in Psychology, students may select a general option or an option in counseling. Through an appropriate selection of courses within the general option, a student may concentrate in one of the following areas: social-community, developmental, perception, physiological-comparative, learning motivation and industrial-personnel.

While the M.S. in Biology provides training in various biological concentrations, the unique environmental setting of the San Bernardino campus allows for special emphasis on desert and mountain ecological studies. Courses are being cycled through late-day and evening hours to permit the employed student to earn this degree.

Several new graduate programs are anticipated in the future, such as the M.A. in Social Sciences and additional options in existing degree programs.

**Admission to the College**

A student who has successfully completed a four-year college course and holds a baccalaureate degree from an accredited institution may be eligible for admission to the College with postbaccalaureate or
graduate standing. He must satisfactorily meet the professional, personal, scholastic and other standards for graduate study. In addition, a student admitted with classified graduate status must show promise of success and fitness.

In seeking admission to the College, each applicant must submit to the Office of Admissions and Records an application for admission, a statement of residence form, a $20 application fee and two official transcripts from each college or university attended.

Applicants for postbaccalaureate programs are limited to the choice of a single campus within the California State University and Colleges system on each application form. If an applicant for a graduate program wishes to be considered by more than one campus, he must submit a separate application and fee to each.

An applicant accepted for graduate study at the College must be admitted in one of the following categories:

**Unclassified Postbaccalaureate Standing.** For admission to unclassified postbaccalaureate standing, a student must: (a) hold an acceptable baccalaureate degree from an accredited institution or have completed equivalent academic preparation as determined by the Associate Dean of Graduate Studies; (b) have attained a grade point of at least 2.5 (on a five-point scale where A equals 4.0) in the last 60 semester (90 quarter) units attempted; and (c) have been in good standing at the last college attended. Admission to this College with unclassified postbaccalaureate standing does not constitute admission to graduate degree curricula.

An applicant who does not qualify for admission under the provisions cited above may be admitted by special action if on the basis of acceptable evidence he is judged to possess sufficient academic, professional and other potential to merit such action. Petitions for admission by special action should be directed to the Office of Academic Planning.

**Classified Postbaccalaureate Standing.** A student who is eligible for admission to this College in unclassified standing may be admitted to classified postbaccalaureate standing for the purpose of enrolling in a particular postbaccalaureate credential or certificate program; provided, that professional, personal, scholastic and other standards, including qualifying examinations, prescribed for the particular program by the College are satisfied.

**Conditionally Classified Graduate Standing.** A student who is eligible for admission to this College under the unclassified postbaccalaureate standing above, but who has deficiencies in prerequisite preparation which can be met by specified additional preparation, including qualifying examinations, may be admitted to an authorized graduate degree program with conditionally classified graduate standing.

**Classified Graduate Standing.** A student who is eligible for admission to this College in unclassified or conditionally classified standing may
be admitted to a graduate degree program as a classified graduate student if he satisfactorily meets the professional, personal, scholastic or other standards, including qualifying examinations, prescribed for the particular program. No more than 20 units of credit earned in unclassified standing may be used to demonstrate fitness to complete the program or may be counted toward meeting requirements for a graduate degree. Such units will be accepted only upon approval of the graduate advisor assigned to the student.

Only students who continue to demonstrate a satisfactory level of scholastic competence and fitness, as determined by appropriate College authorities, shall be eligible to continue in a graduate program. Students whose performance is judged to be unsatisfactory may be required to withdraw from all graduate degree programs offered by the College.

Teaching Credential. A student desiring to work toward a teaching credential at the College must first meet the general qualifications. After admission to the College, he must meet the particular requirements for participation and formal acceptance into the credential program as specified by the appropriate instructional area. A credential candidate must have maintained a minimum 2.5 grade-point average in undergraduate course work in his major field.

Admission to the M.A. Program in Administration

To be admitted as a classified graduate student in the administration program, a student must:

1. Possess a baccalaureate degree from an accredited college with a major in administration, business administration or public administration; or, a major in any academic discipline together with demonstrated competence in the following courses or their equivalents: Economics 100 and 102, or Economics 305; Mathematics 101 or 110; Social Sciences 210 or Mathematics 150; Administration 301, 302, 303, 304 and 306;
2. Have a cumulative undergraduate grade-point average of 2.5 overall;
3. Complete the aptitude test of the Graduate Record Examination (GRE) or the Admission Test for Graduate Study in Business (ATGSB) with an acceptable score. It is recommended that students planning a concentration in public administration take the GRE and students planning a concentration in business administration take the ATGSB. Tests should be completed as soon as possible; further information is available from the School of Administration or the Associate Dean of Graduate Studies.

The competence cited in (1) above may be established by formal completion of course work, credit by examination or appropriate work experience. The student must petition the School of Administration for approval of work experience.

Students who do not meet these criteria may be admitted as conditionally classified graduate students and will remain in this status until deficiencies have been removed.
Admission to M.S. Program in Biology

In order to be admitted as a classified student in the biology program a student must have:
1. A baccalaureate degree from an accredited college;
2. An undergraduate major in biology or associated fields (for example, microbiology, botany, zoology and chemistry);
3. Adequate preparation in chemistry at the college level, including courses in quantitative analysis and organic chemistry;
4. Two full-term courses in physics at the college level;
5. A minimum of one full-term course in mathematics at the college level.

Students who do not meet these criteria may be admitted as conditionally classified graduate students and will remain in this status until deficiencies have been removed.

Admission to M.A. Program in Education

In order to be admitted as a classified student in the elementary education option, a student must possess:
1. A baccalaureate degree from an accredited college;
2. A valid teaching credential or teaching experience;
3. A cumulative undergraduate grade-point average of 2.5 overall and 3.0 in course work in education.

In order to be admitted as a classified student in the English and history options for secondary teachers, a student must possess:
1. A baccalaureate degree from an accredited college;
2. A valid teaching credential or teaching experience;
3. An undergraduate major in English or history.

To be admitted as a classified student in the counseling option, a student must possess:
1. A baccalaureate degree from an accredited college;
2. A cumulative undergraduate grade-point average of 2.5 overall and 3.0 in course work in education;
3. Three letters of recommendation from persons having knowledge of the applicant’s potential for this program;
4. Prerequisite course, Education 531, completed or in progress.

Students who do not meet these criteria may be admitted as conditionally classified graduate students. Students admitted in this category may be changed to classified standing with approval of the School of Education (and the Department of English or History, for secondary teachers).

Admission to M.A. Program in Psychology

In order to be admitted as a classified student in the psychology program, a student must:
1. Possess a baccalaureate degree with a major in psychology; or with any other undergraduate major, (a) score at least at the 50th percentile on the GRE advanced test in psychology or (b) satisfy the Graduate Admissions Committee of the Department of Psychology that a satisfactory course of study has been pursued in preparation for graduate study in psychology;

2. Have a cumulative undergraduate grade-point average of at least 2.5 overall and at least 3.0 in the major;

3. Submit to the department a brief statement describing his preparation for graduate study, goals of the graduate program and professional aspirations;

4. Provide for three letters of recommendation, at least two from former professors. Letters should come directly from the writers or be included in a placement file.

Students who do not meet these criteria may be admitted as conditionally classified graduate students and will remain in this status until deficiencies have been removed.

Graduate Bulletin

Complete details on requirements for admission to the existing programs, admission to candidacy and requirements for graduation are listed in the Graduate Bulletin, a separate publication available without charge from the Office of Academic Planning or any department offering a master’s program. General information about graduate work at this College may be secured from the Office of Academic Planning. Specific details about a particular master’s degree program are available from the department or school involved.
The regular fees of the College are given below. Students are required to pay registration fees at registration. Tuition is not charged to legal residents of California.

Checks will be accepted at registration only for the amount of fees due. The following fees are non-refundable: application and facilities fees.

The following reflects the fees and expenses for the quarter system:

**All students**
- Application fee (non-refundable, payable by check or money order at time of applying) $20.00
- Student services fee:
  - 1-3.9 units $34.00
  - 4-7.9 units $38.00
  - 8-11.9 units $42.00
  - 12 or more units $48.00
- Facilities fee $2.00
- Associated Students fee:
  - one full-term course or less $3.00
  - more than one full-term course $6.50
- Student identification card fee $1.00
- Student union fee $6.50

**Nonresidents (foreign and domestic)**
- Tuition:
  - less than 15 units, per unit or fraction $29.00
  - 15 or more units, maximum $433.00
  (Note: Tuition is in addition to other fees required of all students. The total nonresident tuition charged shall not exceed $1,300 per academic year.)

**Residence halls (for academic year)**
- Room and board (14 meals per week), double room $1,100.00
- Room and board (14 meals per week), single room $1,250.00

**Summer session fee**
- Per quarter unit of credit $20.00

**Special fees**
- Credential fee $20.00
- Late registration $5.00
- Failure to meet required appointment or time limit $2.00
- Graduation fee $6.00
- Parking fees (per quarter)
  - First vehicle $10.00
  - Two-wheeled vehicle $2.50
  - Each alternate in addition to first vehicle $2.00
  - Summer session (six-week session) $6.00
- Check returned for any cause $5.00
- Transcript of academic record $1.00
- Master’s degree thesis contact Office of Academic Planning $1.00

Note: Fees subject to change without advance notice.

No fees of any kind shall be required or collected from those individuals who qualify for such exemption under the provisions of the Alan Pattee Scholarship Act.
Student Services Fee

The student services fee, effective in 1975-76, was established by the trustees of The California State University and Colleges in lieu of the material and service fee. The new fee will provide financing for various student services programs not covered by state funding. A full description of the allocation of the fee may be found in the appendix, Page 226.

Refund of Fees

Students registered for credit or audit who change their program to a lesser number of units may not receive a refund of the student services fee.

However, upon a student’s withdrawal from all classes, the student services fee may be refunded if written application for refund, on forms provided by the Registrar, is submitted to the Bursar not later than 14 calendar days (includes Saturdays, Sundays and holidays) following the first day of classes. However, $10 shall be retained to cover the cost of registration.

Nonresident tuition is refunded on a prorated basis during the first four weeks of instruction according to the following schedule: 100% before or during the first week of instruction; 75% during the second week; 50% during the third week; 25% during the fourth week.

Student Union and Associated Student Body fees are fully refundable during the first 14 calendar days of the quarter.

Parking fees are refunded, upon surrender of the decal, according to the following prorated schedule: regular quarter: 66% during the first 25 calendar days of the quarter; 33% during the 26th through 50th calendar days; no refund after the 50th day; and summer session: based on calendar days, commencing on the day instruction begins: 66% refunded during the first 10 days; 33% during the 11th through 20th days; no refunds after the 21st day.

Estimated Costs per Quarter

It is estimated that students pay about $50 each quarter for books and $64 for fees plus parking costs.

Debts Owed to the College

If a student becomes indebted to the College, the College is authorized by Title 5 of the California Administrative Code to withhold “permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above” until the debt is paid.

Such debts might occur if a student fails to repay money borrowed from the College or to pay dormitory or library fees or for other services provided at his request.
Under these provisions, the College may deny permission to register or may withhold other services, such as grades and transcripts.

If a student feels that he does not owe all or part of a particular fee or charge, he should contact the College business office which will review the matter, including information the student may wish to present, and will advise the student of its conclusions.
ACADEMIC REGULATIONS

All students who register at California State College, San Bernardino in resident study for either the fall, winter or spring quarter must first be admitted to the College by the Office of Admissions.

No student may attend classes until his registration has been completed.

Registration is complete only when official programs are properly filed and all fees are paid. Students are required to make all payments on the regularly announced days.

Students are granted credit only for those courses in which they are formally registered and are responsible for completing all courses entered on their official student assignment slips, except those courses they officially change by filing a change of assignment with the Office of Admissions and Records.

Class Level of Students

Students are classified at the end of each quarter according to total earned credits accepted for transfer and/or completed at the California State College, San Bernardino as follows:

<table>
<thead>
<tr>
<th>Status</th>
<th>Units Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower division</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>0-44.9 quarter units</td>
</tr>
<tr>
<td>Sophomore</td>
<td>45-89.9 quarter units</td>
</tr>
<tr>
<td>Upper division</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>90-134.9 quarter units</td>
</tr>
<tr>
<td>Senior</td>
<td>135 quarter units or more</td>
</tr>
<tr>
<td>Graduate</td>
<td>Holding baccalaureate from an accredited college</td>
</tr>
</tbody>
</table>

Advisory System

Every student is assigned a faculty member as an advisor upon entrance into the College. In general, the faculty advisor is in the area of the student's major interest. Other advisors are provided for students who have not yet chosen a major field of concentration.

In addition to meeting with students during designated class hours, faculty members hold regularly scheduled office hours, which are posted outside their offices. A student who is unable to see a faculty member during class or the posted office hours may arrange an appointment by contacting the appropriate department office.

In addition to academic counseling, specialized counseling in vocational or personal matters is available in the Office of Dean of Students.
Academic Course Load: Undergraduates

The normal full-time course load is 15 quarter units. Students may carry up to 19.5 quarter units with the consent of their advisor. A student may be granted permission to carry 20 or more quarter units upon submission of a course overload card to his school dean. Course overload cards and certifications of grade-point averages are available at the Office of Admissions and Records. Students are encouraged to petition for approval if their overall grade-point average is 3.0 or better and their grade-point average for the previous term is 3.0 or better.

Academic Course Load: Graduates

The normal academic load for graduate students is 10 units per quarter. To enroll in more than 15 units in any one quarter, a student must have the written approval of his major advisor and the Associate Dean of Graduate Studies. Students who must work to support themselves, who have time-consuming family responsibilities, who commute long distances, or who are in other difficult circumstances, should, in conjunction with their advisors, weigh these factors and alter their course loads accordingly.

Accelerated Progress

Students are encouraged to accelerate progress toward completion of their objectives through a program of independent study, summer course enrollment and registration for additional course credits.

Credit-by-examination procedures permit students to demonstrate their mastery of the content of local courses, courses offered through the Advanced Placement Program and the College Level Examination Program.

In some instances, registration in summer sessions permits the completion of one full quarter, 15 units, of degree applicable work.

Students wishing to enroll for additional course work during the academic year should follow the procedures described in the sections on academic course loads, above.

Credit by Examination

A student may petition to receive course credit by examination. In this manner a student who already possesses, or through independent study is able to acquire, the ideas and concepts of a course can accelerate progress through the college. Students must register for the examination in the office of the school or department concerned during the first five days of the term in which the course is offered. Some presumptive evidence is required to indicate that the student has a reasonable chance of passing the examination. The examination must be completed within the first four weeks of the term. A limited number of courses may be designated by a school as inappropriate to be challenged by examination.
No fee is charged for these examinations. A student who passes an examination is given credit for that course toward graduation, provided that this does not duplicate credit counted for his admission to the College. No official record is made of failures in these examinations.

Examinations for course credit are given under the following restrictions:

1. They may be taken only by persons (a) who are in residence, or (b) who are candidates for degrees at this College and need no more than four full-term courses to complete the requirements for their degrees.

2. They may not be taken by students who have received credit for work in the subject in advance of the course in which the examination is requested, except where permission is granted by the school or department concerned.

3. They may not be taken to raise grades or remove failures in courses.

4. Credit for no more than 40 quarter units may be received through such examinations.

5. A student may repeat an examination for credit only upon approval of the Dean of Academic Planning.

6. Credit by examination may not be used to fulfill the minimum residence requirement.

7. The course must be offered during the term in which the examination is taken.

Exact times and places of examinations are announced by the departments concerned. Students who wish to take an examination should consult the departmental office well in advance.

Credit by examination cannot be earned during the summer sessions.

**Concurrent Enrollment**

Procedures have been established whereby a student in good academic standing at the California State College, San Bernardino who has completed at least 18 quarter units of work at the College and who is eligible to register as a continuing student for the immediately subsequent term may enroll concurrently at another campus of the California State University and Colleges System. The procedure enables a student to attend another campus within the system, on a term by term basis, without submitting the formal application for admission form and paying the $20 application fee. For information regarding the procedure, contact the Office of Admissions and Records.

For concurrent enrollment at an institution other than those within the California State University and Colleges System, approval of the Dean of Academic Planning is required.

**R.O.T.C. Programs**

Students at the College can participate through concurrent
enrollment in R.O.T.C. programs at other colleges in southern California. Information about these programs can be secured from the Office of Academic Planning.

**Class Schedule**

An official class schedule, prepared each quarter by the College, includes the registration schedule, procedure for registration, fees, classes offered by hours and instructors, and other pertinent registration information. The schedule is available several weeks in advance of registration each quarter and may be purchased at the College Bookstore.

**Late Registration**

The last day for late registration each term will be announced in the class schedule. The College calendar, Pages 4 and 5, lists registration dates. Late registrants may find themselves handicapped in arranging their programs due to closed classes. A $5 late registration fee is required.

**Adding Courses**

Students may enroll for credit in courses until the last day to add classes. This date is indicated for each term of the academic year in the College calendar.

**Auditing Courses**

Enrollment in any course as an auditor shall be permitted only after students otherwise eligible to enroll in the course on a credit basis have had an opportunity to do so and only upon consent of the instructor. Auditors are subject to the same fee structure as credit students and regular class attendance is expected.

Credit for courses audited will not subsequently be granted on the basis of the audit. Transcripts are not issued for audited courses.

Once enrolled as an auditor, a student may not change to credit status unless such a change is requested prior to the last day to add classes and is approved by the instructor and the advisor. A student registered for credit may change his status to audit with the approval of his advisor and the instructor concerned and within the prescribed time limits for dropping a course.

Forms for such changes may be secured from the Office of Admissions and Records. Registration is by appointment with the Registrar.

**Class Attendance**

Class attendance is expected of all students enrolled at the College. The instructor in each course sets the standard he expects his students to meet in this regard. If a student does not attend a class during the first three periods it meets, the instructor may, at his discretion, drop the student from the class.
When a student is absent from classes, it is his responsibility to inform his instructors of the reason for his absence and to arrange to make up missed class work and assignments. If a student expects to be absent from his classes for two weeks or more, he should notify the Office of the Dean of Students. Should the absence be for the remainder of the term, withdrawal from the College should be initiated by the student in the Office of Admissions and Records. (See section on withdrawal from college.) Where such absence or withdrawal is caused by illness, the student must report to the Health Center upon return to the College.

**Leave of Absence**

A student may petition to the Dean of Academic Planning for a leave of absence from the College for any reason and, if the petition is approved, may, upon his return, continue under the catalog requirements which applied to his enrollment prior to the absence. Except in the case of military service, a leave of absence may be granted for a maximum of one year.

Illness and military service are routinely approved reasons for a leave of absence. An undergraduate student may also petition for such a leave of absence for purposes of undertaking a program elsewhere which will be consistent with the objectives of California State College, San Bernardino and which is not available on this campus.

Students obtaining a leave of absence after the last day to withdraw without penalty will receive grades of W in all courses.

The granting of a leave of absence does not constitute a waiver of the requirement for applying for readmission and paying the application fee.

**Withdrawal from a Class or the College**

Each student is assigned a grade for every course appearing on his official student assignment.

If a student withdraws officially from the College or from a class by the end of the third week of class (see College calendar for exact date), the course is not recorded on the permanent record.

Withdrawal after the third week, and prior to the last three weeks of instruction, is permissible only for serious and compelling reasons. Permission to withdraw during this time period must be obtained from the instructor and the school dean.

Withdrawal will not be permitted during the final three weeks of instruction except in cases such as accident or serious illness where the cause of withdrawal is due to circumstances clearly beyond the student's control and the assignment of an incomplete grade is not practicable. Withdrawal during this period requires the approval of the instructor, the school dean and the Dean of Academic Planning.

A grade of W will be assigned for approved withdrawals occurring after the third week of instruction.

A student who withdraws from all classes in which he is enrolled must officially withdraw from the College.
Final Examinations

Written examinations of two hours duration are held at the close of each term. In courses extending over more than one term, the examination in the concluding term may also cover work done in the preceding term or terms. Examinations may not be taken before or after the scheduled period nor may the time of an examination be changed without authorization by the Dean of Academic Planning. Permission to take a final examination with a different section in the same course may be granted by the Dean of Academic Planning with the consent of the instructors concerned. Failure to take or to pass any final or other course examinations will result in such deficiencies as instructors may assign.

Final Grade Report

Final grade reports are mailed to students within two weeks after the last day of each quarter.

Grades

The grade symbols used at the College are as follows:

<table>
<thead>
<tr>
<th>Grade Symbol</th>
<th>Performance Level</th>
<th>Grade Points per Quarter</th>
<th>Progress Points per Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Marginal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit (A, B, C)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>No Credit (D, F)</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

All courses, except those specifically designated by the College to be taken Credit/No Credit, will be graded on the A, B, C, D or F basis. The following administrative grades carry no grade points or progress points and are, therefore, not used to determine a student's grade-point average or progress toward a degree. However, it should be pointed out that the Incomplete will be counted as an F if not removed within one calendar year from the date it was assigned.

AU Audit
I Incomplete
SP Satisfactory Progress
W Withdrawal

Grade-point averages are computed by dividing the number of grade points earned by the number of units attempted. Only units and grade points earned by a student while enrolled at this College are used to compute the resident grade-point average.
Expanded Grade Symbol Definitions

CR (Credit): A satisfactory or better level of performance, equivalent to the grade of A, B or C, has been demonstrated in meeting course objective. (For graduate students, equivalent to grade of A or B.)

NC (No Credit): Performance at an unsatisfactory or failing level, equivalent to a grade of D or F. (For graduate students, equivalent to the grade of C, D or F.) Does not award credit for the course.

AU (Audit): Course participation as an auditor. Course credit cannot be awarded.

I (Incomplete): An Incomplete signifies that a portion of required course work has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the instructor and to reach agreement on the means by which the remaining course requirements will be satisfied. A final grade is assigned when the work agreed upon has been completed and evaluated.

An Incomplete must be made up within one calendar year immediately following the end of the term in which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment. Failure to complete the assigned work will result in an Incomplete being counted as equivalent to an F (or an NC) for grade-point average and progress point computation.

SP (Satisfactory Progress): The SP symbol is used in connection with courses which extend beyond one academic term. The symbol indicates that work in progress has been evaluated as satisfactory to date but that the assignment of a grade must await the completion of additional course work. Cumulative enrollment in units attempted may not exceed the total number applicable to the student's educational objective. All undergraduate work is to be completed within one calendar year of the date of first enrollment and a final grade will be assigned to all segments of the course on the basis of overall quality. The time limitation for graduate degree theses may be up to two years but may not exceed the overall time limit for completion of all master's degree requirements. Extension of any time period requires prior authorization by the Dean of Academic Planning.

W (Withdrawal): This symbol indicates that the student dropped the course. It carries no connotation of quality of performance and is not used in calculating grade-point average or progress points.

Policy on Credit/No Credit Grading

All courses, except those specifically designated to be taken Credit/No Credit, are graded on the A, B, C, D or F basis. Certain activity courses, independent study projects, and other courses serving special needs are not readily evaluated in the traditional A through F manner. The non-traditional Credit/No Credit grading allows faculty to award credit for satisfactory performance in an activity, rather than to try to assign a letter grade when such performance cannot be evaluated traditionally.
Courses graded Credit/No Credit, whether taken at this or at another institution, may not be used to satisfy requirements for the major, except specific courses designated by the department to be graded Credit/No Credit.

Students who, because of a change of major or because of transfer from another institution or for any other reason, present courses in the major field which have been graded on a Credit/No Credit basis may, at the discretion of the department or other appropriate academic unit, be required to pass competency examinations at an acceptable level or to take prescribed alternate courses before being allowed to continue in the major.

A student may offer no more than 36 quarter units of work graded Credit/No Credit in satisfaction of the total units required in the student’s baccalaureate degree program at the California State College, San Bernardino. This number includes any combination of units graded Credit/No Credit earned at the California State College, San Bernardino and any other institution or institutions.

Course grades of credit received under a credit-by-examination program are exempt from the 36 unit limitation.

Scholarship Standards for Postbaccalaureate and Graduate Students

Scholarship standards for unclassified and classified postbaccalaureate students are the same as for undergraduate students.

For scholarship standards for conditionally classified and classified graduate students, see the Graduate Bulletin.

Scholarship Standards for Undergraduates

For purposes of determining a student’s eligibility to remain at the College, both quality of performance and progress toward his objective shall be considered. Such eligibility shall be determined by use of grade points, grade-point average and progress points. The progress point scale shall be based on the grade-point computation for letter grades consistent with the definitions established in Section 40104 and augmented by the assignment of two points per unit for the CR grade and no points per unit for the NC grade.

(a) An undergraduate student shall be subject to probation if, in any academic term, he either fails to earn twice as many progress points as all units attempted or he fails to maintain a cumulative grade-point average of at least 2.0 (grade of C on a five-point scale).

(b) An undergraduate student shall be subject to disqualification if while on probation he fails to earn twice as many progress points as all units attempted, or if his cumulative grade-point balance displays a deficiency in excess of the number permitted for his class level pursuant to deficiency levels established by the chancellor.

These levels are as follows:
1. Lower-division student (fewer than 90 quarter units of college
credit), 22.5 grade points below a 2.0 average in all units attempted or in all units attempted at California State College, San Bernardino;

2. Junior (90 to 134.9 quarter units of college work), 13.5 grade points below a 2.0 average in all units attempted or in all units attempted at California State College, San Bernardino;

3. Senior (135 or more quarter units of college work), 9 or more grade points below a 2.0 average in all units attempted or in all units attempted at California State College, San Bernardino;

(c) An undergraduate student who is not on probation may be disqualified if at any time his cumulative grade-point average falls below 1.0 (grade of D on a five-point scale) and, in the opinion of the appropriate campus authority, it is unlikely in light of the student's overall educational record, that the resultant grade-point deficiency will be removed in subsequent terms.

A student disqualified for scholarship deficiency may not enroll in any regular session without permission from the Admissions and Academic Standards Committee, and may be denied admission to other educational programs operated or sponsored by the College.

**Administrative Academic Disqualification**

An undergraduate or graduate student may also be placed on probation or may be disqualified by appropriate campus authorities for unsatisfactory scholastic progress regardless of cumulative grade-point average or progress points. Such actions shall be limited to those arising from repeated withdrawal, failure to progress toward an educational objective and noncompliance with an academic requirement and shall be consistent with guidelines issued by the chancellor.

**Repeat of Courses**

An undergraduate student may petition for permission to repeat a course for the purpose of discounting a previous attempt in the same course. If the petition is approved, the grade earned in the last enrollment is used exclusively in determining the units attempted and grade points earned for the course. After a student has registered at this College, courses may not be repeated at any other institution to remove a grade earned at this College or elsewhere. Students are invited to inquire at the Office of Admissions and Records for current procedures governing this policy.

**Plagiarism**

Plagiarism is the presentation as one's own the ideas and writings of another. Plagiarism is academically dishonest and subjects the offending student to penalties up to and including expulsion. Students must make appropriate acknowledgements of the original source where material written or compiled by another is used.
Election of Graduation Requirements

A student remaining in continuous attendance in regular sessions and continuing in the same curriculum in the College, in any of the California community colleges or in any combination of California community colleges and this College, may, for purposes of meeting graduation requirements, elect to meet the graduation requirements in effect either at the time of his entering the curriculum or at the time of his graduation from the College, except that substitutions for discontinued courses may be authorized or required by the proper college authorities.

Postbaccalaureate Credit for Senior Students

Senior students who need fewer than 15 quarter units to graduate may be permitted to enroll for postbaccalaureate credit during the final term of their senior year. Postbaccalaureate credit is used to signify courses taken after the baccalaureate degree and does not necessarily mean graduate credit, i.e., credit applicable to an advanced degree. A petition form for this purpose is available in the Office of Admissions and Records.

Summer Enrollment at Other Institutions

In instances where there might be a question about the acceptability of course work taken at another institution in the summer, students are advised to consult the department offering the equivalent course at this College.

Information for Issuance of Transcripts

All transcripts will be complete as of the date of issuance showing all work attempted at the California State College, San Bernardino.

Transcripts which include final grades for that quarter will be sent three weeks after the last day of the quarter.

Only work taken at the California State College, San Bernardino will show on the transcript. Copies of transcripts from other institutions are not included.

Transcripts are issued at a cost of $1 per copy, payable in advance.

Access to Records

All student records, including recommendations, are kept by the College in accordance with the Family Educational Rights and Privacy Act of 1974, which allows students access to their records. Inquiries and concerns about this federal regulation should be directed to the office of the Dean of Students for further information.

Information for Veterans

Students who plan to attend the College under the Veterans Readjustment Act of 1972 must present to the Registrar a valid certificate of
eligibility in duplicate authorizing training at the California State College, San Bernardino.

The College will certify the following course loads to the Veterans Administration:

<table>
<thead>
<tr>
<th></th>
<th>Undergraduates</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full time</strong></td>
<td>12 quarter units</td>
<td><strong>Full time</strong></td>
</tr>
<tr>
<td><strong>V2 time</strong></td>
<td>9-11 quarter units</td>
<td><strong>V2 time</strong></td>
</tr>
<tr>
<td><strong>V2 time</strong></td>
<td>6-8 quarter units</td>
<td><strong>V2 time</strong></td>
</tr>
<tr>
<td><strong>Less than half time</strong></td>
<td>See Registrar</td>
<td><strong>Less than half time</strong></td>
</tr>
</tbody>
</table>
UNDERGRADUATE DEGREE REQUIREMENTS

To be eligible for the bachelor's degree, a student must:

1. Complete a minimum of 186 quarter units of college credit.
2. Complete 14 full-term designated courses (70 quarter units) in general education distributed in the following manner:

A. Basic studies: two courses
   One course each from two of the four following areas:
   a. English composition (English 101)
   b. Mathematics (Mathematics 100, 101, 110, 200)
   c. Oral communication (Drama 120)
   d. Philosophy {Logic} (Philosophy 105)

B. Humanities: three courses
   One course in the arts:
   a. Art (Art 200)
   b. Drama (Drama 250)
   c. Music (Music 180)

   Two courses in letters:
   a. Foreign studies (French, German, Russian or Spanish 101-102-103*; Spanish 450; Foreign Languages 450)
   b. Literature (English 110, 111, 170)
   c. Philosophy (Philosophy 190)

C. Natural sciences: two courses
   One course from the life sciences:
   a. Biology (Biology 100, 202)
   b. Health science (Health Science 120)

   One course from the physical sciences:
   a. Astronomy (Natural Sciences 100)
   b. Chemistry (Chemistry 100, 205, 215)
   c. Earth science (Earth Science 101)
   d. Physics (Physics 100, 111, 211)

D. Social sciences: three courses
   (Social Sciences 140, 142, 144, 146, 150, 155, 160)

E. Lower-division general education electives: two courses
   To be chosen from the designated courses in two of the four major categories (A, B, C, D) above.

*Credit toward the general education requirement will be awarded only upon completion of two introductory courses in one foreign language.
A wide range of courses may be readily transferred from community colleges to satisfy each of the lower-division general education requirements (categories A through E, above).

F. Upper-division general education requirement: two courses
To be chosen from among the designated upper-division general education lecture courses in two of three areas: Humanities (330, 333, 350, 353, 470); Natural Sciences (300, 310, 330, 350, 351); Social Sciences (300, 304, 312, 321). Also applicable to this requirement are Interdisciplinary Studies 320 and 388.

3. Complete all requirements for a major, including at least 20 quarter units of upper-division course work in the major.

4. Complete at least 45 quarter units at this College.

5. Complete at least 60 quarter units of upper-division work.

6. Earn a grade-point average of 2.0 (C) or better in all units in the major.

7. Earn a grade-point average of 2.0 (C) or better in all units attempted, and in all units attempted at the College.

8. Complete six quarter units of physical education activity courses.

9. Be recommended for graduation by the faculty of the College.

A candidate for graduation must request a graduation requirement check at the Office of Admissions and Records by the dates indicated in the College calendar. No graduation requirement check should be requested unless and until a senior has completed 150 quarter units, including current work in progress. If a candidate does not complete the requirements in the term indicated, he must request a second graduation requirement check, indicating the new date at which he expects to graduate.

**History, Constitution, Government Requirement**

California law prescribes, as a requirement for graduation, that each student demonstrate competence in understanding the Constitution of the United States; American history, institutions and ideals; and the principles of state and local government as established in California.

The requirement in United States history, constitution and American ideals may be met by completing one of the following: Social Sciences 146, History 200, 352 or 540. The requirement in California state and local government may be met by completing Social Sciences 150 or History 370. Selected courses offered by the School of Social Sciences also may satisfy the requirements. The opportunity to meet the California state and local government requirement by passing an optional examination is given to students who transfer from outside the state. In-
formation may be obtained from either the Office of Admissions and Records or the School of Social Sciences office. The examinations are administered through the Counseling and Testing Office.

Certain high school courses may satisfy these requirements. Details are available from the Office of Admissions and Records.

Second Bachelor's Degree Requirements

A student who holds a bachelor's degree from the California State College, San Bernardino or another accredited institution and who applies for a second degree must have satisfactorily completed each of the following in order to receive a second bachelor's degree:

1. General education requirements as stated in the appropriate catalog;
2. Requirements of the major involved;
3. A minimum of 36 quarter units of residence work at this College after completion of the first bachelor's degree; and
4. Approval of the faculty of the College.

This policy does not negate the possibility of a student's graduating with a dual major.

College Residence Requirement for Graduation

A minimum of 45 quarter units must be completed at this College. At least 20 quarter units must be completed among the last 30 quarter units counted toward the degree.

Extension credit or credit by examination may not be used to fulfill the minimum residence requirement.

College Honors

College Honors at Commencement. To be considered for College Honors at commencement, a student must have completed a minimum of 45 units of work at California State College, San Bernardino in courses for which letter grades (A, B, C and D) were received.

Highest Honors: an overall undergraduate GPA of 3.9 or above.
High Honors: an overall undergraduate GPA of 3.75 or above.
Honors: an overall undergraduate GPA of 3.5 or above.

Dean's List. A full-time undergraduate student who earns a 3.5 or above in any regular academic term will be placed on a Dean's List.

Departmental Honors. Individual departments may grant departmental honors, recognizing distinguished students majoring in that field. The requirements to be met to earn honors are specified by the respective departments. Departmental honors are currently awarded in biology, chemistry, economics, health science, mathematics, nursing, political science, psychology and sociology.
Preparation for Professional Schools

The plan of undergraduate study at the California State College, San Bernardino emphasizes a liberal education in preparing for professional or vocational specialization.

Some professions, such as law, stress that candidates for admission to professional schools can best prepare themselves during college by acquiring several fundamental skills. Others, for example, medicine and dentistry, emphasize certain subject matters. A student preparing for either kind of emphasis (skills or specific subjects) has opportunities to do so by selecting, in consultation with an appropriate preprofessional advisor, the kind of curriculum that most soundly meets the standards set by the profession he or she wishes to enter.

Preprofessional Program: Medicine, Veterinary Medicine, Dentistry, Pharmacy

The majority of students entering medical and dental schools in the United States do so after having acquired a B.A. or B.S. degree at an undergraduate college. Possession of an undergraduate degree is especially worthwhile, since professional schools do not offer liberal arts subjects.

Any undergraduate major is appropriate for a preprofessional student as long as certain basic subject areas are included in his program. For specific requirements of professional schools the student is urged to consult such special sources as "Medical School Admission Requirements," (a publication of the Association of American Medical Colleges) or a preprofessional advisor in the School of Natural Sciences.

In general, medical and dental schools recommend that the undergraduate degree program include: one year of general chemistry, one year of organic chemistry, one year of general biology, with additional course work in developmental biology and/or comparative anatomy and genetics, and one year of physics. Other courses, e.g., mathematics through calculus and physical chemistry, are often recommended as well.

Since preprofessional programs in dentistry and medicine place heavy emphasis in biology and chemistry, these are the two majors most often elected by preprofessional students. A preprofessional student majoring in biology should complete the biology core program, supported by courses in chemistry and physics, and should elect Mathematics 200 and Biology 342. A preprofessional student majoring in chemistry should complete the chemistry core program, supported by courses in mathematics and physics, and should elect Biology 342, 423 and 440.

The science and mathematics components of preprofessional programs in veterinary medicine are quite similar to those for medicine. However, it is usually possible to gain admission to a school of veterinary medicine upon completion of two years of undergraduate work at a liberal arts college.
Admission to a school of pharmacy can also be gained after two years of undergraduate work. Although entrance requirements vary somewhat, they generally include full-year introductory courses in biology, chemistry, mathematics and physics. A course in organic chemistry is sometimes required as well.

**Preprofessional Program: Law**

Applicants for admission to most law schools are expected to have a B.A. or B.S. degree and to have taken the Law School Admission Test. There is no single “prelaw” major required, or in most instances recommended, since the successful study of law is more often related to the ability to grasp and solve difficult intellectual problems and to employ disciplined work habits, than it is to any narrow, specialized field of study.

Several broad objectives of prelegal education are set forth by the Association of American Law Schools. These include the oral and written command of language; an understanding and appreciation of social, political and economic values, institutions, problems and frames of reference; and an ability for creative, innovative, critical and analytical thinking.

For these reasons, every prelaw student should carefully choose, with the aid of appropriate advisors, courses which sharpen the skills and sensitivities previously listed. Since no one major is mandatory, the student should select one which emphasizes the areas mentioned above (administration, economics, English, history, philosophy, political science and sociology to name a few). For additional information, the student should consult with the prelaw advisor and should be familiar with the Prelaw Handbook.

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

The College offers several programs leading to a certificate of competency in a special area.
Certificates may be earned by regularly matriculated or continuing education students and denote successful completion of a prescribed program of study designed to (a) impart specified professional/vocational/career competencies; or (b) produce mastery of the content of a sub-field of an academic major (discipline); or (c) provide exposure to the range of materials in a traditional or emerging interdisciplinary field.

Courses offered for the certificate may be the same ones used to satisfy major, minor, credential or general education requirements. In order to qualify for a certificate, the candidate must receive two-thirds of his certificate-applicable credit from the College. The transferring of credit or the substitution of courses may occur only after application to the appropriate campus authority.

The certificate is awarded upon confirmation by the Office of Admissions and Records that the requirements have been satisfied. The candidate is responsible for initiating the conferring of the certificate, during the last term of certificate-applicable study. Award of the certificate also will be noted on the student’s transcript.

Certificate in Accounting/Finance:
The requirements for a Certificate in Accounting/Finance consist of the following:

Administration 306. Concepts of Accounting
*Administration 340. Managerial Accounting
*Administration 370. Financial Accounting
*Administration 303. Financial Theory
*Administration 430. Financial Policy
*Administration 426. Federal Taxation Administration or
*Administration 435. Investment Analysis or
*Administration 438. Auditing
*Course has a prerequisite

Certificate in Human Resources Management:
The requirements for a Certificate in Human Resources Management consist of the following:

Administration 302. Human Behavior in Organizations
*Administration 455. Human Resources Management
Certificate Programs

*Administration 456. (Psychology 456) Psychology of Human Resources
*Administration 457. Industrial and Labor Relations
*Administration 458. Employment Policies and Practices
  Plus one elective (5 units) selected jointly by the student and an academic advisor from the School of Administration

*Course has a prerequisite

Certificate in Classical/Medieval Studies:

The requirements for a Certificate in Classical/Medieval Studies consist of six of the following:

Drama 450. Classical Drama
English 401. English Literature of the Middle Ages
French 311. Masterpieces of French Literature I
Foreign Languages 450. Literature in Translation (medieval subject matter)
History 320. Ancient History I
History 321. Ancient History II
Music 322. Medieval and Renaissance Music
Philosophy 300. Readings in the History of Philosophy I
Philosophy 302. Readings in the History of Philosophy II
Political Science 302. Greek, Roman and Medieval Political Thought

Certificate in International Relations:

The requirements for a Certificate in International Relations consist of six of the following, with no more than four from any one discipline:

Political Science 300. Western Political Systems
Political Science 304. Communist Political Systems
Political Science 306. Developing Political Systems
Political Science 325. American Foreign Policy
Political Science 400. International Policy
Political Science 500. International Law
Political Science 510. International Organization
Political Science 590. Seminar in International Relations
Social Sciences 300. Non-Western World
Economics 420. Comparative Economic Systems
Economics 430. International Economics
Economics 450. Economic Development
Administration 470. Management of International Operations
History 356. Foreign Relations of the United States
CONTINUING EDUCATION

The term Continuing Education denotes a variety of courses, programs, activities and events through which the services and resources of the College are made available to a broad, general audience and are brought to bear on immediate issues and interests of the larger community of which the College is a part.

Responding to diverse educational needs of residents of its two-county service area, the College undertakes to develop opportunities for those seeking personal growth and fulfillment, for those pursuing professional renewal and advancement, for others aspiring to resume an education that has been interrupted or is incomplete, and for still others whose personal experience or community situation dictates an organized effort to understand and affect the conditions of modern urban life.

Extension Study and Credits

The extension program provides opportunities for college-level study, primarily at off-campus locations, at times and places most convenient to varied groups of part-time students.

Extension offerings include courses selected from the established curriculum and new courses designed to meet expressed needs and desires of specific groups and communities.

The College has available a plan which also opens scores of classes offered in the regular residence program of the College to extension students, answering the needs of those who wish to take a specific course or two, but do not want to matriculate to do so. These registrations are handled in the Office of Continuing Education and are accommodated on an individual, space-available basis.

A maximum of 36 quarter units of credit earned through extension registration in upper-division courses from the regular curriculum may be applied to a degree program. A maximum of 13 quarter units of graduate credit earned through extension registration may be accepted toward a master's degree program.

Credits earned in courses offered only through extension and numbered in the 800-series are ordinarily not degree-applicable though they may satisfy salary hurdle, credential, re-licensure and other, similar requirements.

Individuals interested in the extension program may be placed upon the mailing list for regular announcements of courses by contacting the Office of Continuing Education.

Summer Sessions

Summer sessions afford both regular and nonmatriculated students opportunity to pursue undergraduate or graduate study in virtually all
of the College’s academic majors and in professional programs. There is no prior application required nor are there formal procedures for admission to summer study. Course credits earned in the summer are accepted in degree programs, however, when students subsequently make successful application for admission and matriculate in the College.

Announcement of the summer programs is made in early spring each year. The calendar and schedule of classes may be obtained without charge from the Office of Continuing Education.

External Degree Programs

Recent establishment in the California State University and Colleges of procedures for developing, implementing and evaluating external degree programs means that as need and demand warrant, complete upper-division curricula can be offered at sites distant from the College. The guidelines imply careful articulation with community colleges in planning degree programs in a limited number of major fields. Classes of at least 25 to 35 students are essential since external degree programs are required to be self-supporting from fees, as extension long has been. For approved programs, usual residence requirements are waived enabling students who complete the prescribed sequence of courses to earn the baccalaureate degree wholly through off-campus study.

The College presently offers the following external degree programs: in Barstow: B.A. in Social Sciences and M.A. in Education (elementary education option); and in the Coachella Valley: M.A. in Education (elementary education option).

Coordination of the work of implementing a college-wide responsibility to develop external programs appropriate to the service area is a function of the Office of Continuing Education, while delivery of approved programs is to be effected through its established extension routines.

Community Programs

The Office of Continuing Education with its adjunct Management Center provides for continuing liaison among campus and community groups and organizations with common interests and concerns. It assists community groups and agencies in identifying and utilizing campus resources, particularly the expertise of faculty members. It assists students and faculty in efforts both to give service to and to utilize the community as an instructional resource.

The office also initiates, co-sponsors or coordinates a variety of conferences, workshops and seminars each year on behalf of various professional and special interest groups. Assistance can be given, or full responsibility taken, for developing conference programs as well as for making necessary physical arrangements on or off-campus.
ACADEMIC PROGRAM

Schools of the College

The academic program of the College is offered through five schools—Administration, Education, Humanities, Natural Sciences and Social Sciences—and the independent Department of Physical Education and Recreation. Three of the five schools are organized into departments, listed below:

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<thead>
<tr>
<th>Humanities</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
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<tbody>
<tr>
<td>Art</td>
<td>Biology</td>
<td>Anthropology</td>
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<tr>
<td>Drama</td>
<td>Chemistry</td>
<td>Economics</td>
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<tr>
<td>English</td>
<td>Health Science</td>
<td>Geography</td>
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<td>Foreign Languages</td>
<td>Mathematics</td>
<td>History</td>
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<tr>
<td>Music</td>
<td>Nursing</td>
<td>Political Science</td>
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<td>Philosophy</td>
<td>Physics</td>
<td>Psychology</td>
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<td>Sociology</td>
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Degree programs are offered by departments, schools and interdisciplinary committees. A complete listing of the degrees available at the College may be found on Pages 12 and 13.

Course Numbering System

1—99  Non-credit courses
100-299 Lower-division courses designed primarily for freshmen and sophomores
300-499 Upper-division courses of junior and senior level; graduate credit may be awarded if course is accepted in a specific graduate program
500-599 Courses for upper-division, fifth-year credential and graduate students
600-699 Courses for graduate students only
X800-X899 Courses offered through extension only
IP100-IP699 Courses taken by students in the International Programs

Credit earned in a continuing education program for residence credit pursuant to an external degree program
Course Credits

All courses at California State College, San Bernardino carry five quarter units of credit, unless otherwise indicated in the course description in this Bulletin. For purposes of comparison with other colleges, a five quarter-hour course is equivalent to a 3½ semester-hour course.

Major Fields of Study

Work in a major field of study is designed to afford each student the opportunity to engage in intensive study of a discipline.

Not later than the beginning of the junior year, each student shall select one or more specialized areas in which he wishes to concentrate. Thereafter his program will be supervised by an advisor from his chosen major department.

Major programs are available in 1975-76 in the fields listed on Pages 12 and 13.

Every effort has been made to assure the accuracy of the information in this catalog. Students are advised, however, that such information is subject to change without notice. Therefore, they should consult the appropriate instructional departments, schools, or administrative offices for current information.

The class schedule, issued prior to each quarter, lists courses to be offered during that term.
ADMINISTRATION

The School of Administration offers a major in administration designed to prepare students for careers in business, government service, institutions and related fields.

The administration curriculum reflects the view that the concepts, philosophies and methodologies of modern administrative science, though traditionally studied in the context of business enterprise, have applicability to large-scale organizations generally. This curriculum, with its core requirements and areas of specialization, provides the student with a broad-based behavioral and quantitative understanding of the concepts of management.

Areas of commonality among various public and private systems of institutional management constitute the core material of the administration major, while variations which distinguish management practices in different functional areas are subjects for optional specialization.

The program in administration as listed below is being revised and should become effective in the fall quarter of 1975. New students are requested to contact the School of Administration for details on the new requirements, concentrations and course offerings.

Requirements for the bachelor of arts degree: Economics 100 and 102, Mathematics 110, Social Sciences 210 or Mathematics 150, and the core courses: Administration 301, 302, 303, 304 and 306, and six additional courses in administration. Included among these six must be all of those courses listed in any one of the following concentrations:
- Management: Administration 451, 455, 460
- Quantitative methods: Administration 360, 400, 465
- Accounting and finance: Administration 340, 342, 430
- Marketing: Administration 405, 410, 440
- Public administration: Administration 380 (or Political Science 380), Administration 455, Administration 475 (or Economics 475), Administration 480
- Human resources and manpower planning: Administration 455, Administration 456 (or Psychology 456), Administration 457

The remaining courses may be selected from the concentrations, the administration electives or, with the approval of a school advisor, from courses offered by related departments.

Requirements for the bachelor of science degree: Economics 100 and 102, Social Sciences 210 or Mathematics 150, Mathematics 101 or Mathematics 110, Administration 301, 302, 303, 304, 306, 360, 400, 465 and six additional courses in administration, or with the approval of an advisor, courses offered by related departments.
Transfer students may receive credit for two lower-division courses toward completion of the elective requirements for either the B.A. or the B.S. degree.

Requirements for the minor in administration: Economics 100 and 102 plus any four of the core courses required for the major.

Master of Arts Degree: Details of this program are outlined in the Graduate Bulletin. The program is open to both full-time and part-time students and generally requires the equivalent of one year's full-time work for completion (45 units of graduate work including a comprehensive examination). Areas of concentration include business administration or public administration.

Certificate Programs: The School of Administration offers two certificate programs for students who are interested in course work in a specific field, but not necessarily a degree. They are: accounting/finance and human resources management. Details on the certificate programs and course requirements for each are found in the section Certificate Programs, Page 67.

301. MANAGEMENT PRACTICES
Fundamentals of management including studies in planning, organizing, directing, leading and controlling business activity. Concepts and practices are developed through case studies of management situations.

302. HUMAN BEHAVIOR IN ORGANIZATIONS
Behavior of people in relation to managerial environment and the functional fields of administration. Selected behavioral concepts analyzed with respect to applications in management.

303. FINANCIAL THEORY
Basic principles of financial analysis for management. Techniques of financial decision-making for liquidity management, financial forecasting, dividend policy and selection of sources of capital. Prerequisite: Administration 306.

304. QUANTITATIVE ANALYSIS FOR MANAGEMENT
Introduction to mathematical tools used in administrative problem analysis; includes topics in set theory, functional analysis, linear algebra, interest and annuities. Prerequisite: Mathematics 101 or 110.

306. CONCEPTS OF ACCOUNTING
Development and use of basic accounting information for management analysis, decision-making, planning and control relating to operations.

330. LEGAL ENVIRONMENT OF BUSINESS
Study of the legal system; nature and source of law as applied to business activity; statutes and significant cases involving business policies; effect of public policies on private enterprise system.

340. MANAGERIAL ACCOUNTING
Accounting information systems used by management. Prerequisite: Administration 306.

342. ADVANCED MANAGERIAL ACCOUNTING
Continuation of Administration 340 with emphasis on development of sophisticated analytical accounting models. Prerequisite: Administration 340.

350. ADMINISTRATIVE COMMUNICATIONS
Techniques and methods of analysis; practical exercises in oral and written communications for administrative situations.
355. **MANAGEMENT OF ADMINISTRATIVE CONFLICT**
Emphasis on development of conflict, theories of administrative conflict and method of resolving such conflict. *Prerequisites: Administration 301 and 302.*

360. **STATISTICAL ANALYSIS FOR MANAGEMENT**
Application of probabilistic models and statistical decision theory to decision-making within the enterprise; techniques for optimization of administrative decisions. *Prerequisites: Administration 304 and Social Sciences 210 or Mathematics 150.*

370. **FINANCIAL ACCOUNTING**
Accounting theory and its application. Topic areas include financial statement analysis, funds and cash flows, income measurement, price level adjustments and valuations, and business combinations and consolidated statements. Emphasis is on accounting for the corporate form of organization. *Prerequisite: Administration 306.*

380. **SURVEY OF PUBLIC ADMINISTRATION**
An introduction to the study of public administration, including a survey of the major functions, structures, behaviors, processes and problems. (Also offered as Political Science 380)

400. **QUANTITATIVE DECISION METHODS**
Quantitative methods of analysis used in solution of administrative problems, including linear programming and calculus applications. *Prerequisites: Administration 304 and Social Sciences 210 or Mathematics 150.*

402. **STUDIES IN ORGANIZATIONAL BEHAVIOR**
Review and presentation of selected areas of behavioral science research and its application to management practices. Selected subjects may include: motivation, communication, change and leadership. *Prerequisite: Administration 302.*

405. **MARKETING MANAGEMENT**
Marketing functions including products, channels, pricing and promotion.

410. **CONSUMER BEHAVIOR**
Nature and determinants of consumer attitudes, consumption and purchasing behavior. *Prerequisite: Administration 405.*

420. **COMPUTER MANAGEMENT**
Nontechnical approach to techniques, equipment and a programming language; programming, debugging and running management programs.

426. **FEDERAL TAXATION ADMINISTRATION**
Analysis of federal taxes with emphasis on research, contemporary interpretations and business policy formulation. *Prerequisites: Administration 306 and senior standing.*

430. **FINANCIAL POLICIES AND SYSTEMS**
Financial management with application to capital markets, financial planning, capital budgeting, capital structure, portfolio selection and managerial problems. *Prerequisite: Administration 303.*

435. **INVESTMENT ANALYSIS**
Analysis and forecasting of security markets, industry studies, portfolio construction. *Prerequisite: Administration 303.*

438. **AUDITING**
Function of the auditor, viewed from the perspective of professional ethics, SEC standards of reporting, auditor's legal liabilities. Techniques include internal control, sampling, standards of statement presentation, use of the computer as an auditing tool. Case studies emphasize design of audit programs, working papers and audit reports. *Prerequisites: Administration 306 and 370.*
440. MARKETING RESEARCH
Analysis of markets, survey methodology, sample design, quantitative techniques in market research projects. Prerequisites: Administration 304 and 405, Social Sciences 210 or Mathematics 150.

451. ORGANIZATION AND MANAGEMENT THEORY
Development and analysis of organization and management theory. Comparative analysis seeking patterns and systematic explanation of differences among organizations. Dynamics of interaction between organizations and environment. Prerequisites: Administration 301 and 302.

455. HUMAN RESOURCES MANAGEMENT
Policies relating to human resources; manpower planning, personnel selection and development, performance appraisal, compensation, relationships with unionized employees, collective bargaining. Prerequisites: Administration 301 and 302.

456. PSYCHOLOGY OF HUMAN RESOURCES
Review of research in application of psychology to selection, evaluation and training of human resources. Topics include fair employment legislation, job analysis methodologies, merit evaluation, interviewing techniques and psychometric methods. Prerequisites: Social Sciences 210 or Mathematics 150 and Administration 302. (Also offered as Psychology 456)

457. INDUSTRIAL AND LABOR RELATIONS
Social forces leading to collective employee action in relation to labor legislation and collective bargaining. Utilizes current developments, case law and bargaining simulation. Prerequisite: Administration 455.

458. EMPLOYMENT POLICIES AND PRACTICES
Evaluation of employer-employee relationships. Utilizes case analysis for the study of policy in the areas of collective bargaining, selection and placement, affirmative action, job design and manpower utilization. Prerequisites: Administration 455 and senior standing.

460. PRODUCTION PLANNING AND CONTROL
Analysis of production resources; measurement and evaluation of man-machine systems; forecasting, planning and scheduling; quality and quantity control. Prerequisites: Administration 301 and 304.

465. OPERATIONS RESEARCH
Principles of management science in executive decision-making. Algebraic and geometric representations of optimization models in management. Problems in production, marketing, finance, purchasing and personnel administration. Prerequisite: Administration 400.

470. MANAGEMENT OF INTERNATIONAL OPERATIONS
Cultural, economic, legal, political and institutional factors influencing international operations. Organizational, marketing, financial, production and labor problems, policies and practices in the international arena.

475. PUBLIC FINANCE
Fiscal theory and policy, theories and incidence of taxation, problems of national debt management, government spending and budgeting. (Also offered as Economics 475)

480. ORGANIZATIONAL PROBLEMS IN PUBLIC ADMINISTRATION
Administrative and management problems as they exist within public organizations and agencies. Prerequisites: Administration 380 (or Political Science 380) or consent of instructor.
499. METHODS AND MATERIALS IN THE TEACHING OF BUSINESS
May not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.

530. BUSINESS AND SOCIETY
Evaluation of American business systems; political, legal and social factors influencing business; role of business in alleviating society's problems. Prerequisite: senior or graduate standing.

550. MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT
Approaches to studying management development from the dual perspectives of effecting changes in organization systems and individual behavior. Prerequisite: senior or graduate standing.

560. FOUNDATIONS OF PUBLIC ADMINISTRATION
Advanced concepts of public administration, its role in society, management of public business, survey of the major functional fields and selected problems. Prerequisite: senior or graduate standing.

562. PUBLIC PERSONNEL ADMINISTRATION
Definition, description and evaluation of government personnel systems; classification, compensation, recruitment, examination, training, working conditions, incentives, performance ratings, public employee organizations and organizational development in the public service. Prerequisites: Administration 560 and senior standing.

565. PROBLEMS IN PUBLIC FINANCE
Problems and concepts of financial management in public administration including: revenue sources, tax administration, debt management, the budgetary cycle and budget types. Prerequisites: Administration 475 (or Economics 475), Administration 560, or consent of instructor; and senior standing.

566. URBAN ADMINISTRATION
Administrative problems and characteristics of public management in the urban area. Prerequisite: Administration 560.

575 INTERNSHIP IN ADMINISTRATION
Supervised work and study in private or public organizations. May be repeated once for credit. Graded credit/no credit. Prerequisite: consent of instructor and school.

590. SEMINAR IN ADMINISTRATION
An intensive study of some phase of administration to be developed by the instructor. May be repeated for credit as topics change.

595. INDEPENDENT STUDY
Special topics involving library and/or field research. Prerequisites: school approval of written proposal of project and consent of instructor. (Credit to be arranged: 2 to 5 units.)

601. ORGANIZATION THEORY AND BEHAVIOR
A critical analysis of theories for viewing organizations and an examination of the common models for understanding human behavior, including executive behavior, within the constraints of a complex social system. Prerequisites: Administration 301, 302, or equivalent.

602. FINANCIAL PLANNING AND CONTROL
Current developments and controversies in accounting and financial controls for government and industry. Analysis of financial management in the context of recent technological, sociological and environmental changes. Prerequisites: Administration 303, 306 or equivalents.
603. RESEARCH METHODS IN ADMINISTRATION
Principles of research design, development of research instruments, data accumulation and analysis of significant data. Critique of sample research studies from the literature and a research study conducted by the student. Prerequisite: Social Sciences 210 or Mathematics 150 or equivalent.

604. QUANTITATIVE METHODS IN ADMINISTRATION
Concepts and techniques used for quantitative analysis in management. Topics in matrix algebra, linear programming, game theory and regression analysis for model building and problem solving. Prerequisites: Social Sciences 210 or Mathematics 150 and Administration 304 or equivalents.

610. DECISION THEORY FOR MANAGEMENT
Behavioral and quantitative approaches to administrative decision making. Prerequisites: Administration 601 and 604.

620. MARKETING PLANNING AND CONTROL
Problem solving and decision making in marketing and the interacting effects of such factors as selling, advertising, pricing, consumer behavior and channels of distribution. Prerequisites: Economics 101 and 102, or equivalents, or Economics 305.

630. PRODUCTION SYSTEMS DEVELOPMENT
Production function (both products and services) in management and its importance as a subsystem of administrative operations. Prerequisite: Administration 604.

640. INDUSTRIAL RELATIONS AND PERSONNEL PROBLEMS
Specific areas and problems in the administration of business personnel systems and of labor-management relations. Prerequisite: Administration 601.

642. COMMUNICATION AND INTERPERSONAL PROCESSES
Various theories of interpersonal processes and communication as they relate to organizational efficiency and effectiveness, as well as a consideration of the organization as a communication system. Prerequisite: Administration 601.

650. MANAGEMENT INFORMATION AND CONTROL SYSTEMS
Study and design of management information systems, their implementation and the integration of their operations within the organization. Prerequisites: Administration 301, 304 and 602, or equivalents.

652. ACCOUNTING THEORY AND RESEARCH
Development of accounting theory; accounting standards, doctrines and conventions; current problems; survey of current literature in accounting. Prerequisites: Administration 602 and 603.

660. ADMINISTRATIVE SYSTEMS ANALYSIS
A theoretical and applied understanding of the systems approach as used in public administration planning, analysis and design. Prerequisite: Administration 602.

670. LOCAL ADMINISTRATION
City, county, school district and special district administration, including management of the following functions: police, fire, health, education, welfare, probation, public works, environment, tax and personnel. Prerequisites: Administration 560 and 601.

698. EXTENDED ENROLLMENT
Independent study leading to completion of requirements (other than course work) for the master's degree. Students enrolled in this course have full use of College facilities. Prerequisites: advancement to candidacy and consent of school. (0 units)
ANTHROPOLOGY

The study of anthropology promotes an understanding of self and all mankind by exploring man's nature at all times and in all places. In the modern world in which every society depends upon other societies, ignorance of the goals, values and ways of life of others may become a fear leading to discrimination and racism in the community or to war and oppression between nations. The challenges of desert life for the Australian Aborigine and the problems of contemporary ghetto existence are of equal interest to the anthropologist, and courses in these topics and world ethnography are offered by the Anthropology Department. Man's physical and cultural evolution, the distribution and significance of racial differences, the history and ecology of specific areas, and the role of language in culture are treated in courses in physical anthropology, archaeology and prehistory, and linguistics.

Requirements for the major: a minimum of eight upper-division courses in anthropology including: Anthropology 300 and 511; two courses from Anthropology 301, 305, 310, 315, 351, 352, 354, 356, 360, 361, 451; three courses from Anthropology 455, 456, 457, 460, 465, 470, 475, 480, 490, 491, 492, 493, 550, 551, 590, 595; one additional upper-division course in anthropology (or a related field as approved by advisor).

Anthropology 100 and 102 or an equivalent background are ordinarily required for enrollment in upper-division anthropology courses.

Requirements for a minor in anthropology: Anthropology 100, 102 and four upper-division courses selected in consultation with an advisor.

100. INTRODUCTION TO ANTHROPOLOGY: HUMAN EVOLUTION
Man's biological and social evolution through time.

102. INTRODUCTION TO ANTHROPOLOGY: CULTURE AND SOCIETY
Structure and dynamics of man's cultural experience; comparative analysis of language, religion, economic patterns and social and political organization in traditional and complex societies.

300. ARCHEOLOGY
History of archeological research, a survey of concepts and methods for the study of prehistoric culture and a summary of major sequences in prehistory.

301. OLD WORLD PREHISTORY
The prehistory and protohistory of Eurasia and Africa, emphasizing the growth of culture and the origin and spread of civilization.

305. NEW WORLD PREHISTORY
The prehistory of North, Middle and South America, emphasizing the peopling of the New World, the earliest American Indian cultures and later regional developments.
310. ANCIENT CIVILIZATIONS OF THE NEW WORLD
The origin, spread and decline of pre-Columbian civilizations in the New World.

315. SOUTHWESTERN ARCHEOLOGY
The prehistoric cultures of the American Southwest, their origins, characteristics and relationships.

330. CROSS-CULTURAL CHILD-REARING PRACTICES
Cross-cultural examination of child-rearing practices from the perspective of major anthropological theories of personality formation and its relationship with culture.

WORLD CULTURES (Anthropology 351-375)
Emphasis in the following courses is on major problems of current interest to the cultural anthropologist. Topics include general discussion of physical anthropology, language, affilations and culture, history of the area, the native populations, their relations with each other and to outside societies, and the effects of culture change upon them through time.

351. INDIANS OF NORTH AMERICA
352. INDIANS OF THE SOUTHWEST
354. CULTURES OF MEXICO AND CENTRAL AMERICA
356. CULTURES OF SOUTH AMERICA
360. PEOPLES OF AUSTRALIA
361. PEOPLES OF MICRONESIA, MELANESIA AND POLYNESIA

451. AMERICAN INDIANS AND WHITE SOCIETY
The present position and problems of American Indians in the U.S. and the history of Indian-White relations. No prerequisite, although Anthropology 351, 470 or an American history course is recommended.

455. ADVANCED PHYSICAL ANTHROPOLOGY: HUMAN VARIATION
The processes of adaptive differentiation in man and the assessment of significant differences among human races; the influence of culture in microevolutionary phenomena and the analysis of blood groups and other gene distributions in modern populations. Prerequisite: Anthropology 100 or equivalent or consent of instructor.

456. ADVANCED PHYSICAL ANTHROPOLOGY: PRIMATE STUDIES
Taxonomy and fossil record of the nonhuman primates. Primate behavior as a basis for the reconstruction of prehistoric human behavior. Prerequisite: Anthropology 100 or equivalent or consent of instructor.

457. ADVANCED PHYSICAL ANTHROPOLOGY: PALEOANTHROPOLOGY
The analysis of the anatomical and behavioral evidence of fossil man and earlier hominid forms. Discussion of the problems involved in reconstructing the direction of human physical and cultural evolution. Prerequisite: Anthropology 100 or equivalent or consent of instructor.

460. LANGUAGE AND CULTURE
Analysis of languages stressing the relationship of language to patterns of human behavior.
465. PSYCHOLOGICAL ANTHROPOLOGY
Cross-cultural comparisons of personality and its formation, stressing the mutual interrelationship of cultural, social and psychological factors in human behavior. Prerequisite: Anthropology 102 or equivalent or consent of instructor.

470. CULTURE CHANGE AND DYNAMICS
An examination and evaluation of the various theories that have been proposed to explain societal change using actual case study materials.

475. CULTURAL ECOLOGY
An examination of theories, methods and applications of the ecological perspective in the anthropological study of human cultures, and a cross-cultural comparison of adaptations to different ecological niches.

480. MAGIC, RELIGION AND SCIENCE
A comparative study of the widely varied attempts by members of human societies to order, control and make predictions about their physical and social environments.

490. SYSTEMS OF SOCIAL ORGANIZATION
A comparative description and analysis of social integration in human societies.

491. POLITICAL ANTHROPOLOGY
An examination of anthropological concepts relevant to comparative studies of traditional political systems and their relationships to other aspects of culture, with an emphasis on tribal and other nonindustrial cultures.

492. ECONOMIC ANTHROPOLOGY
An anthropological approach to the analysis of systems of production and exchange in nonindustrial societies.

493. URBAN ANTHROPOLOGY
Utilization of ethnographic and cross-cultural materials in an examination of anthropological concepts and methods for the study of urban environments and the processes of urbanization.

511. METHODS AND THEORY IN ANTHROPOLOGY
An in-depth examination of the development and current status of major methodological and theoretical orientations in anthropology. Prerequisite: senior or graduate standing or consent of instructor.

550. FIELDWORK IN CULTURAL ANTHROPOLOGY
Supervised design, execution and analysis of an ethnographic field project. Prerequisite: consent of instructor.

551. METHODS IN ARCHEOLOGY
Application of the methods and techniques of archeology through survey, mapping, excavation, laboratory analysis and preparation of reports. Emphasis is on research design and interpretation; an independent project may be required. Prerequisites: Anthropology 300 and consent of instructor.

590. SEMINAR IN ANTHROPOLOGY
Study of selected topics in anthropology. May be repeated for credit, with consent of instructor.

595. INDEPENDENT STUDY
Special topics involving library and/or field research. Prerequisites: departmental approval of written proposal of project and consent of instructor. (Credit to be arranged: 2 to 5 units.)
ART

The challenge for visual artists is to discover what is already there, to open up and probe what is inside and outside themselves and to find a means of giving it back to the whole world. It is this adventure which is the focus of the Department of Art.

A student may either major or minor in art, and eventually chooses one or more specific areas of concentration. The choice is governed by the student's experiences with various media, concepts and techniques, but this is not a rigid choice as new interactions among these elements are constantly being developed.

Two programs are available for students working for the Bachelor of Arts in Art and two options are available for a minor in art. The studio areas of concentration currently offered are: ceramics, crafts, fiber construction, glass blowing, painting and drawing, printmaking, sculpture, and woodworking and furniture design.

Requirements for the major (Plan I): Art 201, 203, 204, four courses in the history of art, two upper-division studio courses in a single area of concentration, and three upper-division electives in the department. This program is designed for students seeking a liberal education with an emphasis in art, and is recommended for those who wish to teach at the secondary school level.

Requirements for the major (Plan II, single studio area of concentration): Art 201, 203, 204, five courses in the history of art, four upper-division studio courses in a single area of concentration, and three upper-division electives in the department. This program is designed for the student with a strong professional interest in art who may wish to pursue graduate studies. Such students are strongly advised to take Art 210 and 211.

In addition to their courses in art, students are urged to seek electives in related areas of creative expression. Suggested possibilities include acting, creative writing, music seminar in electronic composition.

Students in either plan interested in the history of art may use the three upper-division electives in art in that area. Students contemplating graduate studies in art history are strongly advised to learn French or German.

Art majors under both plans are required in the senior year to arrange an exhibit or review of representative examples of studio work completed while in residence at this College.

Field trips are required in most art history courses and several studio courses as well. Also, in many courses students are required to pay for materials used.

Minor in studio art: Art 201, 203, 204; three courses in art history; and one upper-division studio course.
Minor in art history: seven courses in art history. With the advisor's approval up to two selected courses may be substituted from two of the following fields: anthropology, drama, music and philosophy. In most cases, students who have completed the minor in art history and four terms of a foreign language or equivalent proficiency can easily complete the requirements of a humanities major as well.

200. STUDIES IN ART
Exploration of the form and content of art. Cannot be counted toward fulfillment of requirements in the major.

201. FOUNDATION STUDIO IN ART
Organization of two-dimensional phenomena with an emphasis on the interaction of color.

203. FOUNDATION STUDIO IN ART
The organization of three-dimensional phenomena.

204. DRAWING AND LIFE DRAWING
Exploration in techniques of drawing for purposes of creative expression related to object and figure placement in space.

Art 201, 203 and 204 represent a foundation group that can be taken in any sequence. This group or its equivalent must be completed before enrollment in upper-division studio courses—with certain exceptions as noted in course descriptions.

210. WESTERN ART HISTORY I
History and development of styles and procedures in art from prehistoric times through the Middle Ages.

211. WESTERN ART HISTORY II
History and development of styles and procedures in art from the proto-Renaissance period in Italy to the rise of French Impressionism.

304. ADVANCED DRAWING AND LIFE DRAWING
Further exploration in techniques of drawing for purposes of creative expression. May be repeated for a maximum of 15 units. Prerequisite: Art 204 or consent of instructor. A. (5 units) B. (5 units) C. (5 units)

311. ART OF THE UNITED STATES
Development of American art from the Colonial period to 1950. Significant examples from the fields of architecture, sculpture, painting and the minor arts.

312. MODERN ART, 1850 TO THE PRESENT
Development and significance of contemporary art in the Western World.

314. THE ART OF INDIGENOUS PEOPLES
Art of the native cultures of North, Central and South America; the South Pacific; Africa.

316. ARTS OF THE NEAR EAST
History and development of the arts of the ancient Near East and Islam.

317. ART OF THE FAR EAST I
History and development of styles of art from prehistoric times in India, Ceylon, Central and Southeast Asia.
318. ART OF THE FAR EAST II
History and development of styles of art from prehistoric times in China, Korea and Japan.

325. STUDIES IN MEXICAN AND CHICANO ART
Topics in the painting, architecture, sculpture and pottery of Mexico from pre-Columbian times to the present day.

331. PAINTING I
Pictorial functions of formal elements of picture-making such as line, plane, color and light, pattern and edge. Prerequisites: Art 201 and 204.

332. PAINTING II
A more conceptual extension of the implications of scale in the formal functions of line, plane, color and light, pattern and edge. Prerequisite: Art 331 or consent of instructor.

333. PAINTING III
Advanced work in painting. Prerequisite: Art 332.

340. SCULPTURE I
Introduction to sculpture using a variety of materials, tools and processes. Prerequisite: Art 203.

341. SCULPTURE II
Continuation of Sculpture I. Prerequisite: Art 340 or consent of instructor.

342. SCULPTURE III
Advanced work in sculpture. Prerequisite: Art 341.

354. CERAMICS I
Procedures of hand building, throwing, slip casting and glazing as practiced by the studio potter and the ceramic sculptor.

355. CERAMICS II
Continuation of Ceramics I including kiln management and the formation of glazes and clay bodies. Prerequisite: Art 203 or consent of instructor.

356. CERAMICS III
Advanced work in ceramics. Prerequisite: Art 355.

360. PRINTMAKING I
Creative research into studio techniques in relief, intaglio, collographic, planographic and stencil processes. Prerequisites: Art 201 and 204.

361. PRINTMAKING II
Continuation of Art 360. Prerequisite: Art 360 or consent of instructor.

362. PRINTMAKING III
Advanced work in printmaking. Prerequisite: Art 361.

373. WOODWORKING AND FURNITURE DESIGN
Exploratory experiences in the use of hand and power tools in woodworking techniques for the fabrication and design of wood projects. May be repeated for a maximum of 15 units. Prerequisite: Art 203 or consent of instructor. A. (5 units) B. (5 units) C. (5 units)
374. WEAVING AND FIBER CONSTRUCTION
Design and execution of woven and nonwoven textile structures using a variety of techniques. Exploration in the use of various fibers in the form of yarns, rope, cord and cane, and the possibilities of weaving without a standard loom. May be repeated for a maximum of 15 units. Prerequisite: Art 203 or consent of instructor. A. (5 units) B. (5 units) C. (5 units)

375. GLASS BLOWING
The techniques of furnace glass working involving gathering molten glass on blow pipes and punti rods, as well as cold working, as used in the formation of both functional and sculptural glass objects. May be repeated for a maximum of 15 units. Prerequisite: Art 203 or consent of instructor.

376. JEWELRY AND METALSMITHING
Design and fabrication of jewelry and hollow ware including the techniques of bending, forming, soldering and casting. May be repeated for a maximum of 15 units. Prerequisite: Art 203 or consent of instructor.

395. ART IN THE CLASSROOM I
Providing art experiences through the use of varied art media in the elementary school. May not be counted toward fulfilling requirements of courses in the major.

396. ART IN THE CLASSROOM II
Providing art experiences through the use of varied art media in the elementary school. May not be counted toward fulfilling requirements of courses in the major. No prerequisite required.

410. STUDIES IN ART HISTORY
Study in a selected period in the history of art. May be repeated for credit.

429. SPECIALIZED STUDIO PROJECTS
Study and experimentation developed in consultation with the instructor from the student's individual abilities and needs. Prerequisite: consent of instructor.

482. STUDIO WORKSHOP
Study and experimentation in a selected area of art. May be repeated for credit. Prerequisites: Art 201, 203 and 204 or consent of instructor. (Credit to be arranged: 2 to 5 units)

499. METHODS AND MATERIALS IN THE TEACHING OF ART
A studio course dealing with media exploration, community resources, art classroom organization and contemporary art education philosophy. This course may not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing, and admission to the teacher credential program.

510. COLLOQUIUM IN ART
Inquiry into problems of art history, aesthetics and art criticism. May be repeated for credit. Prerequisite: consent of instructor.
BILINGUAL/CROSS-CULTURAL STUDIES

The courses listed below are intended to be used by students who wish to complete simultaneously the B.A. in Liberal Studies and the requirements for the multiple subjects credential with the bilingual/cross-cultural option. For further information concerning credential programs, contact the School of Education.

ART 325. STUDIES IN MEXICAN AND CHICANO ART
EDUCATION 533. TEACHING THE CULTURALLY DIFFERENT: THE CHICANO
EDUCATION 534. TEACHING THE CULTURALLY DIFFERENT: THE BLACK AMERICAN
FOREIGN LANGUAGES 450. LITERATURE IN TRANSLATION: MEXICAN
HISTORY 390. HISTORY OF MEXICO
HISTORY 391. CHICANO HISTORY
HISTORY 565. ETHNIC MINORITIES IN AMERICAN HISTORY
HUMANITIES 460. CULTURE STUDIES: MEXICO
HUMANITIES 501. SEMINAR IN CHICANO STUDIES
MUSIC 351. MEXICAN AND CHICANO MUSIC
PSYCHOLOGY 347. PSYCHOLOGICAL DEVELOPMENT OF THE CHICANO
POLITICAL SCIENCE 351. THE CHICANO AND POLITICS
SOCIAL SCIENCES 220. INTRODUCTION TO CHICANO STUDIES
SOCIOLOGY 342. THE CHICANO FAMILY
SOCIOLOGY 410. RACIAL AND CULTURAL MINORITIES
SPANISH 204. INTRODUCTION TO LITERARY TEXTS
SPANISH 302. THEORY AND PRACTICE IN COMPOSITION
SPANISH 440. MEXICAN LITERATURE
The major in biology emphasizes processes and structure and the concept that biological processes can be studied at different levels of organization. Viewed from another perspective, the major is a balanced blend of traditional and modern biology, incorporating the important generalizations of traditional biology and the more recent advances essential to the successful biologist or medical practitioner of the future.

The excellent facilities and equipment of the department are readily available to all students enrolled in biology courses. Qualified seniors are encouraged to engage in research projects through the independent study program.

Many career opportunities are available to the student majoring in biology. The undergraduate program provides an excellent background for further work in medicine, dentistry, veterinary medicine and graduate programs; and it also can serve for direct entry into public school teaching, medical technology and a variety of positions in industrial, research and governmental organizations.

Requirements for the bachelor of arts degree: Mathematics 101 or 150 or 200; Physics 111 and 112 or 211 and 212; Chemistry 215 and 216; 225 and 226 or 321, 322 and 323; Biology 200, 201, 202 and six upper-division courses in biology (which may include Chemistry 436 and 437) totaling no less than 30 units.

Requirements for the bachelor of science degree: Mathematics 101 or 150 or 200; Physics 111 and 112 or 211 and 212; Chemistry 215, 216 and 217; 225 and 226 or 321, 322 and 323; Biology 200, 201, 202; four courses selected from Biology 400 (or Chemistry 437), 423, 424 or 431, 440, 450; and six upper-division courses in biology (which may include Chemistry 436 and 437) totaling no less than 30 units.

All courses leading to either a B.A. or a B.S. are to be selected in consultation with a departmental advisor.

Requirements for a minor in biology: Biology 200, 201, 202 and three additional upper-division courses in biology totaling no less than 15 units; Chemistry 215 and 216; and one of the following courses: Physics 100, 111, 211, Mathematics 101, 150, 200.

In a number of courses, field trips are normal and frequent.

Preprofessional students of medicine or dentistry seeking a major in biology should refer to Page 64 of this bulletin and consult with a departmental advisor.

Departmental Honors: Candidacy for departmental honors in biology is voluntary. To be eligible a student must fulfill the following requirements: achieve a minimum GPA of 3.5 for all courses satisfying the requirements for the major (as defined above), take at least five courses in the major at the College, complete satisfactorily a senior proj-
ect and complete satisfactorily the departmental comprehensive ex-
amination. Application for candidacy must be made at the beginning of
the senior year. Approval of candidacy and of the project and project
advisor rests with the department. The project advisor will have sole
responsibility for acceptance of the completed project.

The department may grant honors to the exceptional student who
fails to meet the above requirements, but who has in the judgment of
the department brought distinction upon himself and the department
in some other appropriate manner.

Master of Science Degree: Details of this program and application
procedures are outlined in the Graduate Bulletin. The program is open
to both full-time and part-time students and generally requires the
equivalent of one year’s full-time work for completion (45 units of
graduate study including completion of master’s thesis and final oral
examination).

100. TOPICS IN BIOLOGY
Major generalizations of biology with particular emphasis on man’s inter-action with the
biosphere. Lecture and three hours of laboratory.

200. BIOLOGY OF THE CELL
Introduction to cellular structure and function. Lecture and three hours of laboratory.
Pre- or corequisite: Chemistry 215 or consent of instructor.

201. BIOLOGY OF ORGANISMS
Introduction to the structural and functional attributes of organisms. Lecture and three
hours of laboratory. Prerequisite: Biology 200 or consent of instructor.

202. BIOLOGY OF POPULATIONS
Introduction to the principles of ecology and evolution. Lecture and three hours of
laboratory.

220. PRINCIPLES OF MICROBIOLOGY
Morphology, physiology and classification of bacteria, yeasts, molds, rickettsiae and
viruses. Bacteriology of air, soil and dairy products; rudiments of infection and immunity.
Laboratory training in culture preparation, sterilization, inoculation and identification.
Lecture and six hours of laboratory. Prerequisite: one lower-division biology course. (6
units)

222. HUMAN ANATOMY AND PHYSIOLOGY
Survey of structure and function of human organ systems with emphasis on homeostasis.
May not be counted toward fulfilling requirements in the major. Lecture and three hours
of laboratory. Prerequisite: one lower-division biology course.

313. HISTORY OF BIOLOGY
Major developments in biological thought and their intellectual impact from the Greeks
to the present. An elective course for nonmajors as well as majors. Lecture only. Prereq-
quisite: one lower-division biology course. Recommended: Social Sciences 142 and 144.

314. BIOLOGY OF HUMAN SEXUALITY
Biological aspects of human anatomy, physiology and behavior as related to sexual
reproduction including discussion of fertility, pregnancy, childbirth and birth control;
consideration also given to homosexuality, venereal disease, sexual intercourse and
response. Lecture only. Prerequisite: one lower-division biology course.
315. INTRODUCTION TO HUMAN EMBRYOLOGY
An introductory course in human development. Emphasis on normal developmental sequences from fertilization to birth and on factors which can modify these normal sequences. Lecture only. May not be counted toward major requirements in biology. Prerequisite: Biology 100.

316. GENETICS OF MAN
Principles of heredity as they apply to man. Lecture only. May not be counted toward fulfilling requirements in the major by students already receiving credit for Biology 423. Prerequisite: one lower-division biology course.

319. LOCAL FLORA
Identification of flora of the immediate San Bernardino area. Field collections, lecture and six hours of laboratory. May not be counted toward fulfilling requirements in the major by students already receiving credit for Biology 464. Prerequisite: one lower-division biology course. (6 units)

321. EVOLUTION
Darwin, the modern view of evolution and the implications of evolution in other disciplines. Lecture only. Prerequisite: one lower-division biology course.

331. BIOLOGY OF THE INVERTEBRATES
The evolution of the invertebrate phyla with emphasis on major phylogenetic changes. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

335. ENTOMOLOGY
A study of the evolution, anatomy, classification and habits of insects and related arthropods. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

342. BIOLOGY OF THE CHORDATES
Consideration of structural, physiological and ecological changes in the evolution of the chordate groups. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

351. BIOLOGY OF LOWER PLANTS
A survey of the major structural and physiological features in the evolution of lower plants. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

357. BIOLOGY OF HIGHER PLANTS
Comparative morphology of ferns, fern allies and seed plants, with a consideration of their phylogenetic relationships. Lecture and six hours of laboratory. Prerequisite: Biology 201 or consent of instructor. (6 units)

360. FUNCTIONAL ANATOMY OF PLANTS
Tissues and tissue aggregates in vascular plants, stressing the functional attributes of structure, with laboratory study of living and preserved plant material and prepared slides. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

370. SYMBIOSIS
The nature and principles of biological interactions with a survey of various types of relationships such as commensalism, mutualism, parasitism and competition. Lecture only. Prerequisite: Biology 201.

371. PARASITOLOGY
Study of the nature and principles of parasitism with a survey of various types of animal parasites. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)
375. INTRODUCTION TO PATHOBIOLOGY
Causes, mechanisms and consequences of disease in plants and animals at all levels of biological organization. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

376. BASIC FOUNDATION IN ENDOCRINOLOGY
Vertebrate endocrine system, with emphasis on mechanisms for regulating the biosynthesis, secretion, transport and actions of hormones. Designed for students interested in medicine and related areas. Not open to students who have taken Biology 541. Lecture only. Prerequisites: organic chemistry and vertebrate physiology, or equivalent.

400. MOLECULAR BIOLOGY
A basic course in biological chemistry with emphasis on gene function. May not be counted for credit by students who have received credit for Chemistry 437. Lecture and six hours of laboratory. Prerequisites: Biology 201 and Chemistry 226 or 323. (6 units)

423. GENETICS
Principles of classical and modern genetics including an introduction to population genetics. Lecture and six hours of laboratory. Prerequisite: one year of biology, including Biology 202 or equivalent. (6 units)

424. COMPARATIVE ANIMAL PHYSIOLOGY
A comparative analysis of the physiological mechanisms and processes of organisms with emphasis upon trends of evolutionary specialization. Lecture and six hours of laboratory. Prerequisite: Biology 201. Pre- or corequisite: Chemistry 226 or 323. (6 units)

431. COMPARATIVE PLANT PHYSIOLOGY
Analysis of water relationships and nutrient requirements of green plants, their metabolism and controlling mechanisms involved in their growth and development. Lecture and six hours of laboratory. Prerequisite: Biology 201. Pre- or corequisite: Chemistry 226 or 323. (6 units)

440. PRINCIPLES OF DEVELOPMENT
A comparative analysis of patterns and processes of development in organisms, with emphasis upon the role of genetic and biochemical mechanisms. Lecture and six hours of laboratory. Prerequisite: Biology 201. (6 units)

450. ECOLOGY
An analysis of the interrelationships of organisms and their physical and biotic environment with a consideration of the role of the environment in natural selection. Lecture, field studies and six hours of laboratory. Prerequisites: Biology 201 and 202. Recommended: Mathematics 150. (6 units)

464. TAXONOMY OF VASCULAR PLANTS
Taxonomic characteristics of vascular plant orders and families, with laboratory investigation of illustrative living and preserved plant material. Lecture and six hours of laboratory. Prerequisites: Biology 201, 202 and 357. (6 units)

466. BIOGEOGRAPHY AND EVOLUTION OF PLANT POPULATIONS
Consideration of major plant formations, with emphasis on world flora, evolutionary trends within major plant families and evolution of economically important cultivated plants. Lecture only. Prerequisite: Biology 423. Recommended: Biology 450 or 319.

470. BIOLOGY OF MICROORGANISMS
A study of microorganisms and their activities: microbial cell structure and function, metabolism, microbial genetics, microbial ecology, viruses, pathogenic microorganisms, and immunity. Lecture and six hours of laboratory. Prerequisites: Biology 201 and 202 and Chemistry 226 or 323. Recommended: Biology 400 or Chemistry 437. (6 units)
474. HEMATOLOGY
Basic principles and current laboratory procedures used in the study of blood. Morphological and chemical characteristics of normal and abnormal blood tissue will be emphasized. Lecture and six hours of laboratory. Prerequisite: Biology 424. (6 units)

476. IMMUNO BIOLOGY
Antigens, antibodies and the immune response. Lecture and six hours of laboratory. Prerequisites: Biology 400 or equivalent and Biology 424. (6 units)

499. METHODS AND MATERIALS IN THE TEACHING OF BIOLOGY
This course may not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.

501. SEMINAR IN BIOCHEMISTRY AND MOLECULAR BIOLOGY
An interdisciplinary seminar treating such topics as protein structure and function, biochemical catalysis, intermediary metabolism and macromolecular synthesis. Emphasis is on the study of original research papers. May be repeated for credit. Prerequisites: Chemistry 436, 437 or Biology 400 or consent of instructor. (2½ units)

523. THE GENETICS AND ECOLOGY OF POPULATIONS
Genetic and ecological mechanisms influencing the development, maintenance and evolution of populations. Lecture and six hours of laboratory. Prerequisite: Biology 423. Recommended: Biology 450. (6 units)

541. COMPARATIVE ENDOCRINOLOGY
Consideration of the endocrine control of metabolism, reproduction, differentiation, and the role of endocrines in the adaptation of selected invertebrates and vertebrates. Lecture and six hours of laboratory. Prerequisite: Biology 424 and Chemistry 226 or 323. (6 units)

545. THE NATURE AND EVOLUTION OF ANIMAL BEHAVIOR
Interrelationship between the ecology and behavior of animals, with particular reference to evolutionary aspects. Prerequisites: senior or graduate standing and consent of instructor.

550. SCANNING ELECTRON MICROSCOPY
Application of scanning electron microscopy to biological problems. Subjects include theory, maintenance and use of the microscope, specimen preparation, darkroom procedures and interpretation of micrographs. Lecture, six hours of laboratory and independent study. Prerequisite: consent of instructor. (5 units)

595. INDEPENDENT STUDY
Laboratory and/or library research in selected areas in biology conducted under the direction of a faculty member. A total of six units in Biology 595 may be applied toward graduation. Prerequisites: consent of department and instructor. (Credit to be arranged: 1 to 6 units)

620. ADVANCED TOPICS IN PLANT BIOLOGY
An in-depth consideration of selected areas of current study in plant biology. May be repeated for credit as topics change. Prerequisite: graduate standing. (2½ units)

650. ADVANCED TOPICS IN GENETICS
An in-depth consideration of selected research areas in genetics. May be repeated for credit as topics change. Prerequisite: graduate standing and consent of instructor. (2½ units)
664. **BIOSYSTEMATICS**

Fundamental concepts of classification systems, biometric and experimental taxonomic procedures, nomenclature and systematic literature; both plant and animal materials used. Lecture only. Prerequisites: Biology 423 and one taxonomy-based course; e.g. Biology 319, 331, 335, 342, 351, 357 or 464. Recommended: Mathematics 150. (2½ units)

670. **ADVANCED TOPICS IN ECOLOGY**

Literature survey of specific topics related to community or ecosystem dynamics. May be repeated for credit as topics change. Prerequisites: graduate standing and Biology 450 or equivalent. (2½ units)

680. **ADVANCED TOPICS IN EVOLUTION**

Topics of current research interest in plant or animal evolution. May be repeated for credit as topics change. Prerequisite: graduate standing. (2½ units)

690. **GRADUATE SEMINAR IN BIOLOGY**

Selected topics and reviews of current investigations in the fields of biology. Required of all graduate students in biology. May be repeated for credit as topics change. Prerequisite: graduate standing. (2½ units)

698. **EXTENDED ENROLLMENT**

Independent study leading to completion of requirements (other than course work) for the master of arts degree. Students enrolled in this course have full use of College facilities. Prerequisite: advancement to candidacy and consent of department. (0 units)

699. **THESIS RESEARCH AND THESIS**

Independent graduate research conducted under guidance of the major advisor and resulting in a thesis. May be repeated for a maximum of 9 units. Prerequisite: admission to candidacy. A. (3 units) B. (3 units) C. (3 units)
The Department of Chemistry provides: (1) undergraduate training in chemistry for students planning professional careers in chemistry and allied professions such as medicine, dentistry, pharmacy, health sciences and veterinary medicine and for those contemplating graduate work for advanced degrees; (2) appropriate courses for the teacher credential program; (3) fundamental chemical science courses required by students majoring in related fields such as physics and biology; and (4) an understanding of the achievements and contributions of chemistry as a science.

Requirements for the bachelor of arts degree: Chemistry 215, 216, 217, 321, 322, 323, 455, 456, 475, 590 and five additional upper-division units in chemistry; Physics 111-112 or 211-212; and Mathematics 200, 201 and 202.

Requirements for the bachelor of science degree: Chemistry 215, 216, 217, 321, 322, 323, 455, 456, 475, 457, 590 and 15 additional upper-division units (10 units to be selected from among Chemistry 436, 545, 525 or 526 or 576; five units from among Chemistry 437, 526, 528, 566, 568, 576, 595 or an upper-division course in mathematics or physics selected in consultation with the departmental advisor); Physics 211, 212, and 213; Mathematics 200, 201, 202, 203, and one applied mathematics course, selected in consultation with the departmental advisor; foreign language (German 101-102 or Russian 101-102 or equivalent proficiency). A comprehensive examination covering the major field of study will be required in the senior year.

The Bachelor of Science in Chemistry satisfies the requirements for certification by the American Chemical Society.

Pre-professional students of medicine or dentistry seeking a major in chemistry should refer to Page 64 of this catalog and consult with a departmental advisor.

Students interested in fields such as environmental science, environmental law, business and clinical chemistry can pursue these by following the minimum requirements of the major and appropriate electives.

Requirements for a minor in chemistry: Chemistry 215, 216, 217, 225-226 or 321-322-323, 455, and 456 or 475; Mathematics 200, 201 and 202; and Physics 111-112 or 211-212.

Departmental Honors: A graduating senior will be awarded departmental honors in chemistry after meeting the following requirements: at least a 3.5 average in all chemistry course work taken at
the College with a minimum being five chemistry courses, at least a 3.0 average on the comprehensive examinations, and an A in Chemistry 595 or another demonstration of ability to do independent work in chemistry.

100. CHEMISTRY IN THE MODERN WORLD
An examination of chemistry, its use by modern man and its value to contemporary society. Designed primarily for students with no high school background in chemistry. Lecture and two hours of laboratory.

205. FUNDAMENTALS OF CHEMISTRY I: GENERAL CHEMISTRY
A basic introduction to the concepts of chemistry, including the composition of matter and physical and chemical changes. Lecture and three hours of laboratory. Recommended preparation: one year of high school algebra.

206. FUNDAMENTALS OF CHEMISTRY II: ORGANIC CHEMISTRY
An introduction to the chemistry of organic compounds. Lecture and three hours of laboratory. Prerequisite: Chemistry 205.

207. FUNDAMENTALS OF CHEMISTRY III: BIOCHEMISTRY
An introduction to the principles of modern biological chemistry and to organic compounds of biological interest. Lecture and three hours of laboratory. Prerequisite: Chemistry 206.

215. INTRODUCTORY CHEMISTRY I: ATOMIC STRUCTURE AND CHEMICAL BONDING
The first of a three-course sequence in general chemistry and quantitative analysis. Topics in this course include atomic and molecular structure, chemical bonding, states of matter and solutions. Lecture and six hours of laboratory. Recommended preparation: one year of high school chemistry and three years of high school mathematics. (6 units)

216. INTRODUCTORY CHEMISTRY II: PRINCIPLES OF CHEMICAL REACTIONS
Chemical kinetics and equilibrium, thermodynamics, redox reactions and electrochemistry, and topics in inorganic, organic, biological and environmental chemistry. Lecture and six hours of laboratory. Prerequisite: Chemistry 215 or consent of instructor. (6 units)

217. INTRODUCTORY CHEMISTRY III: MODERN QUANTITATIVE ANALYSIS
Gravimetric and volumetric analysis, chemical equilibria, modern instrumental methods and radioanalytical techniques. Lecture and six hours of laboratory. Prerequisite: Chemistry 216 or consent of instructor.

225. ORGANIC CHEMISTRY I
A descriptive discussion of carbon compounds, including modern concepts of structure, reaction mechanisms and reactivity. Major emphasis is placed on organic compounds of biological interest. Lecture and six hours of laboratory. For nonchemistry majors only. Prerequisite: Chemistry 216 or consent of instructor. (6 units)

226. ORGANIC CHEMISTRY II
A continuation of Chemistry 225. Lecture and six hours of laboratory. Prerequisite: Chemistry 225 or consent of instructor. (6 units)

315. ENVIRONMENTAL CHEMISTRY
An introduction to the chemistry of water, soil and air pollution problems. Lecture and three hours of laboratory. Prerequisites: Biology 100 or 202, and Chemistry 206 or 216, and 225 or 321, or consent of instructor.
321. PRINCIPLES OF ORGANIC CHEMISTRY I
A detailed study of organic molecules and their structures, reaction mechanisms, stereochemistry and synthesis. Lecture and six hours of laboratory. Prerequisite: Chemistry 216 or consent of instructor.

322. PRINCIPLES OF ORGANIC CHEMISTRY II
A continuation of Chemistry 321. Lecture and six hours of laboratory. Prerequisite: Chemistry 321 or consent of instructor.

323. PRINCIPLES OF ORGANIC CHEMISTRY III
A continuation of Chemistry 322, including special topics in heterocyclic compounds, fats, carbohydrates, and amino acids and proteins. Lecture and six hours of laboratory. Prerequisite: Chemistry 322 or consent of instructor.

348. BIOLOGICAL APPLICATIONS OF RADIOCHEMISTRY
Introduction to radiochemistry, radioinstrumentation, the applications of radiotechniques for analytical purposes, especially within living systems, and the effects of radiation on living systems and the environment. Lecture and six hours of laboratory. Prerequisites: Biology 200 and Chemistry 217, and 226 or 323; or consent of instructor. (6 units)

392. SCIENTIFIC GLASSBLOWING
Principles and skills in the construction, modification and repair of scientific glass apparatus. May not be counted toward requirements for the major. (2 units)

436. BIOCHEMISTRY I
Chemistry of proteins, carbohydrates, lipids and other classes of biomolecules; the kinetics, mechanism and structure of enzymes; the principles of bioenergetics; and the basic principles of metabolism. Lecture and three hours of laboratory. Prerequisites: Chemistry 216, and 226 or 323.

437. BIOCHEMISTRY II
Biochemical processes that yield and utilize energy: metabolism of carbohydrates, lipids, amino acids, purines and nucleic acid biosynthesis. Lecture and three hours of laboratory. Prerequisites: Chemistry 216, and 226 or 323, and 436; or consent of instructor.

455. PHYSICAL CHEMISTRY I
Thermodynamics and the properties of solutions. Lecture and six hours of laboratory. Prerequisites: Chemistry 216, Mathematics 202 and Physics 112 or 212, or consent of instructor. (6 units)

456. PHYSICAL CHEMISTRY II
Phase equilibria, electrochemistry, transport properties, reaction rates and mechanisms, and quantum mechanics. Lecture and six hours of laboratory. Prerequisite: Chemistry 455 or consent of instructor. (6 units)

457. PHYSICAL CHEMISTRY III
Quantum and statistical mechanics, gases, theories of reaction kinetics, photochemistry and crystal structure. Lecture only. Prerequisites: Chemistry 456, Mathematics 203 and Physics 213, or consent of instructor. Physics 213 may be taken concurrently.

475. INORGANIC CHEMISTRY
Inorganic compounds and reactions. Special emphasis on group theory, structure, kinetics, and thermodynamic principles. Lecture and six hours of laboratory. Prerequisite: Chemistry 455 or consent of instructor. (6 units)
100 / Chemistry

499. METHODS AND MATERIALS IN THE TEACHING OF CHEMISTRY
May not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.

525. ADVANCED ORGANIC CHEMISTRY
Advanced concepts of structure, synthesis and properties of organic compounds, and the theory and application of experimental techniques employed in their study. Lecture and six hours of laboratory. Prerequisite: Chemistry 323 or consent of instructor. (6 units)

526. PHYSICAL ORGANIC CHEMISTRY
Selected topics in mechanistic organic chemistry with emphasis on recent developments in the field. Lecture only. Prerequisite: Chemistry 323 and 456 or consent of instructor.

528. CHEMISTRY OF NATURAL PRODUCTS
Selected topics in natural products chemistry. Lecture only. Prerequisite: Chemistry 323 or consent of instructor.

545. ADVANCED ANALYTICAL CHEMISTRY
Principles and techniques of modern instrumental analysis, including spectrophotometry, spectroscopy, chromatography, X-ray analysis, mass spectrometry and potentiometry. Lecture and six hours of laboratory. Prerequisites: Chemistry 226 or 323 and 456 or consent of instructor. (6 units)

549. ADVANCED CHEMICAL INSTRUMENTATION
Individual study on advanced chemical instrumentation under the direction of a faculty member. May be repeated once for credit. Prerequisites: Chemistry 323 and consent of department and instructor. (Credit to be arranged: 1 to 2 units)

566. THE LITERATURE OF CHEMISTRY
An introduction to the use of chemical information resources. Lecture only. Prerequisite: Chemistry 226 or 323 or consent of instructor. (2½ units)

568. HISTORY OF CHEMISTRY
The development of chemical knowledge from antiquity to present times. Lecture only. Prerequisite: Chemistry 206 or 226 or 323 or consent of instructor. (2½ units)

576. ADVANCED INORGANIC CHEMISTRY
Current developments in inorganic chemistry, including coordination chemistry, nonmetals and metalloids. Lecture only. Prerequisites: Chemistry 456 and 475 or consent of instructor.

590. CHEMISTRY SEMINAR
Topics of current chemical interest, presented by students, faculty and guest speakers. May be taken once for credit toward the major requirements for graduation. Prerequisite: Chemistry 323 or 455. (1 unit)

595. INDEPENDENT STUDY
A analytical, biochemical, inorganic, organic or physical chemical research conducted under the direction of a faculty member. A total of six units in Chemistry 595 may be applied toward requirements of the major. Prerequisites: consent of department and instructor. (Credit to be arranged: 1 to 6 units)
The child development major focuses on the biological, psychological and sociological aspects of human development, through an interdisciplinary approach which draws its course offerings from the departments of psychology, sociology, anthropology, biology and education as well as from the field of ethnic studies. The major provides the important advantage of promoting a holistic approach to development that no single discipline can offer.

The major is designed specifically for persons who plan to enter occupations or professions that call for child development specialists. These include teachers, teaching assistants, day-care workers, playground and recreation supervisors, and other positions involving work with young children and their families. The program also provides academic preparation for graduate-level training in a number of child-related professions.

Students whose interests are in teaching need to familiarize themselves as well with the professional requirements for the multiple subjects teaching credential with a focus on early childhood education and the degree program in liberal studies. For further information on the child development major contact the Office of Academic Planning or the School of Education.

Requirements for the major: Biology 100 and 315; Psychology 100, 325 and 326; Sociology 100 and 339; Anthropology 330; and four approved electives, at least two of which must be upper-division, chosen in consultation with an advisor, from the listing below. In addition, each student is required to complete five units of work in a practical setting involving children. This requirement may be met through Education 365 or its equivalent or through comparable experience gained in certain specified community college courses. Students planning to enroll in Education 356 before graduation may use this course in lieu of Education 365. Social Sciences 210 or Mathematics 150 is strongly recommended, for students who plan to continue with graduate study.

Lower-division prerequisites:

  BIOLOGY 100.  TOPICS IN BIOLOGY
  PSYCHOLOGY 100.  INTRODUCTION TO PSYCHOLOGY
  SOCIOLOGY 100.  THE STUDY OF SOCIETY

Upper-division core:

  PSYCHOLOGY 325.  PSYCHOLOGY OF INFANCY
  PSYCHOLOGY 326.  PSYCHOLOGY OF CHILDHOOD
  SOCIOLOGY 339.  SOCIALIZATION
  BIOLOGY 315.  INTRODUCTION TO HUMAN EMBRYOLOGY
ANTHROPOLOGY 330. CROSS-CULTURAL CHILD REARING PRACTICES

Practicum:

EDUCATION 365. INTERNSHIP IN CHILD DEVELOPMENT

Approved electives:

ANTHROPOLOGY 100. INTRODUCTION TO ANTHROPOLOGY: HUMAN EVOLUTION
ANTHROPOLOGY 102. INTRODUCTION TO ANTHROPOLOGY: CULTURE AND SOCIETY
PSYCHOLOGY 327. PSYCHOLOGY OF ADOLESCENCE AND AGING
PSYCHOLOGY 337. PSYCHOLOGICAL DEVELOPMENT OF THE BLACK AMERICAN
PSYCHOLOGY 347. PSYCHOLOGICAL DEVELOPMENT OF THE CHICANO
PSYCHOLOGY 385. PERSONALITY
PSYCHOLOGY 526. MENTAL RETARDATION
SOCIOLOGY 305. SOCIOLOGICAL RESEARCH AND ANALYSIS
SOCIOLOGY 340. SOCIOLOGY OF THE FAMILY
SOCIOLOGY 341. MARRIAGE AND FAMILY AMONG BLACKS
SOCIOLOGY 342. THE CHICANO FAMILY
SOCIOLOGY 352. JUVENILE OFFENDER
SOCIOLOGY 354. DEVIAN T BEHAVIOR
SOCIOLOGY 480. HUMAN GROWTH AND SOCIAL ENVIRONMENT
EDUCATION 330. PSYCHOLOGICAL FOUNDATIONS OF EDUCATION
EDUCATION 430. THEORIES OF LEARNING
EDUCATION 530. PSYCHOLOGY AND EDUCATION OF EXCEPTIONAL CHILDREN
BIOLOGY 314. BIOLOGY OF HUMAN SEXUALITY
BIOLOGY 316. GENETICS OF MAN
BIOLOGY 321. EVOLUTION

POLITICAL SCIENCE 450. POLITICAL ATTITUDES AND ORIEN TATIONS OF CHILDREN
In a period of rapid and dramatic social change, a system of criminal justice must meet the needs of each individual citizen as well as the needs of complex social, economic and governmental institutions. The B.A. degree program in criminal justice is concerned with these diverse needs and is appropriate for both career-bound preservice students and inservice personnel in law enforcement, probation, parole, corrections and related areas.

In addition, the program is designed to provide students with an appropriate academic background for continuing into graduate studies in criminal justice or pursuing graduate study in other areas such as law or criminology.

The criminal justice major is an interdisciplinary program with enough flexibility to permit each student to pursue his own interests. For example, students wishing to emphasize law enforcement may select particularly appropriate courses within the major and are encouraged to minor in administration, political science or sociology. Students directed toward probation, parole or correction work are advised to select courses accordingly and to take electives in psychology or sociology.

Students transferring from community colleges may substitute selected police science/corrections courses for Criminal Justice 101, 102 and 103 and may be given lower-division credit toward the major for two additional courses.

Requirements for the major: Criminal Justice 101, 102, 103, 305; Sociology 350; and either Sociology 357 or 358; Social Sciences 210; nine additional courses to be selected as follows, in consultation with an advisor: either Administration 380 and 480 or two courses from among Administration 301, 302, 350, 451, 455; Philosophy 350, 360 or 465; one course from among Political Science 328, 410, 411; one course from among Political Science 330, 380, 426, 550; two courses from among Psychology 100, 385, 390; two courses from among Sociology 352, 354, 356, 359, 360, 410, 430, 436.

Requirements for a minor in criminal justice: Criminal Justice 101, 102, 103, Sociology 350, and two courses from among Sociology 352, 357, 358 or 359.

Students must complete Criminal Justice 101, 102 and 103 before taking upper-division courses in the major.

101. INTRODUCTION TO CRIMINAL JUSTICE I
A survey of the history and philosophy of the criminal justice system in the United States with emphasis on systemic change, the development and content of criminal law and current developments in the structure of education and training in the system.
102. INTRODUCTION TO CRIMINAL JUSTICE II
Nature, structure and functions of the police, courts (including prosecution and defense) and corrections (institutional and community) and the interrelationships among those component parts.

103. CRITICAL ISSUES IN CRIMINAL JUSTICE
Consideration of various topics with regard to the criminal justice system including, but not limited to, issues in criminal evidence, arrest and detention, search and seizure, the ideology of crime control and criminal justice reform, and specific areas of crime (organized crime, political crime).

305. RESEARCH METHODS IN CRIMINAL JUSTICE
Examination of research techniques and methods applicable to the criminal justice system and application to specific problems. Lecture and laboratory. Prerequisites: Criminal Justice 101, 102, 103; Social Sciences 210 or Mathematics 150.

575. INTERNSHIP IN CRIMINAL JUSTICE
Supervised work and study in private or public organizations. May be repeated once for credit. Open only to majors. Prerequisites: consent of instructor and department.

595. INDEPENDENT STUDY
In-depth research into special topics concerned with the criminal justice system utilizing readings, library and/or field research. Prerequisites: consent of the coordinator of the program and the instructor. (Credit to be arranged: 2 to 5 units)
Fun and hard work characterize the life of the drama student. A student's interest in the theatre arts may be oriented toward career goals or toward avocational goals. The curriculum provides a broad base for both by exploring every phase of those arts, and the plays provide opportunities to actually experience those arts. Many opportunities exist for working in student productions of reader's theatre and guerrilla theatre as well as in conventional theatre.

These experiences in the theatre arts are available to nonmajors as well as majors. Plays are cast from enrolled students except for an occasional resident artist.

Classes are designed to afford optimum individual attention. Professors in the department do not hesitate to present differing points of view, which encourages students to develop their skill to think independently and critically.

Requirements for the major: ten five-unit upper-division drama courses, including 330, 340, 343; 441 or 443; three courses in dramatic literature (450 to 479). Also required are five practica (10 units of Drama 320 or equivalent).

With the approval of an advisor, a student having specialized interests (for example, interpersonal communications) may develop an alternative program of study leading to the major. Such a program will require the same amount of course work as described above but with a different distribution.

Requirements for a minor in drama: six upper-division courses including Drama 330 and 340; 441 or 443; and two courses numbered 450 or above.

120. ORAL COMMUNICATION
Effective development of the voice coupled with development of the mind for the purpose of improving meaningful oral communication.

210. ORAL INTERPRETATION OF LITERATURE
Introduction to the techniques of the oral performance of literature; emphasizes literary and aesthetic analysis and the oral presentation of poetry and prose.

230. STAGECRAFT
Theory and practice of stage production and design; including basic problems and techniques of costume construction, scenic construction and painting, elements of lighting.

250. THE ART OF THEATRE ARTS
Development of an awareness of such arts of the theatre as set, costume and lighting design; of acting and directing; of theatre management, organization; and of the history of theatre architecture and dramatic literature. The course will be arranged around a contemporary theatrical event.

300. ELEMENTS OF PUBLIC SPEAKING
302. ANALYSIS OF DRAMA
The literary experience through study of structure and theme in selected plays.

305. DISCUSSION AND DEBATE
Group discussion techniques and their implementation, leading to the basic principles of argumentative discourse, including the concepts of presumption, burden of proof, rhetorical forms of reasoning and evidence. Practice in applying these principles in discussion and debate.

320. THEATRE PRACTICUM
Application of theatre for an audience. Students will concentrate on acting, or technical production, for an intensive period. Open to all full-time students except freshmen. May be repeated for credit up to a total of ten units. No more than ten units for theatre practicum and music performance may be used to satisfy graduation requirements. (2 units)

325. FORENSICS PRACTICUM
An activity course for students to prepare for intercollegiate forensics competition. No more than 10 units of credit may be awarded for practicum courses (Drama 320, 325). (2 units)

330. DESIGN
A consideration of the aesthetics and history of scenic, costume and lighting design and their influence on theatrical production. Study of the elements of line, color, light and stage composition; assigned projects requiring drafting of ground plans and elevations, and rendering of original designs. Prerequisite: Drama 230 or 320 or consent of instructor.

340. ACTING I
First steps in acting and mimetic expression. Development through class participation in planned exercises of self-expression and techniques in creating a role.

341. ACTING II
Styles in acting. Techniques in creating a role in period dramas requiring coordination in the internal and external manifestations of character. May be repeated once for credit with consent of instructor. Prerequisite: Drama 340 or consent of instructor.

343. ORAL INTERPRETATION FOR THE THEATRE
Techniques for the oral performance of drama, including literary and aesthetic analysis of plays.

415. COMMUNICATION AND PERSUASION
Techniques of oral persuasion and its relationship to attitude change: theory and practice. Cross-cultural communication and freedom of speech are also considered.

420. TECHNIQUES OF MASS COMMUNICATION
Studies of and experience with the techniques of mass media and their effects on society, emphasizing such forms as television, film and print.

441. DIRECTING
Development of the theory and practice of play directing. Student director gains experience by participation in directorial exercises. Prerequisite: Drama 340 or consent of instructor.

443. READERS THEATRE
Group techniques for oral performance and staging of literature. Includes the preparation and performance of scripts for readers theatre, choral theatre, story theatre and chamber theatre. Prerequisites: Drama 210, 343, or consent of instructor.
445. THE CAMERA EYE
Film as a creative art medium. Such topics as the history of silent film, film since the '50's or television will be chosen. May be repeated for credit with consent of instructor.

450. CLASSICAL DRAMA
Development of comedy and tragedy in Greece and Rome.

451. MYSTERY TO MELODRAMA
Development of drama from Medieval passion plays to late 19th century villain-hissing melodramas. Emphasis on either comedy or tragedy.

455. MODERN DRAMA I
European, British and American realism, beginning with variations of the 19th century well-made play. Emphasizes such playwrights as Ibsen, Chekhov, Shaw and O'Neill.

456. MODERN DRAMA II
European, British and American anti-realism, including various avant-garde movements. Emphasizes such playwrights as Brecht, Pinter, Wilder and Genet.

461. AMERICAN DRAMA
Survey of the American theatre and its drama (Dunlap to Odets) as they reflect the changing patterns of American society.

475. SHAKESPEARE I
Comedies and history plays.

476. SHAKESPEARE II
Tragedies and romances.

481. CREATIVE DRAMATICS
Experience with improvisational dramatic techniques designed to develop the imaginations of elementary school children and to increase creative results of classroom instruction.

499. METHODS AND MATERIALS IN THE TEACHING OF DRAMA
May not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.

510. STUDIES OF MAJOR FIGURES AND GENRES
May be repeated for credit with consent of instructor.

515. COMMUNICATION THEORY
Analysis of communication theories and research. Students will acquire a working knowledge of the communication process, an understanding of the underlying forces at work in given social settings and a familiarity with alternative explanations of communication outcomes.

520. THEATRE SEMINAR
Literature and theory relative to aesthetics, theatre history, drama and dramatic criticism. May be repeated for credit with consent of instructor.

555. INDEPENDENT STUDY
Research and analysis culminating in direction or design of a play for public performance.
EARTH SCIENCE

At the present time the College does not offer a major program in earth science or geology. The courses listed below are offered to permit an elective option in general education (Earth Science 101) and in support of other major programs.

101. PHYSICAL GEOLOGY
An introduction to the study of the earth, particularly the structure, composition, distribution and modification of earth materials and processes that shape the surface of the earth.

102. HISTORICAL GEOLOGY
Geologic history of the earth including the chronological development of continental features and an interpretation of the earth's history as reflected in rock and fossil records. Prerequisite: Earth Science 101.
Any time a choice must be made between alternatives—whether a personal decision to study math or play ball, or a governmental decision whether to spend a billion dollars on the space program or on schools—there are economic ramifications. Personal decisions sometimes are made without conscious awareness of costs and benefits involved in the alternatives. But business, government and social institutions must, if they are to use resources wisely, consciously consider economic factors in making decisions. The use of economic principles enables individuals and organizations to analyze problems in an orderly manner and to make sound choices about the economic desirability of a program or activity.

Training in economics, supplemented by course work in other disciplines, provides excellent preparation for particular careers in industry, government and many professions including teaching, law or consulting. Because economic problems are encountered everywhere and touch everyone's life, the study of economics also provides useful intellectual training for individuals who may be uncertain about their future plans.

Requirements for the major: ten courses in economics, including Economics 100, 102, 300, 302, and at least six other upper-division courses. With the approval of the departmental advisor, up to two courses in related fields may be counted toward the upper-division course requirement in economics. Mathematics 150 or Social Sciences 210 is also required. Mathematics 200 is highly recommended.

Requirements for a minor in economics: Economics 100, 102, 300, 302, plus two upper-division economic courses.

Economics 100 or 102 or consent of instructor is a prerequisite for upper-division courses, except for Economics 305, 350 and 360. No background in mathematics is required for Economics 100 or 102. Economics 100 need not be taken prior to Economics 102.

Departmental Honors: Departmental honors will be awarded upon graduation to students majoring in economics who have earned a 3.5 grade-point average in all economics courses attempted, completed at least half of all work in economics at this College and been recommended for departmental honors by economics faculty.

100. **PRINCIPLES OF ECONOMICS I**
Introduction to the theory of national income determination, employment and general price levels, international economic issues and growth.

102. **PRINCIPLES OF ECONOMICS II**
Introduction to price theory; resource allocation and the distribution of income; monopoly and imperfect competition.
110 / Economics

300. NATIONAL INCOME THEORY
Intermediate macroeconomic theory; analysis of the problems of measurement and determination of national income, employment and general price level.

302. PRICE THEORY
Analysis of the role of prices in the allocation of resources under various market structures.

305. INTENSIVE INTRODUCTORY ECONOMICS
An intensive introduction to micro- and macroeconomic concepts for graduate students. Not open to students with credit in Economics 100 and 102. Prerequisite: graduate standing.

350. ECONOMICS OF POCKET UNDERDEVELOPMENT: THE GHETTO
Emphasizes the various factors retarding economic progress in ghetto areas and the methods by which necessary changes can be effected. Case studies will be utilized.

360. ECONOMICS OF THE ENVIRONMENT
Investigation into economic implications of air and water pollution, urban congestion, natural resource depletion and population growth; examination of economic impact of environmental control and protection.

410. MONEY AND BANKING
Development and operation of the central bank and monetary institutions of the United States; problems of achieving full employment and price stability through monetary control.

420. COMPARATIVE ECONOMIC SYSTEMS
Theories and forms of organization of the major contemporary economic systems.

430. INTERNATIONAL ECONOMICS
Theory of international specialization and exchange; contemporary international economic issues; balance of payments, exchange rates, common markets, tariffs and commodity agreements.

450. ECONOMIC DEVELOPMENT
Economic problems of underdeveloped countries and the policies necessary to induce growth.

460. LABOR ECONOMICS
Labor markets and wages, development of unions and collective bargaining, labor legislation.

475. PUBLIC FINANCE
Fiscal theory and policy, theories and incidence of taxation, problems of national debt management, government spending and budgeting. (Also offered as Administration 475)

480. INTRODUCTION TO MATHEMATICAL ECONOMICS
Application of mathematics to economics; graphs, functions and calculus applied to income determination models, growth models and maximization models. Prerequisite: Mathematics 200.

490. INTRODUCTION TO ECONOMETRICS
Applications of statistical methods to the verification of hypotheses generated by economic theory. Prerequisites: Mathematics 101 and Social Sciences 210 or Mathematics 150.
500. HISTORY OF ECONOMIC THOUGHT
Development of economic doctrines and analysis from ancient times to the present; emphasis on landmark economists and their thought from Adam Smith to John Maynard Keynes.

555. INDEPENDENT STUDY
Special topics involving library and/or field research. Prerequisites: departmental approval of written proposal of project and consent of instructor.

565. PROBLEMS IN PUBLIC FINANCE
Problems and concepts of financial management in public administration including: revenue sources, tax administration, debt management, the budget cycle and budget types. Prerequisites: senior standing, Administration 560, Economics 475 or Administration 475, or consent of instructor. (Also offered as Administration 565)

590. SEMINAR IN ECONOMICS
Intensive study of some phase of economics. May be repeated for credit as subject matter changes and with consent of instructor.
EDUCATION

The School of Education offers course work designed to prepare students for a variety of careers in education. At the present time, the College is approved to offer the single subject teaching credential for teaching a single subject in a "departmentalized" school (all grades), and the multiple subjects teaching credential for teaching in a self-contained classroom (all grades). A pupil personnel services credential program is also offered, and plans are underway to offer the bilingual/cross-cultural specialist credential, the administrative services credential, the reading specialist credential, the vocational credential, the special education credential and the early childhood specialist credential. Master's degrees are offered in elementary and secondary education and in school counseling. Inservice course work also is available to personnel currently employed in education, or for those interested in learning more about the field.

Admission to the Teacher Education Program

Admission to the College must precede admission to the credential program. During the first week of every term, all new credential candidates (juniors, seniors and graduate students) must apply for admission to the School of Education. Special meetings are held for this purpose, with times and places announced in advance. Candidates may enroll in Education 330 (Psychological Foundations of Education) and Education 345 (Reading in the Elementary School) or Education 445 (Reading in the Secondary School) without being formally admitted to the program. Admission is based on the following criteria:

1. Three written recommendations, at least two from faculty members in the student's major department.
2. Interview by a member of the School of Education faculty.
3. Health clearance secured from the College Health Service.
4. Academic achievement. Candidates must maintain a minimum 2.0 (C) grade-point average in all college course work and 2.5 (C+) in course work in the major field and in professional education.
5. Completion of an approved program in a major field or satisfactory completion of the required state examination.
6. A signed affidavit by the candidate indicating he has no criminal convictions which would preclude the issuance of a credential.

In addition, the following criteria are also used: professional aptitude, personality and character, speech and language usage, and many-sided interests.

All course work taken at another college, or more than seven years ago, is subject to approval by an advisor in the School of Education.
One quarter in advance of the time the student intends to enroll in student teaching, the candidate must complete an application for student teaching. At that time, each applicant is reviewed in terms of all of the above criteria and, in addition, candidates must have completed the prerequisite course work in education, and be at least of senior standing.

Major
The multiple subjects teaching credential requires a student to satisfactorily complete an examination covering the following fields of study: English, humanities, social science, science and mathematics. Students who choose the liberal studies major on this campus do not need to take the examination. (Information on this program may be found on Page 150 of this Bulletin.)

The single subject teaching credential requires a student to complete an approved program of study or complete a required state examination. Approved fields of study for the single subject teaching credential include the following: art, English, foreign language (French or Spanish), mathematics, music, physical science (Chemistry B.A./B.S.; Physics B.A./B.S.), life science (Biology B.A./B.S.), social science, history, government (taught as political science on this campus). For further information on examinations and waivers, contact the School of Education.

Professional Requirements
All candidates for a teaching credential must complete Education 330 (Psychological Foundations of Education). In addition, all candidates for a multiple subjects teaching credential and candidates for a single subject teaching credential (except majors in art and music) must complete a course on the teaching of reading or pass a state examination. These courses are: Education 345 (Reading in the Elementary School) or Education 445 (Reading in the Secondary School).

The above two courses (or the passage of the examination) are prerequisite to student teaching. Students must apply for student teaching one quarter in advance of the time they intend to student teach and must be of at least senior standing. Student teaching for both credentials is a full-time assignment for two quarters, and no concurrent course work may be taken except for the required methods courses.

Students seeking the multiple subjects teaching credential must register for Education 370 (Elementary Student Teaching I), 10 units, during one quarter and Education 371 (Elementary Student Teaching II), 10 units, during the succeeding quarter. Concurrently with each of these courses, students must also take one of the following methods courses: Education 340 (Elementary Curriculum and Methods I) or Education 341 (Elementary Curriculum and Methods II).

Candidates for the single subject teaching credential must register for Education 470 (Secondary Student Teaching I), 10 units, during one quarter and Education 471 (Secondary Student Teaching II), 10 units, during a succeeding quarter. Students must also complete two of the following methods courses and these must be taken concurrently with student teaching: Education 440 (Secondary Curriculum and
Instruction I; Education 441 (Secondary Curriculum and Instruction II) or courses in appropriate other disciplines numbered 499 (methods and materials of teaching in the student's major field).

Other Credential Programs
The College offers an approved program for the pupil personnel services credential. Plans are underway to offer also the bilingual/cross-cultural specialist credential, the administrative services credential, the reading specialist credential, the special education specialist credential and the early childhood specialist credential. Further information on these programs may be secured from the School of Education.

Master's Degree Program
The College offers a Master of Arts in Education, with options to specialize in elementary education, English or history (for secondary teachers), or counseling. Plans are being developed to offer additional options under the M.A. in Education in reading, administration, special education and bilingual/cross-cultural studies. Further information may be secured from the Graduate Bulletin or the School of Education.

330. PSYCHOLOGICAL FOUNDATIONS OF EDUCATION
Learning, motivation, evaluation, and human growth and development as applied to teaching.

331. GROWTH AND DEVELOPMENT OF THE YOUNG CHILD
Developmental characteristics of the young child, with special emphasis on family, child, preschool and school interaction. Prerequisite: admission to the credential program. Must be taken concurrently with Education 356.

340. ELEMENTARY CURRICULUM AND METHODS I
Introductory course in elementary curriculum and basic teaching techniques with emphasis on mathematics and science. Prerequisite: Education 330. Must be taken concurrently with student teaching.

341. ELEMENTARY CURRICULUM AND METHODS II
Introductory course in elementary curriculum and basic teaching techniques with emphasis on social science and language arts. Prerequisite: Education 330. Must be taken concurrently with student teaching.

342. CURRICULUM AND METHODS FOR PRESCHOOL EDUCATION
Principles, methods and materials of instruction in early childhood education. Includes instruction in the use of audio-visual equipment. Field work required. Prerequisite: admission to the credential program. Must be taken concurrently with Education 350.

343. CURRICULUM AND METHODS FOR PRIMARY EDUCATION
Continuation of Education 342, but includes emphasis on the teaching of reading including the phonetics approach. Prerequisite: admission to the credential program. Must be taken concurrently with Education 351.

344. CURRICULUM AND METHODS FOR BILINGUAL/CROSS-CULTURAL EDUCATION
Bilingual/cross-cultural teaching strategies and materials development. Emphasis on teaching language arts in Spanish, ESL and SSL teaching techniques, and development of units of study based on multicultural themes and concepts. Prerequisite: Education 340. To be taken concurrently with student teaching.
345. READING IN THE ELEMENTARY SCHOOL
Methods of teaching reading in the elementary school including skills in the diagnosis of reading difficulties, organization for instruction, selection of appropriate methods and use of instructional materials.

347. ORGANIZATION AND ADMINISTRATION OF PRESCHOOL EDUCATION
Principles of organizing and administering preschool programs including interpretation of school programs, laws, fiscal management and personnel practices. Prerequisite: consent of instructor. (2½ units)

350. STUDENT TEACHING: KINDERGARTEN
Early childhood candidates only. Must be taken concurrently with Education 342.

351. STUDENT TEACHING: PRIMARY
Early childhood candidates only. Must be taken concurrently with Education 343.

356. STUDENT TEACHING: PRESCHOOL
Observation, student teaching and scheduled seminars. Special permission required. Must be taken concurrently with Education 331.

365. INTERNSHIP IN CHILD DEVELOPMENT
Supervised work and study in settings involving young children. Prerequisite: completion of upper-division core courses in child development or consent of instructor.

370. ELEMENTARY STUDENT TEACHING I
Full-time teaching in the public schools. To be taken concurrently with Education 340. (10 units)

371. ELEMENTARY STUDENT II
Full-time teaching in the public schools. To be taken concurrently with Education 341. (10 units)

427. EDUCATION AND SOCIETY
An analysis of the process of education from the position of the individual seeking and becoming and the social institutions which facilitate and inhibit this process. A seminar course open to students in all majors.

430. THEORIES OF LEARNING
An examination of major theories of learning and their application to understanding child behavior.

440. SECONDARY SCHOOL CURRICULUM AND INSTRUCTION I
Analysis of curriculum and instructional procedures in the secondary school. Prerequisite: Education 330. Must be taken concurrently with student teaching.

441. SECONDARY SCHOOL CURRICULUM AND INSTRUCTION II
Curriculum planning, teaching strategies, media and classroom management. Prerequisite: Education 330. Must be taken concurrently with student teaching.

445. READING IN THE SECONDARY SCHOOL
Techniques and procedures for improving and extending reading habits, skills and interests of students in secondary schools.

470. SECONDARY STUDENT TEACHING I
Full-time teaching in the junior or senior high school. Prerequisite: consent of advisor. Must be taken concurrently with Education 440 or 441 or the appropriate 499 course. (10 units)
471. SECONDARY STUDENT TEACHING I
Full-time teaching in the junior or senior high school. Prerequisites: satisfactory completion of Education 470 and consent of advisor. Must be taken concurrently with Education 440 or 441 or the appropriate 499 course. (10 units)

530. PSYCHOLOGY AND EDUCATION OF EXCEPTIONAL CHILDREN
Physical, intellectual, social and emotional deviations among children and youth, with implications among exceptional children.

531. PRINCIPLES OF GUIDANCE
Introduction to guidance. Class members will sample the field of counseling and the pupil personnel credential program in school counseling, and will study the basics for developing a guidance program. Prerequisite: consent of instructor.

532. TEACHING THE EDUCATIONALLY HANDICAPPED CHILD
Causes, symptoms, diagnoses and remediation of specific learning disabilities. Special emphasis given to planning and evaluating programs for the educationally or neurologically handicapped child. Prerequisite: credential or teaching experience.

533. TEACHING THE CULTURALLY DIFFERENT: THE CHICANO
The Mexican-American's quest for equal educational opportunities, the need for Mexican-American culture and contributions in the school curriculum, methods and techniques for instruction of children, youth and adults in the traditional school subjects and in bilingual bicultural education.

534. TEACHING THE CULTURALLY DIFFERENT: THE BLACK AMERICAN
The Black American's quest for equal educational opportunities, the need for Black culture and contributions in the school curriculum, methods and techniques for instruction of children, youth and adults in the traditional school subjects. Cultural awareness to help teachers develop ways of motivating and relating to the Black students.

541. PROBLEMS IN ELEMENTARY CURRICULUM
Advanced study of some phase of the elementary school curriculum. May be repeated for credit as subject matter changes and with consent of instructor. Prerequisite: graduate standing or consent of instructor. (2-5 units)

542. SEMINAR IN EDUCATION
An intensive study of topics and problems in secondary education, such as reading and team teaching. May be repeated for credit as subject matter changes and with consent of instructor. Prerequisite: graduate standing or consent of instructor. (2-5 units)

543. INDIVIDUALIZED INSTRUCTION
An individualized course on techniques and procedures for constructing materials, tracking students, classroom management, learning centers, record keeping and media involvement for individualizing instruction at all levels.

575. INTERNSHIP IN EDUCATION
Supervised work and study in private or public organizations. May be repeated once for credit. Prerequisite: consent of instructor and School of Education.

595. INDEPENDENT STUDY
Special topics involving library and/or field research. Prerequisites: consent of school and instructor. (1-5 units)

600A. MASTER'S DEGREE PROJECT
Prerequisite: advancement to candidacy. (2-5 units)
600B. MASTER'S DEGREE PROJECT
Prerequisite: advancement to candidacy. (2\(\frac{1}{2}\) units)

610. RESEARCH METHODOLOGY IN EDUCATION
Principles of research design, methods of data collection and analysis. Prerequisite: Social Sciences 210, or Mathematics 150, or equivalent.

630. RESEARCH IN TEACHING AND LEARNING
Survey of current research in teaching and learning. Prerequisite: Education 610.

635. SEMINAR IN READING
Review of research, curriculum issues and instructional procedures. For experienced teachers only. Prerequisite: credential or teaching experience.

640. ELEMENTARY SCHOOL CURRICULUM
History, organization and operation of the elementary school; curriculum trends; newer practices in elementary education. Prerequisite: credential or teaching experience.

641. MEDIA AND STRATEGIES IN TEACHING
An assessment of media used in instruction with emphasis on teaching strategies and principles of learning. Prerequisite: graduate standing or consent of instructor.

642. INSTRUCTIONAL TECHNOLOGY
Computer-assisted instruction, instructional television, self-instructional systems, programmed instruction and other aspects of instructional technology.

650. EDUCATIONAL AND CAREER PLANNING
Theory of occupational choice, labor force data, and implementation and continuation of career advisement programs from elementary grades through high school. Prerequisite: consent of instructor.

651. LAWS AND ETHICS RELATING TO CHILDREN
Examination of the present legal and ethical responsibilities a family, community and school have toward a child. Comprehensive study of various community organizations as to internal structure, referral services and most specifically, their service to the student, truant, delinquent and institutional child. Prerequisite: consent of instructor.

652. DYNAMICS OF INDIVIDUAL BEHAVIOR AND CASE STUDY
Evaluation of various assessment tools, including tests, life records, rating scales and interviewing. Emphasis on growth and developmental factors relating to the child in the school counseling setting. Prerequisite: consent of instructor.

655. COUNSELING THE CULTURALLY DIFFERENT
Examination of diversity of cultural and ethnic experiences and the nature of prejudice. Counseling techniques found to be most effective in cross-cultural counseling. Prerequisite: consent of instructor.

657. PRACTICUM IN COUNSELING
Supervised practice in counseling in a laboratory setting. Prerequisite: consent of instructor.

658. FIELD WORK AND INTERNSHIP
Field work or internship for prospective school counselors in the public schools. Application of concepts and procedures of counseling services in appropriate school settings. Daily observations and practice. Interns must have released time and permission of the school district. Regular seminars or conferences required. May be repeated for a maximum of 5 units. Prerequisite: consent of instructor. A. (2\(\frac{1}{2}\) units) B. (2\(\frac{1}{2}\) units)
670. INTRODUCTION TO SCHOOL ADMINISTRATION
Exploration of current administrative problems at the school and district level, self-assessment of the student's potential as a school administrator. Required of all candidates for the administrative services credential. Must be taken during the first quarter of residence. Prerequisite: consent of instructor. (2 1/2 units)

671. ADMINISTRATION AND SUPERVISION OF THE ELEMENTARY SCHOOL
Principles and practices of elementary school administration, including personnel relations, instructional leadership, school organization, relationships with pupils and community. Prerequisite: Administration 301, 302 and Education 670.

672. ADMINISTRATION AND SUPERVISION OF THE SECONDARY SCHOOL
Principles and practices of secondary school administration, including personnel relations, instructional leadership, school organization, relationships with pupils and community. Prerequisite: Administration 301, 302 and Education 670.

675. LEGAL AND FINANCIAL ASPECTS OF EDUCATION
Consideration of current governance, legal and financial processes including local, state and national issues. Emphasis on recent laws and court cases affecting public schools. Prerequisite: Education 671 or 672.

676. SCHOOL COMMUNITY RELATIONS
Interaction with the community, including school boards, community groups and leaders of a variety of ethnic groups; relations with media. Prerequisite: Education 671 or 672.

680. SEMINAR IN COMPARATIVE EDUCATION
Comparison of educational theory and practice in certain selected countries.

690. FIELD WORK OR INTERNSHIP IN SCHOOL ADMINISTRATION
Supervised field experiences in all aspects of school administration. May be repeated for a maximum of 6 units. Prerequisite: consent of instructor. A. (2 units) B. (2 units) C. (2 units)

695. FOUNDATIONS OF EDUCATION
History and theory of education within the setting of American society. Prerequisite: graduate standing.

698. EXTENDED ENROLLMENT
Independent study leading to completion of requirements (other than course work) for the master's degree. Students enrolled in this course have full use of College facilities. Prerequisites: advancement to candidacy and consent of department. (0 units)

699. SECONDARY SCHOOL CURRICULUM
Study of the development of the American secondary school with emphasis on current and emerging patterns of organization and curriculum. Prerequisite: graduate standing.
Everyone has his own reasons for studying literature but these personal feelings tend to take for granted one common notion: the experience of great poetry, fiction and drama makes a person more aware of himself and his world, more human.

The English department at California State College, San Bernardino is, like most college or university English departments, devoted mainly to the study of literature. The literature courses are arranged in different ways; some analyze a specific genre (poetry, fiction, drama); some treat a particular period (the sixteenth century, the Romantic period); some deal with an individual author, area or problem (Shakespeare, modern American poetry, black literature, fantasy).

The department offers additional courses in the history and structure of the language and in advanced composition. Courses in creative writing give students the opportunity to write poetry or fiction under the direction of an experienced writer. Courses in journalism give students the chance to develop professional skills under the direction of a working newspaperman.

English majors enter many careers, such as teaching, journalism, publishing, advertising, writing, business and industry. They may also enter graduate and professional schools for the further study of English or for training in such fields as library science and law. Students having the abilities the English major is designed to foster — perceptive reading, skillful writing and a developed sense of imagination and originality — are particularly well-equipped for the needs of a changing society.

Requirements for the major: thirteen courses, of which eleven must be upper division. Required are two courses from English 120, 121, 140; two courses from English 301, 302, 303; two courses from English 401, 403, 406, 409, 412, 415; two courses from English 315, 325, 335; one course from English 430, 432, 436; one course from English 475, 476; one course from English 500, 505. The additional two courses may be chosen from any upper-division English courses or from upper-division courses in foreign literature or foreign literature in translation.

With the approval of an advisor, a student may develop an alternative program of study leading to the major. Such a program will require about the same amount of course work as described above, although with a different distribution. It also will require, in the senior year, completion of a comprehensive examination with a satisfactory score or a special writing project.

Students majoring in English who also wish to pursue a liberal studies major (diversified major) for elementary school teaching should consult with the department chairman.
The College now offers a Master of Arts in Education, with an option in English, for secondary teachers. Details on this graduate program may be secured from the department or the School of Education.

Requirements for a minor in English: six courses, including English 170; a course in the study of language such as English 500 or 505; a survey course in literature (English 110, 111, 120 or 121); an upper-division course in American literature, such as English 432 or 439; an upper-division course in Shakespeare, such as English 475 or 476; an upper-division course in literary analysis (English 301, 302 or 303).

100. INTENSIVE ENGLISH
A program in English composition for students from dialectically variant linguistic backgrounds.

101. FRESHMAN COMPOSITION
Analytical study of the language and structure of prose to help students develop a clear, mature and flexible expository style. Frequent writing required.

110. WORLD LITERATURE I
Readings in Oriental and continental European literature to the Renaissance (in English translation).

111. WORLD LITERATURE II
Readings in Oriental and continental European literature from the Renaissance to the contemporary period (in English translation).

120. ENGLISH LITERATURE I
Readings in English literature from the Middle Ages to Milton.

121. ENGLISH LITERATURE II
Readings in English literature from Dryden to the contemporary period.

140. SURVEY OF AMERICAN LITERATURE
Readings in major figures in American literature from the Puritans to the present.

170. STUDIES IN LITERATURE
Analysis of the forms and content of literature.

301. ANALYSIS OF POETRY
An approach to an understanding of the literary experience through a study of structure and theme in selected lyric poems.

302. ANALYSIS OF DRAMA
An approach to an understanding of the literary experience through a study of structure and theme in selected plays.

303. ANALYSIS OF PROSE FICTION
An approach to an understanding of the literary experience through a study of structure and theme in selected pieces of narrative prose.

313. INTRODUCTION TO CREATIVE WRITING
Workshop in imaginative writing. Discussion of student writing and exemplary works by established authors.

315. STUDIES IN LITERARY GENRES
Intensive study in a particular genre. May be repeated for credit as topics change.
325. STUDIES IN MAJOR LITERARY FIGURES
Intensive study in two or more literary figures. May be repeated for credit as topics change.

333. MYTH AND EPIC
Myths and epics of folklore and of classical literature, emphasizing relationship to later Western literature.

335. STUDIES IN THE NOVEL
Studies in the novel with emphasis on close reading of specific texts.

370. THEORY AND PRACTICE OF NEWSPAPER JOURNALISM
Practice in writing and editing will be emphasized. Consideration of the press in its social and historical context.

371. TOPICS IN JOURNALISM
Special topics such as advanced editing and reporting, or magazine writing. May be repeated for credit as subject matter changes and with consent of instructor. Prerequisite: English 370 or equivalent professional experience.

372. JOURNALISM PRACTICUM
Practical application of journalism skills. To be taken concurrently with, or subsequent to, English 370. May be repeated for credit for a total of not more than 6 units. Graded credit/no credit. (2 units).

385. INTRODUCTION TO LITERARY CRITICISM
The major issues in literary criticism considered in historical perspective.

393. WRITING SEMINAR
Advanced work in writing expository prose, with emphasis on the demands of the individual student’s own discipline. Open to full-time students, except freshmen. May not be counted toward fulfilling requirements for the major. Credit cannot be given for both English 393 and English 396. (2 units)

396. ADVANCED COMPOSITION
Advanced expository writing. Credit cannot be given for both English 396 and English 393.

401. ENGLISH LITERATURE OF THE MIDDLE AGES
Lyric, drama, prose and verse narrative from the beginnings of English literature through Malory.

403. ENGLISH LITERATURE OF THE RENAISSANCE
Poetry, prose and drama (exclusive of Shakespeare) of the sixteenth century.

406. SEVENTEENTH CENTURY LITERATURE
English prose and poetry from Bacon through Milton.

409. ENGLISH LITERATURE OF THE RESTORATION AND EIGHTEENTH CENTURY
Emphasis on Dryden, Pope, Swift and Johnson.

412. ROMANTIC PROSE AND POETRY
Major English romantics such as Blake, Wordsworth, Coleridge, Keats, Shelley and Byron.

415. VICTORIAN LITERATURE
Major writers of Victorian England.
122 / English

430. AMERICAN LITERATURE I
Colonial and Federal American literature to the early nineteenth century.

432. AMERICAN LITERATURE II
Romantic movement in American literature.

436. AMERICAN LITERATURE III
Age of realism in American literature.

439. BLACK LITERATURE
Literature by and about the Black man. Emphasis on the contribution of Black writers to the American cultural heritage.

442. MODERN POETRY
Modern and contemporary poetry.

446. MODERN FICTION
Modern and contemporary fiction.

450. CLASSICAL DRAMA
Development of comedy and tragedy in Greece and Rome.

455. MODERN DRAMA I
European, English and American realism.

456. MODERN DRAMA II
European, English and American anti-realism.

475. SHAKESPEARE I
Comedies and histories.

476. SHAKESPEARE II
Tragedies and romances.

499. METHODS AND MATERIALS IN THE TEACHING OF ENGLISH
May not be counted toward fulfilling requirement of courses in the major. Prerequisites: Education 330, senior or graduate standing, and admission to the teacher credential program.

500. GRAMMAR AND LINGUISTICS
An introduction to the attitudes, theories and techniques of modern grammar and linguistic science.

505. HISTORY OF THE ENGLISH LANGUAGE
Development of the English language from the beginning to the present.

511. THEORY AND PRACTICE OF RHETORIC AND COMPOSITION
Traditional and contemporary approaches to rhetoric, composition and style.

513. ADVANCED CREATIVE WRITING
Intensive writing workshop in one genre: poetry, fiction, autobiography or others. Emphasis will change from quarter to quarter. May be repeated for credit as subject matter changes. Prerequisite: consent of instructor.
522. INDEPENDENT STUDY IN WRITING
Project in advanced writing: fiction, non-fiction, poetry or drama. An outline of the project must be approved during the junior year and the completed project approved at least one quarter before graduation. This project may, upon special recommendation, substitute for the comprehensive examination. Prerequisites: English 513 and departmental approval.

550. APPROACHES TO LITERATURE
Study and practice of various critical approaches, such as the moral, formalistic, psychological, archetypal, with particular attention to their assumptions about the meaning and function of literature.

555. SPECIAL STUDIES IN LITERATURE
Independent study of selected literary figures or study in a special area of literary theory or history. Requires prior approval of department chairman and consent of instructor.

570. SEMINAR IN ENGLISH LITERATURE
May be repeated for credit with consent of instructor.

580. SEMINAR IN AMERICAN LITERATURE
May be repeated for credit with consent of instructor.
ENVIRONMENTAL STUDIES

To accomplish its principal objective of promoting an understanding of the interaction of man with his environment, this interdisciplinary degree program includes courses from the natural sciences, social sciences and humanities.

Major requirements from the natural sciences develop fundamental principles about the composition and functioning of the earth's ecosystem—principles deemed essential to a sound working knowledge of the environment. Course offerings from the social sciences assess the impact of man upon the environment and the possibility of creating different environments. Questions of aesthetics and values, as they relate to the environment, are examined through courses in the humanities.

The program is designed for students who desire either to focus on a study of the environment as part of a broader liberal arts curriculum or to prepare for an environmentally related career. Professional opportunities for graduates include a wide range of tasks in public agencies responsible for developing and enforcing environmental controls, and in business, industry and nonprofit organizations which need qualified individuals to communicate environmental information and to assist in compliance with environmental regulations. Additional opportunities are available in conjunction with other programs of study, such as environmental law, environmental health, education and public administration.

Requirements for the major: Geography 103 (Physical Geography), Biology 202 (Biology of Populations), Physics 100 (A Survey of Physics) or Physics 111 (Basic Concepts of Physics I), Chemistry 205 (Fundamentals of Chemistry I) or Chemistry 215 (Introductory Chemistry I), Mathematics 150 (Elementary Statistics);

From the School of Natural Sciences: any three of the following courses: Biology 200 (Biology of the Cell), Biology 201 (Biology of Organisms), Biology 319 (Local Flora), Biology 370 (Symbiosis), Biology 423 (Genetics), Biology 450 (Ecology), Chemistry 206 (Fundamentals of Chemistry II), Chemistry 207 (Fundamentals of Chemistry III), Chemistry 216 (Introductory Chemistry II), Chemistry 217 (Introductory Chemistry III), Chemistry 225 (Organic Chemistry I), Chemistry 315 (Environmental Chemistry), Physics 112 (Basic Concepts of Physics II), Physics 300 (Electronics for Scientists), Mathematics 410 (Mathematical Modeling), Natural Sciences 140 (Introduction to Digital Programming), Natural Sciences 340 (Advanced Digital Computing); one only of the three courses may be chosen from: Natural Sciences 407 (Biological Basis of Social Behavior), Natural Sciences 418 (Frontiers in Science),
Natural Sciences 421 (Dynamics of Populations), Natural Sciences 431 (The Biological Sciences and Public Policy), Natural Sciences 432 (Energy and its Utilization by Man);

From the School of Social Sciences: any four of the following courses: Anthropology 475 (Cultural Ecology), Economics 360 (Economics of the Environment), Geography 350 (Conservation and Natural Resources), Geography 410 (Regional Planning and Resource Development), Geography 440 (Urban Geography), Political Science 342 (The Politics of Environment), Political Science 428 (Formulation of Public Policy), Social Sciences 321 (Urbanization and the Urban Environment), Sociology 420 (Population Problems), Sociology 430 (Urban Sociology), Sociology 437 (Complex Organizations);

From the School of Administration: Administration 530 (Business and Society) may be taken in lieu of one of the four courses in the School of Social Sciences;

From the School of Humanities: any three of the following courses: Art 312 (Modern Art, 1850 to the Present), Humanities 401 (Utopia: The Idle Dream?), Humanities 403 (Technology Versus the Pastoral Ideal in American Literature), Philosophy 350 (Ethics), Philosophy 360 (Political Philosophy), Philosophy 370 (Philosophy of Art and Criticism: Aesthetics), Philosophy 465 (Philosophy of Law);

Environmental Studies: three courses: Environmental Studies 300 (A Survey of Environmental Problems), Environmental Studies 500 (Environmental Issues), Environmental Studies 501 (Special Projects).

300. A SURVEY OF ENVIRONMENTAL PROBLEMS
An identification of environmental problems: sources, effects and interrelationships. Special emphasis is placed on developing a critical attitude toward the recognition and assessment of environmental problems. Prerequisite: basic core or equivalent or consent of instructor.

500. ENVIRONMENTAL ISSUES
A critical survey of alternative solutions to environmental problems requiring the synthesis of ideas derived from the disciplines emphasized in the major. Prerequisites: Environmental Studies 300 and senior standing.

501. SPECIAL PROJECTS
Students will engage in an environmental study either individually or in groups. The studies undertaken may include the recognition, assessment or possible solutions of current or potential environmental problems. Open to environmental studies majors with senior standing and to other qualified students upon consent of the Committee on Environmental Studies.
ETHNIC STUDIES

The College, as part of its ethnic studies program, offers a variety of subject matter options. These include the history major with options in Black studies or Mexican-American studies and the sociology major with options in Black studies or Mexican-American studies. In addition, a group of three ethnic studies courses may be selected for a supporting field in a social sciences major. Besides these, the college offers ethnic studies courses as electives.

A degree in history with an emphasis in either Black or Mexican-American studies should include the following: History 200, 201, 300, 301 and 490. The remaining five courses shall be selected by the student and advisor from the appropriate ethnic studies concentration.

The ethnic studies option in sociology requires Social Sciences 210 or equivalent; Sociology 300, 305, 310, 312; four courses in either Mexican-American studies or Black studies, and two additional sociology courses which fulfill requirements for the sociology major.

ANTHROPOLOGY 351. INDIANS OF NORTH AMERICA

ANTHROPOLOGY 352. INDIANS OF THE SOUTHWEST

ANTHROPOLOGY 451. AMERICAN INDIANS AND WHITE SOCIETY

ART 325. STUDIES IN MEXICAN AND CHICANO ART

ECONOMICS 350. ECONOMICS OF POCKET UNDERDEVELOPMENT: THE GHETTO

EDUCATION 533. TEACHING THE CULTURALLY DIFFERENT: THE CHICANO

EDUCATION 534. TEACHING THE CULTURALLY DIFFERENT: THE BLACK AMERICAN

ENGLISH 439. BLACK LITERATURE

GEOGRAPHY 324. AREA STUDY: AFRICA

HISTORY 331. BLACK HISTORY I

HISTORY 332. BLACK HISTORY II

HISTORY 333. BLACK HISTORY III

HISTORY 390. HISTORY OF MEXICO
HISTORY 391. CHICANO HISTORY
HISTORY 565. ETHNIC MINORITIES IN AMERICAN HISTORY
HISTORY 596. SEMINAR IN BLACK HISTORY
HUMANITIES 501. SEMINAR IN CHICANO STUDIES
MUSIC 350. MUSIC OF OTHER CULTURES
MUSIC 351. MEXICAN AND CHICANO MUSIC
POLITICAL SCIENCE 350. POLITICS OF BLACK AMERICA
POLITICAL SCIENCE 351. THE CHICANO AND POLITICS
PSYCHOLOGY 336. BLACK RAGE
PSYCHOLOGY 337. PSYCHOLOGICAL DEVELOPMENT OF THE BLACK AMERICAN
PSYCHOLOGY 347. PSYCHOLOGICAL DEVELOPMENT OF THE CHICANO
SOCIAL SCIENCES 155. MINORITY GROUPS IN AMERICA
SOCIAL SCIENCES 220. INTRODUCTION TO CHICANO STUDIES
SOCIAL SCIENCES 250. INTRODUCTION TO BLACK STUDIES
SOCIAL SCIENCES 415. RESEARCH METHODS IN BLACK STUDIES
SOCIOLOGY 322. SOCIOLOGY OF THE GHETTO
SOCIOLOGY 341. MARRIAGE AND FAMILY AMONG BLACKS
SOCIOLOGY 342. THE CHICANO FAMILY
SOCIOLOGY 410. RACIAL AND CULTURAL MINORITIES
SOCIOLOGY 441. BLACK SOCIAL STRATIFICATION
SOCIOLOGY 442. CHICANO SOCIAL STRATIFICATION
SPANISH 440. MEXICAN LITERATURE
SPANISH 450. MEXICAN LITERATURE IN TRANSLATION
FOREIGN LANGUAGES AND LITERATURES

The Department of Foreign Languages and Literatures offers a wide variety of courses both in the foreign languages and in English. The principal objectives of the department's programs are to teach students to understand, speak, read and write the foreign languages offered; and to promote an understanding of foreign civilizations and an appreciation of their literatures. This background will prepare students to teach foreign languages and will provide language skills for those interested in positions such as librarian, interpreter, translator, foreign service officer and foreign trade specialist.

450. LITERATURE IN TRANSLATION
Significant masterpieces of a genre or a period read in English translation. No prerequisite. May be repeated for credit as topics change. When the topic of Foreign Languages 450 is Mexican literature, this course may not be taken for credit by a student who has received credit for Spanish 450.

499. METHODS AND MATERIALS IN THE TEACHING OF FOREIGN LANGUAGES
May not be counted toward fulfilling requirement of courses in the major. Prerequisites: Education 330, senior or graduate standing, and admission to the teacher credential program.

555. INDEPENDENT STUDY
Independent study of individual writers and genres. Prerequisite: one 300-level course in the language under study or consent of instructor.

French

Requirements for the major: twelve courses in French or their equivalent, including 301. One course in Humanities 460 (when the topic is France) and one course in Foreign Languages 450 or History 510 will be accepted toward the major.

Requirements for a minor in French: French 101, 102, 103, 200, 301, and one additional course at the 300 level.

101. ELEMENTARY FRENCH I
Pronunciation, grammar, reading and conversation.

102. ELEMENTARY FRENCH II
Continuation of French 101.

103. INTERMEDIATE FRENCH
Grammar, composition and conversation; discussion in French of literary texts. Prerequisite: French 102 or equivalent.

110. INTENSIVE STUDY OF FRENCH
An intensive one-quarter course in French covering the material normally presented in French 102 and 103. Recommended to students who do not wish to delay the sequence in French language study. Prerequisite: French 101 or equivalent. (10 units)
130 / Foreign Languages

115. INTENSIVE STUDY OF FRENCH
An intensive one-quarter course in French covering the material normally presented in French 101, 102 and 103. Prerequisite: consent of instructor. (15 units)

200. CONVERSATION AND COMPOSITION
Prerequisite: French 103 or equivalent.

210. INTRODUCTION TO LITERARY STUDY
Techniques of literary study and analysis. Explication de textes. Prerequisite: French 103 or equivalent.

Ordinarily, all upper-division courses are conducted in French.

301. ADVANCED FRENCH I
French phonology, with emphasis on improvement of the students' pronunciation. Prerequisite: French 200 or equivalent.

302. ADVANCED FRENCH II
Structure of the French language, with emphasis on improvement of the students' ability to write French. Prerequisite: French 200 or equivalent.

311. MASTERPIECES OF FRENCH LITERATURE I
Middle Ages and sixteenth century. Prerequisite: French 210 or equivalent.

312. MASTERPIECES OF FRENCH LITERATURE II
Seventeenth and eighteenth centuries. Prerequisite: French 210 or equivalent.

313. MASTERPIECES OF FRENCH LITERATURE III
Nineteenth century. Prerequisite: French 210 or equivalent.

340. ADVANCED CONVERSATION
Advanced practice of oral French stressing the reading and discussion of current topics in France. May be repeated for credit. Prerequisite: French 200 or consent of instructor. (21/2 units)

403. THE FRENCH NOVEL IN THE TWENTIETH CENTURY
Prerequisites: two 300-level French courses or equivalent.

404. THE FRENCH THEATRE IN THE TWENTIETH CENTURY
Prerequisites: two 300-level French courses or equivalent.

420. SPECIAL TOPICS IN FRENCH LITERATURE
Topics such as the role of nature in French literature. May be repeated for credit. Prerequisites: two 300-level courses in French literature or equivalent.

510. SEMINAR IN FRENCH LITERATURE

530. STUDIES IN LITERARY FIGURES AND GENRES
Individual writers and genres such as Proust, Moliere and the new novel. May be repeated for credit. Prerequisite: one 400-level French course or consent of instructor.

German

No major program in German will be offered in 1975-76. Courses listed below will be offered as electives in support of other major programs.
Requirements for a minor in German: German 101, 102, 103, 104, 301, and one additional course at the 300 level.

101. ELEMENTARY GERMAN I
Pronunciation, grammar, reading and conversation.

102. ELEMENTARY GERMAN II
Continuation of German 101.

103. INTERMEDIATE GERMAN I
Reading and discussion of modern German prose and poetry, grammar review, composition and conversation. Prerequisite: German 102 or equivalent.

104. INTERMEDIATE GERMAN II
Continuation of German 103.

110. INTENSIVE STUDY OF GERMAN
A one-quarter course covering the materials normally presented in German 102 and 103. Prerequisite: German 101 or equivalent. (10 units)

115. INTENSIVE STUDY OF GERMAN
An intensive one-quarter course in German covering the material normally presented in German 101, 102 and 103. Prerequisite: consent of instructor. (15 units)

All upper-division courses with the exception of those in translation are conducted in German.

301. ADVANCED GERMAN I
Development of correct pronunciation and speaking style. Oral reports and class discussion based on reading and analysis of literary works. Prerequisite: German 104 or equivalent.

302. ADVANCED GERMAN II
Development of good writing and expressive vocabulary. Study and application of the characteristics of German critical writing. Written assignments based on reading of literary works. Prerequisite: German 104 or equivalent.

308. READINGS IN GERMAN LITERATURE
Selected literary genre or writer. Prerequisite: German 104 or equivalent.

Russian

Courses listed below will be offered as electives in support of other major programs.

101. ELEMENTARY RUSSIAN I
Pronunciation, grammar, reading and conversation.

102. ELEMENTARY RUSSIAN II
Continuation of Russian 101.

103. INTERMEDIATE RUSSIAN I
Grammar, composition and conversation; discussion in Russian of literary texts. Prerequisite: Russian 102 or equivalent.
110. INTENSIVE STUDY OF RUSSIAN
A one-quarter course covering the materials normally presented in Russian 102 and 103. 
Prerequisite: Russian 101 or equivalent. (10 units)

115. INTENSIVE STUDY OF RUSSIAN
An intensive one-quarter course in Russian covering the material normally presented in 
Russian 101, 102 and 103. Prerequisite: consent of instructor. (15 units)

Spanish

Requirements for the major: proficiency in Spanish equal to that of 
Spanish 103 or its equivalent*, Spanish 202 and 204 and nine upper-
division courses. The nine in the upper-division must include Spanish 
301, 302, 406 or 407, 410 or 411, and two courses at the 500 level; the 
remaining three courses may be chosen at the student’s option, in con-
sultation with an advisor, from courses in language, culture and 
civilization (Spanish 412, 414 and Humanities 460) and literature 
(Spanish 406, 407, 410, 411, 440, 450 {or Foreign Languages 4501, 500, 503, 
507, 508, 510 and 512).

Requirements for the minor: proficiency in Spanish equal to that of 
Spanish 103 or its equivalent*, and twenty additional units in Spanish, 
ten of which must be at the upper-division level.

Spanish majors are encouraged to broaden the scope of their studies 
by using some of their electives to take courses in French, German or 
Russian. Many students may desire to use their electives to prepare a 
minor or a second major. The department encourages such a program 
and is prepared to help each student plan.

*Entering students with previous training in Spanish, and those who are native speakers, 
should contact the department for information about advanced placement and credit by 
examination.

101. ELEMENTARY SPANISH I
Fundamentals of pronunciation, structure and Hispanic culture designed to develop the 
ability to use and understand basic spoken Spanish.

102. ELEMENTARY SPANISH II
Continuation of Spanish 101.

103. INTERMEDIATE SPANISH.
Continuation of Spanish 101 and 102 stressing conversation and acquisition of reading 
skills.

110. INTENSIVE STUDY OF SPANISH
A one-quarter course covering the materials normally presented in Spanish 101 and 102. 
(10 units)

115. INTENSIVE STUDY OF SPANISH
An intensive one-quarter course covering the material normally presented in Spanish 
101, 102 and 103. Prerequisite: consent of instructor. (15 units)

202. GRAMMAR AND COMPOSITION
Comprehensive review of the principles of Spanish grammar, emphasizing their 
application to composition. Prerequisite: Spanish 103 or equivalent.
204. INTRODUCTION TO LITERARY TEXTS
Techniques of literary study and analysis. Vocabulary development. Prerequisite: Spanish 103 or equivalent.

206. ADVANCED CONVERSATION
Advanced practice of oral Spanish stressing the discussion of current topics. Panel discussions, debates, short talks, skits. Students may not enroll in more than one section per quarter. May be repeated for credit. May not be counted toward fulfilling requirements in the major. Prerequisite: Spanish 103 or equivalent. (2/3 units)
All upper-division courses with the exception of those in translation are conducted in Spanish.

301. PRACTICAL PHONETICS
In-depth study of the Spanish sound system. Oral practice and study of general principles of Spanish phonology and dialectology. Prerequisite: Spanish 202 or 204 or equivalent.

302. THEORY AND PRACTICE IN COMPOSITION
Extensive practice in composition and style. May be repeated for credit. Prerequisite: Spanish 202 or 204 or equivalent.

310. PRACTICAL SPANISH FOR THE HEALTH PROFESSIONS
Preparation of professionals in basic conversational Spanish with emphasis on the vocabulary, the expressions and the cultural attitudes related to health. No previous knowledge of Spanish required. May not be counted toward fulfilling requirements in the major.

406. INTRODUCTION TO SPANISH LITERATURE I
Readings in sixteenth and seventeenth century Spanish literature from the Celestina to Calderon. Prerequisite: Spanish 204 or equivalent.

407. INTRODUCTION TO SPANISH LITERATURE II
Survey of Spanish literature and principal writers from Moratín to the contemporary period. Prerequisite: Spanish 204 or equivalent.

410. SPANISH-AMERICAN LITERATURE I
Survey of Spanish-American literature from the time of the Spanish conquest to the end of the nineteenth century. Prerequisite: Spanish 104 or equivalent.

411. SPANISH-AMERICAN LITERATURE II
Survey of Spanish-American literature from Modernismo to the present. Prerequisite: Spanish 104 or equivalent.

412. HISTORY OF THE SPANISH LANGUAGE
Evolution of Spanish from Vulgar Latin to its modern form, emphasizing the rules of phonetic change, linguistic influence of the various inhabitants of Spain and reading and discussion of selected medieval texts. Prerequisite: Spanish 301 or equivalent.

414. SPANISH LINGUISTICS
Analysis of the morphology and syntax of Spanish, emphasizing linguistic differences among Spanish, English and the Spanish spoken in the southwestern states of this country. Prerequisite: Spanish 301 or equivalent.

440. MEXICAN LITERATURE
Development of Mexican literature with emphasis on the Mexican novel. Prerequisite: Spanish 204 or equivalent.
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450. MEXICAN LITERATURE IN TRANSLATION
Critical examination of selected works of Mexican literature to the present day. Emphasis on the novel, drama, poetry and the essay. May not be taken for credit by students who have received credit for Foreign Languages 450, Literature in Translation: Mexico.

500. SPANISH GOLDEN AGE LITERATURE
Intensive study in the works of a particular writer or in a genre. May be repeated for credit as subject matter changes. Prerequisite: two 400-level literature courses or equivalent.

503. CERVANTES
Don Quijote. Prerequisite: two 400-level literature courses or equivalent.

507. NINETEENTH CENTURY SPANISH LITERATURE
Intensive study in the works of a particular writer or in a genre. May be repeated for credit as subject matter changes. Prerequisite: two 400-level literature courses or equivalent.

508. TWENTIETH CENTURY SPANISH LITERATURE
Intensive study in the works of a particular writer or in a genre. May be repeated for credit as subject matter changes. Prerequisite: two 400-level literature courses or equivalent.

510. SPANISH-AMERICAN NOVEL
Intensive study in the works of a particular writer or in a genre. May be repeated for credit as subject matter changes. Prerequisite: two 400-level literature courses or equivalent.

512. SPANISH-AMERICAN POETRY
Intensive study in the works of a particular writer or in a genre. May be repeated for credit as subject matter changes. Prerequisite: two 400-level literature courses or equivalent.
GEOGRAPHY

Geography is concerned with the spatial variations and interrelations of the natural and cultural features of the earth. Geographers study the earth primarily as the home of man. As an approach to knowledge, geography forms an interdisciplinary bridge between the physical and cultural worlds, examining both man and his environment. As a synthesizing discipline, geography is an especially attractive major for liberal arts and science students. Its body of theory and methodologies provides an analytic technique applicable to a wide range of questions. For students planning to terminate their formal education with a bachelor's degree, it also provides both the regional and world perspective required of responsible citizens. For the same reasons, geography is especially valuable for those who plan to do graduate work. Geography offers rewarding job opportunities in teaching, business, government, the armed forces, conservation and water resources, planning and market research, and international organizations.

The geography major involves a two-track system, Track A and Track B. Requirements for all majors include the following core: Geography 100, 103, 420, 450 and one area studies course.

Track A requires that students take, in addition to the core, five upper-division courses in geography. Only one of these courses may be drawn from the area studies group.

Track B requires that students take, in addition to the core, five upper-division courses in geography and/or related disciplines. These courses, selected in consultation with an advisor, must be from one of the following areas of study: urbanization, industrialization, modernization or area studies.

Requirements for a minor in geography: six courses in geography including the series 100, 103, 420. The remaining three courses can be chosen from any of the upper-division geography offerings with the restriction that only one can be an area study.

100. INTRODUCTION TO GEOGRAPHIC STUDIES: HUMAN DEVELOPMENT AND SETTLEMENT
Analysis of human society as expressed through man's occupancy and utilization of the land.

103. PHYSICAL GEOGRAPHY
Systematic approach to the physical environment of man stressing the relationships between the atmosphere, land, life forms and water. Lecture and laboratory.

301. CARTOGRAPHY
Provides students with necessary drafting skills to construct maps, charts and graphs as well as training in map interpretation. Prerequisite: consent of instructor.
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303. AREA STUDY: ANGLO-AMERICA
Regional analysis of socio-economic development and environmental problems.

306. AREA STUDY: WESTERN EUROPE
Regional analysis of socio-economic development and environmental problems.

309. AREA STUDY: SOVIET UNION
Regional analysis of socio-economic development and environmental problems.

321. AREA STUDY: LATIN AMERICA
Regional analysis of socio-economic development and environmental problems.

324. AREA STUDY: AFRICA
Regional analysis of socio-economic development and environmental problems.

340. HISTORICAL GEOGRAPHY
Concepts and methods of analyzing the sequential patterns of human occupance. Illustrated with case studies.

350. CONSERVATION AND NATURAL RESOURCES
Principles of resource utilization and ecology as they involve human development and politico-economic policy.

360. CLIMATE AND VEGETATION
Climate and vegetation, and the interrelationships between the two including the consideration of atmospheric processes significant for understanding regional patterns of distribution.

370. SOILS AND LANDFORMS
Physical and cultural processes that produce soils and landforms, their areal distributions and interrelationships, including plate tectonics.

410. REGIONAL PLANNING AND RESOURCE DEVELOPMENT
Application of concepts of location, spatial organization and spatial interaction to regional planning and resource development.

420. GEOGRAPHY OF ECONOMIC ACTIVITY
Analysis of concepts of location, interaction and regionalization as they apply to economic activity. Special emphasis on economic growth and modernization.

430. GEOGRAPHY OF AGRICULTURAL ACTIVITY
Covers agricultural patterns, on a thematic basis, as keys to understanding human economic organization.

440. URBAN GEOGRAPHY
Description and classification of cities, analysis of their distribution, and a study of the external and internal relations of urban areas.

450. DEVELOPMENT OF GEOGRAPHIC THOUGHT
Changing ideas and methods of geographic analysis.

550. SEMINAR IN GEOGRAPHY
Intensive study of some phase of geography. May be repeated for credit with instructor's consent.

555. INDEPENDENT STUDY
Students interested in personal growth, community service, intellectual stimulation and professional career opportunities in the health and environmental fields may find the major in health science a method to achieve these goals.

The Department of Health Science and Human Ecology emphasizes an ecological approach to health and attempts to provide students with the tools necessary to understand factors contributing to the promotion of general health and well-being and to the prevention of illness.

A Bachelor of Science in Health Science is appropriate for students preparing to become health professionals or desiring to work in environmental protection agencies, private businesses or industrial hygiene and safety. The program also is designed to provide a career ladder opportunity for persons currently engaged in health and environmental occupations or preparing for graduate work in public health, social or natural sciences.

The department offers a blend of traditional and modern approaches to education and career development in the health science field. It encourages multidisciplinary orientation, community interaction and a social outlook, while providing an appropriate grounding in the natural sciences. In their senior year, students spend time in community agencies, such as health departments, hospitals, industrial plants, environmental improvement agencies and consumer affairs offices; thus combining theory and practice.

Pre-professional students of medicine, dentistry or veterinary medicine seeking a major in health science should refer to Page 64 of this bulletin and consult with a department advisor.

Students interested in fields such as health or environmental law, clinical chemistry, business, health physics, or any other academic discipline should complete the minimum requirements of the major and select appropriate electives in consultation with a department advisor.

Requirements for the major: Biology 100 or 202, 220 and 222; Mathematics 150; Chemistry 205 or 215, 206 or 216 and 207 or 217 or 225 or 321; Physics 100 or 111 or 211; Health Science 120, 352, 354, 356, 366, 371, 451, 470, 496, 497A, 497B and 17½ units of health science electives.

Departmental Honors: A graduating senior will be awarded departmental honors in health science after meeting the following requirements: at least a 3.5 average in all health science courses taken at California State College, San Bernardino; at least a 3.0 average overall; and an A in Health Science 595 or another clear demonstration of ability to do independent work in health science.
Requirements for a minor in health science: Health Science 120, 352, 451 and 15 units of upper-division health science courses selected in consultation with an advisor.

120. HEALTH AND SOCIETY: AN ECOLOGICAL APPROACH
Nature and function of health in society through study of the fundamental concepts of living systems and their implication on the processes of health and illness in the human organism. Major health problems are analyzed to contribute to the student's understanding of his role as an individual and as a member of the community.

330. SCHOOL AND COLLEGE HEALTH PROGRAMS
Philosophical framework, organization, administration and legal aspects of school health with particular attention to the roles of the teacher and the school nurse. Factors contributing to a healthful and safe school environment and their interrelationship to health services and instruction. Prerequisite: Health Science 120.

336. DRUG AND ALCOHOL USE AND ABUSE
Analysis of factors influencing human use or abuse of drugs, alcohol and other substances and their effects on the health and well-being of the individual, family and society. (2\(\frac{1}{2}\) units)

350. FOODS, NUTRITION AND HEALTH
Usage of foods and the nutritional status of man as an indicator of prevailing social and ecological factors; principles of nutrition applied to public health; contemporary food trends such as "health foods"; diverse effects of malnutrition and hunger on the individual and society. (2\(\frac{1}{2}\) units)

352. ENVIRONMENTAL HEALTH I
Relationship of the physical, chemical and biological environments to man. Methods of assessment, evaluation and control of environmental aspects related to medicine and public health. Principles of public health engineering, environmental planning and preparation of environmental impact studies. Prerequisite: completion of lower-division required core or consent of instructor.

353. ENVIRONMENTAL HEALTH II
Present environmental and occupational health standards. Methods of testing and surveying residential, recreational and work environments. Laboratory and field experience in measuring the quality of air, water and food. Measurement and prevention of noise pollution and occupational health hazards. Prerequisite: Health Science 352 or consent of instructor.

354. CONSUMER PROTECTION, HEALTH AND ENVIRONMENTAL LAW
Legal basis for health practice and environmental regulation. Interface between man's technological abilities and his functions as a citizen-consumer. Roles of Food and Drug Administration, Consumer Product Safety Commission, Department of Agriculture and state and local health departments in protection of the consumer. (2\(\frac{1}{2}\) units)

356. HOUSING AND SPECIFIC HUMAN ENVIRONMENTS
Basic environmental health problems characteristic of facilities such as hospitals and nursing homes, educational institutions, day care centers, youth camps and penal institutions. Relationship of housing quality to physical, socio-economic and ethnic factors and their influence on health. (2\(\frac{1}{2}\) units)

361. PRINCIPLES OF ACCIDENT PREVENTION
Ecological and medical aspects of accident prevention in residential, work, educational, medical and recreational environments. Legal aspects and governmental organizations involved in accident prevention. (2\(\frac{1}{2}\) units)
366. OCCUPATIONAL HEALTH AND THE WORK ENVIRONMENT
Identification, evaluation and control of hazards prevailing in the work environment. Factors affecting man in his working environment. Safety and health legislation. Field trips to selected industries. (2\(\frac{1}{2}\) units)

371. ORGANIZATION AND FUNCTION OF COMMUNITY HEALTH SERVICES
Consideration and comparison of traditional and current programs in official and voluntary health agencies.

372. ENVIRONMENTAL ADMINISTRATION AND ENVIRONMENTAL IMPACT REPORTING
Principles and procedures of environmental health administration, emphasizing the role of the government and the citizen. Review of federal, state and local legislation and guidelines essential in preparing an environmental impact report.

400. LAND USE: ENVIRONMENTAL HEALTH FACTORS RELATED TO NOISE, AIR OR WATER
Planning and environmental health aspects of land use with social reference to factors significant in an environmental impact report. Every time course is offered, one topic (noise, air or water) is discussed in depth and in relation to other topics. May be repeated for credit as topics change. (2\(\frac{1}{2}\) units)

420. COMMUNITY MENTAL HEALTH
Examination of the mental health care delivery system with emphasis on a community approach to prevailing problems and issues. Methods of evaluating community and school mental health education programs; survey of available resources. (2\(\frac{1}{2}\) units)

426. ENVIRONMENTAL EDUCATION: SOLVING SCHOOL-COMMUNITY HEALTH PROBLEMS
Techniques involved in health and environmental teaching and development of methods and material. Factors considered in solving the school and community health problems and methods of encouraging school-community interaction. (2\(\frac{1}{2}\) units)

435. CHILD AND YOUTH DEVELOPMENT: HEALTH ASPECTS
Health aspects of child growth and development. Observation of group activities involving children.

440. FAMILY HEALTH
Health aspects of the home and family, including qualifications for marriage, prenatal care, pregnancy, infant and maternal mortality, children's disease, home accidents, health plans for the family and health problems associated with old age. (2\(\frac{1}{2}\) units)

451. COMMUNITY HEALTH: AN EPIDEMIOLOGICAL APPROACH
Aspects of epidemiology relating to medical, nutritional, environmental and public administration. Distribution of human health problems. Principles of scientific investigation used to determine circumstances under which disease occurs or health prevails. In addition to the classical concern about infectious diseases and their role in social upheavals, the broadened scope of epidemiology is examined.

458. VECTOR CONTROL: FACTORS INFLUENCING ENVIRONMENT AND HEALTH
Identification and control of arthropods, and other vectors of disease. Use of natural methods of control and chemical pesticides and their impact on environmental quality and health. Students enrolling in this course should possess some knowledge of biology and chemistry. (2\(\frac{1}{2}\) units)
470. HEALTH BEHAVIOR AND COMMUNITY HEALTH EDUCATION
Factors influencing the community's response to public health programs and individual's
health behavior. Analysis of community health problems, the process of decision-making
and health education activities of governmental and non-governmental organizations.

475. THE NURSE AND SCHOOL HEALTH PROGRAMS
Role of the nurse in relation to the needs of children and the community; current school
health practices; screening practices, including vision and hearing. Prerequisite:
registered nurse license

496. PRE-FIELD STUDY PRACTICUM
Preparation for field study/research assignments. (2½ units)

497. FIELD STUDY: ACTION/RESEARCH IN HUMAN ECOLOGY AND HEALTH
Individual and team field studies and research in agencies with activity relevant to the
student's career goals and interests. May be repeated for a maximum of 10 units. Prereq-
uisite: Health Science 496 or consent of instructor. A. (5 units) B. (5 units)

595. INDEPENDENT STUDY
Research in special topics including library studies and/or laboratory work under the
direction of a faculty member. Prerequisites: consent of department and instructor.
(Credit to be arranged: 1 to 6 units)
History has been called the "extension of memory" which enables one to utilize past experiences. History, of course, is for the prospective teacher; it also provides excellent training for a future in law, journalism, politics or governmental careers. In short, history is for everyone.

The History Department has developed a major around a core of five courses which present a broad survey of American and European history and an introduction to the nature of historical study. To meet the remainder of the requirements for the major, the student may choose from a wide spectrum of courses.

Currently, the department consists of faculty specializing in the areas of American, European, Latin American and African history. Majors are also offered optional programs emphasizing Black or Mexican-American studies.

Requirements for the major: ten courses in history, including History 200, 201, 300, 301 and 490, and at least five other upper-division courses in history. With the approval of the departmental advisor, up to two upper-division courses in related fields may be counted toward the upper-division course requirement in history. Students who are interested in Latin American or European history are encouraged to take a complete sequence of courses in the appropriate language.

Requirements for a minor in history: six courses, at least four of which must be on the upper-division level, to be selected in consultation with a history advisor.

A degree in history with an emphasis in either Black or Mexican-American studies should include the following: History 200, 201, 300, 301 and 490. The remaining five courses shall be selected by the student and advisor from the appropriate ethnic studies concentration; three of the courses must be in history. Courses specified will be listed as an option contract to be filed with the Dean of Academic Planning.

The College now offers a Master of Arts in Education, with an option in history, for secondary teachers. Details on this graduate program may be secured from the department or the School of Education.

200. UNITED STATES HISTORY TO 1877
A survey of the history of the United States from the colonial beginnings to 1877. This course meets the State Code requirement in United States History, Constitution and American ideals.

201. UNITED STATES HISTORY, 1877 TO THE PRESENT
A survey of the history of the United States from 1877 to the present.

300. EARLY MODERN EUROPE, THE RENAISSANCE TO 1815
Institutions, culture, and political development of Europe from the Renaissance to the end of the Napoleonic Wars.
301. MODERN EUROPE, 1815 TO THE PRESENT
Institutions, culture, and political development of Europe from the Congress of Vienna to the present.

320. ANCIENT HISTORY I
Ancient world from the beginning of Egyptian civilization (c. 5000 B.C.) to the death of Alexander the Great (323 B.C.).

321. ANCIENT HISTORY II
Ancient world from 323 B.C. to the conversion of Constantine to Christianity (312 A.D.).

331. BLACK HISTORY I
Origin of sub-Saharan cultures and development of African civilizations through the 18th century; special emphasis on West Africa and the region’s relationship to Black people of North America.

332. BLACK HISTORY II
Black people in America through World War I, including the experience of slavery, contributions of Blacks to American society and the effects of the attitudes and policies of the majority.

333. BLACK HISTORY III
Black people in America since World War I, with an emphasis on the changing nature of the Black community, the Civil Rights struggle and the rise of Black nationalism.

350. THE AMERICAN COLONIES, 1607-1783
The thirteen colonies from European origins to the attainment of independence.

352. THE EARLY REPUBLIC
United States from the Confederation through the administration of Van Buren. This course meets the State Code requirement in United States history, constitution and American ideals.

354. CIVIL WAR AND RECONSTRUCTION
Background and causes of the Civil War and the problems of Reconstruction.

356. THE UNITED STATES, 1877-1917
Transformation of the nation between the end of Reconstruction and entrance into World War I.

358. MODERN AMERICA
Principal developments in American life since the first World War.

370. HISTORY OF CALIFORNIA
Political, economic and social development of California from Spanish times to the present. This course meets the State Code requirement in California state and local government.

390. HISTORY OF MEXICO
Survey of Mexican history from early Indo-American civilizations to the present.

391 CHICANO HISTORY
Mexican-Americans in the United States from the Colonial period to the present, with special emphasis on the Southwest.
402. **RENAISSANCE AND REFORMATION**
Principal political, economic, intellectual and religious developments in Europe from about 1300 to 1648.

403. **THE AGE OF ABSOLUTISM AND ENLIGHTENMENT**
The period from 1648 to 1789, emphasizing the development of the modern state, the new scientific movement and the growth of revolutionary ideas.

405. **EUROPE IN THE NINETEENTH CENTURY**
Political, social and intellectual changes of the period 1815 to 1914.

406. **TWENTIETH CENTURY EUROPE**
Europe from the outbreak of the first World War to the present.

420. **ECONOMIC HISTORY OF THE UNITED STATES**
Economic history of the United States from the founding of the colonies to the present.

469. **COLONIAL LATIN AMERICA**
Survey of Spanish colonial system beginning with discovery of America and continuing to the independence period.

470. **MODERN LATIN AMERICA**
A survey of the development and interaction of modern Latin American institutions in the major nations of Central and South America.

480. **SUB-SAHARAN AFRICA SINCE 1800**
Survey of Sub-Saharan Africa in the 19th and 20th centuries. Emphasis on purely indigenous developments, response of African societies to European penetration and development of nationalism and Pan-Africanism.

490. **THE STUDY OF HISTORY**
An introduction to the nature of history through a consideration of the problems of historical knowledge and of the works of major historians of the past.

500. **TUDOR AND STUART ENGLAND**
Principal political, economic, religious and intellectual developments of England from 1485 to 1714.

504. **MODERN BRITAIN**
Great Britain from the accession of the Hanoverian dynasty to the present.

508. **RUSSIA SINCE 1855**
Last years of the empire and origins and development of the Soviet Union.

510. **FRANCE SINCE 1815**
French culture and politics from the fall of Napoleon to the present.

514. **GERMANY SINCE 1815**
German culture and the emergence of the German state from the Congress of Vienna to the present.

540. **CONSTITUTIONAL HISTORY OF THE UNITED STATES**
American constitutional development from English and European origins to the present day. This course meets the State Code requirement in United States history, constitution and American ideals. **Prerequisite:** History 200 or 201, or Political Science 410 or consent of instructor.
552. SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES
Topics in the history of American civilization including the development of American society, thought and culture. May be repeated for credit with consent of instructor.

555. INDEPENDENT STUDY
Special topics in historical research. Prerequisites: departmental approval of a written proposal and consent of instructor.

556. FOREIGN RELATIONS OF THE UNITED STATES
A survey of American foreign policy with special emphasis on America's rise to world power in the twentieth century.

560. HISTORY OF THE AMERICAN WEST
A survey of the western expansion of the American nation.

565. ETHNIC MINORITIES IN AMERICAN HISTORY
Historical perspective of the major ethnic groups, their efforts to assimilate and their interaction with American society.

570. AMERICAN URBAN HISTORY
Historical consideration of the city in U.S. history from colonial times to the present.

593. SEMINAR IN HISTORY
Intensive study of some phase of history. May be repeated for credit with consent of instructor.

596. SEMINAR IN BLACK HISTORY
Study of some phase of Black history to be developed by the instructor with the class. May be repeated for credit with consent of instructor.
The humanities major is interdisciplinary in concept, and students are encouraged to take courses in each of the six fields. The student may be concerned only with his or her individual development, but the major can also lead to one of the many professions related to arts and letters, to a continually widening spectrum of interests, or to graduate study specializing in a single field.

Requirements for the major: six upper-division courses in either Category A or B; four upper-division courses in the other. Category A includes art, music and drama courses not cross-listed with English; Category B includes English, foreign language (French, German, Russian or Spanish at present), philosophy. The major also requires three courses (101, 102, 103) or equivalent proficiency in a foreign language, Humanities 400 which must be taken during the senior year, and one elective from Humanities courses 401-501.

A list of recommended courses for the humanities major may be obtained from the Office of the School of Humanities.

330. ARTS AND IDEAS
An interdisciplinary exploration of several ways in which different arts exhibit ideas and various ideas stimulate our understanding of and pleasure in the arts.

333. MYTH AND EPIC
Myths and epics of folklore and of classical and Eastern literatures, emphasizing relationship to later Western literature.

350. LITERARY AND CULTURAL TRADITIONS OF WESTERN EUROPE
Major Western European aesthetic tendencies as seen in selected literary masterpieces and as reflected in art, architecture and music.

353. POPULAR CULTURE
Significance and context of popular modes of art and entertainment focusing on selected periods, such as the rock generation.

400. HUMANITIES SEMINAR
A seminar considering the various ways (particularly through philosophy, literature and the arts) in which people deal with "human experience." Prerequisite: senior standing or consent of instructor.

401. UTOPIA: THE IDLE DREAM?
Nature of utopias, the circumstances fostering their conception, and the extent to which purpose, deceit and desire go into their making. A seminar course open to students in all majors.

402. INDIVIDUALITY OR CONFORMITY; ALIENATION OR COMMUNITY
Readings from literature, philosophy and social analysis as the basis for discussion of the crisis in the individual's sense of himself and in his relation to others. A seminar course open to students in all majors.
403. TECHNOLOGY VERSUS THE PASTORAL IDEAL IN AMERICAN LITERATURE
Impact of industrialism on the American ethos as seen in such representative works of fiction and non-fiction as Walden, The Gilded Age, Huckleberry Finn, The Education of Henry Adams, The Octopus, The Machine in the Garden and The American Adam. A seminar course open to students in all majors.

404. ASSUMPTIONS, METHODS AND PROBLEMS IN THE NATURAL AND SOCIAL SCIENCES.
Analysis of typical 20th-century works in the natural and social sciences in order to examine such problems as moral relativism in anthropological literature, Freud and psychoanalytic explanations of art and religion, mechanical technique and creative invention in mathematics, and theories of evolution. A seminar course open to students in all majors.

405. CREATIVE MAN
Processes of creativity are explored through reading, discussion, experimentation and examination of relevant examples from the arts. A seminar course open to students in all majors.

409. MYTH, METAPHOR AND SYMBOL
 Modes of expression in the natural sciences, the social sciences and the arts. A seminar course open to students in all majors.

420. THE DEATH OF GOD
Implications of Nietzsche's statement "God is Dead!" with references to the alternatives available to modern man on the meaning and purpose of life. A seminar course open to students in all majors.

423. SONGS OF THE ROCK GENERATION
Significance of popular music in the '60's; technology and media in contemporary America; formal and historical elements in the songs of Dylan, Lennon, McCartney, Simon and others. A seminar course open to students in all majors.

460. CULTURE STUDIES
Aspects of culture, language and civilization with emphasis upon major factors shaping national tradition. May be repeated for credit as topics change.

470. NATURE OF LANGUAGE
Nature and development of languages as a means of human communication and as a form of cognition.

480. INTRODUCTORY LINGUISTICS
Scientific study of language as a system: sound, meaning and word-ordering systems; sub-systems (dialects), writing systems.

498. STUDIES IN HUMANITIES
Selected topics in general and interdisciplinary studies. (2 units)

501. SEMINAR IN CHICANO STUDIES
Study of some phase of Mexican-American studies in the humanities. Prerequisite: consent of instructor.
The College is planning to add to its curriculum an interdisciplinary, career-oriented degree program, B.A. in Human Services. The program will draw from sociology, psychology, ethnic studies and health science. In addition, two specially designed courses are expected to be included in the program and are listed below. Latest information on these plans can be obtained from the Department of Sociology.

305. RESEARCH METHODS IN THE HUMAN SERVICES
Basic methods of research in the human services including collection, sampling, and interpretation of demographic data. Techniques to assess selection, placement and training procedures of human services personnel. Methods of evaluating the effectiveness of programs in achieving their goals.

400. HUMAN SERVICES COUNSELING
Techniques of behavior change used by the human service worker including rehabilitation, remotivation, and environmental modification. Basic communication skills, counselor attitude and behavior, and group counseling methodology will be discussed, practiced, and experienced during the course.
 INTERDISCIPLINARY STUDIES

The College is developing a limited number of courses outside of its departmental and school structure. The courses listed below are designed specifically to meet upper-division general education requirements (see Page 60).

Also offered as interdisciplinary studies are the certificate programs in classical/medieval studies and international relations, see Page 68.

320. SCIENCE AND THE HUMANITIES
A survey of the many links between the natural sciences and the humanities (the arts, literature, history and philosophy).

388. SPECIAL COMPREHENSIVE EXAMINATION IN UPPER-DIVISION GENERAL EDUCATION
Independent study of selected readings drawn from many disciplines in the natural sciences, social sciences and humanities, interrelated on the topic "The Arts and Sciences as Human Activities." No class meetings; study guides provided at registration outline entire quarter's work. Six-hour examination at end of term. (10 or 15 units)
LIBERAL STUDIES

The B.A. in Liberal Studies is a multidisciplinary degree program designed for students whose needs or interests are for a more broadly based liberal arts curriculum than is possible through existing disciplines. Although the program is open to all students, it should prove of particular value to those who plan to enter the elementary teaching field. The program is outlined below:

<table>
<thead>
<tr>
<th>Basic program</th>
<th>126 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (including grammar, literature, composition and speech)</td>
<td>32</td>
</tr>
<tr>
<td>Mathematics and the physical and life sciences</td>
<td>30</td>
</tr>
<tr>
<td>Social sciences</td>
<td>32</td>
</tr>
<tr>
<td>Humanities and the fine arts (including foreign languages)</td>
<td>32</td>
</tr>
<tr>
<td>Field of concentration</td>
<td>18</td>
</tr>
<tr>
<td>Physical education activity</td>
<td>6</td>
</tr>
<tr>
<td>Free electives</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>186 units</td>
</tr>
</tbody>
</table>

A student electing to complete the B.A. in Liberal Studies is also required to meet the general education requirements. A careful selection of courses within the major, including electives, will enable the student to complete the general education requirements, as well as the major, without additional course work.

By an appropriate selection of course work in the basic program, the field of concentration and the free electives, the following objectives may be achieved:

1. Completion of a second major in certain fields.

2. Completion of the professional education requirements leading to a multiple subjects teaching credential.

3. By deferment of some course work to a fifth year, a three-fold objective: completion of the B.A. in Liberal Studies, a second major and the professional education requirements for the multiple subjects teaching credential.

Basic Program

The basic program for the B.A. in Liberal Studies is divided into four broad categories. Within each of these four, the course work is further subdivided into courses in required areas and elective courses.
English (32 units)
  Two courses in composition:
    English 101
    English 393 (English 396 may be a substitute)
  One course in literary analysis:
    English 301 or 302 or 303
  One course in language:
    English 500 or 505
  Three electives:
    Two must be upper-division. Selections are to be made from the
course offerings of the Department of English; Drama 120 and 210
are also acceptable.

Humanities (32 units)
  One course in the arts:
    Art 200 or Drama 250 or Music 180
  Two courses in letters:
    English 110, 111 and 170; Foreign Language 450; French 101-102-
    103; German 101-102-103; Russian 101-102-103; Spanish 101-102-
    103, and 450; Philosophy 190
  Humanities activity (2 units):
    To be chosen from Art 201, 203, 204, 304, 354, 355, 395, 396, 482;
    Drama 320; Music 200, 205, 220, 221, 222, 380 through 387 and 398
  Three electives:
    Two must be upper-division. Selections are to be made from the
course offerings of the School of Humanities (excluding the
Department of English).

Social Sciences (32 units)
  Three courses in civilization:
    Social Sciences 140, 142, 144, 146, 150, 155, 160
    Social Sciences 498
  Three electives:
    Two must be upper-division. Selections are to be made from the
course offerings of the School of Social Sciences.

Natural Sciences and Mathematics (30 units)
  One course in basic mathematics:
    Mathematics 100 or 101 or 200
  One course in applied mathematics:
    Mathematics 150 or Mathematics 301 or Natural Sciences 140
  One course in life sciences:
    Biology 100 or 202
  One course in physical sciences:
    Chemistry 100; Earth Science 101; Natural Sciences 100; Physics
    100
  Two electives:
    One must be upper-division. Selections are to be made from the
course offerings of the School of Natural Sciences.
Field of Concentration

The field of concentration requires 18 quarter units, with at least 15 units at the upper-division level. Courses to meet this requirement, to be selected in consultation with an advisor, must be from a single one of the disciplines below:

<table>
<thead>
<tr>
<th>Art</th>
<th>Administration</th>
<th>Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drama</td>
<td>Anthropology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>English</td>
<td>Economics</td>
<td>Mathematics</td>
</tr>
<tr>
<td>French</td>
<td>Geography</td>
<td>Physics</td>
</tr>
<tr>
<td>Music</td>
<td>History</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>Political Science</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
<td></td>
</tr>
</tbody>
</table>

An alternative is also possible for the field of concentration. In consultation with an advisor, courses may be chosen to develop a coherent program in one of the following fields: bilingual/cross-cultural studies, child development, classical/medieval studies, environmental studies, humanities, international relations, social sciences.
MATHEMATICS

The role of mathematics in society is rapidly growing. New mathematical methods are making an ever wider range of problems amenable to quantitative treatment, thus stimulating new applications, especially in the social, behavioral, management and biological sciences. The computer, with its ability to process formerly unmanageable masses of data and to perform prodigious computational chores, has freed the mathematician to attack problems arising in such diverse areas as industrial management, medical research, environmental studies, ecology, psychology and space exploration.

The mathematics program at California State College, San Bernardino prepares students for careers utilizing applied mathematics, such as oceanography, biostatistics, and computer design and analysis. The program also prepares students interested in teaching, and for others it provides the well-rounded background necessary for graduate work in mathematics and the social and physical sciences.

Requirements for the bachelor of arts degree: eleven courses in mathematics including Mathematics 200, 201, 202, 203, 311, 312, 331, 551 and three upper-division electives, not to include Mathematics 301, 302, 410 or 499, chosen in consultation with the advisor. Physics 211, 212 and 213 are recommended for mathematics majors.

Requirements for the bachelor of science degree: Natural Sciences 140; Mathematics 200, 201, 202, 203, 311, 312, 331, 551, 556, 572 and two upper-division electives, not to include 301, 302, 410 or 499, chosen in consultation with an advisor; five additional courses beyond the general education requirements from at most two disciplines in the natural sciences, chosen in consultation with an advisor. Physics 211, 212 and 213 are recommended.

The required core of the major programs (Mathematics 311, 312, 331, 551) is designed to provide a solid background for a student planning a career as either an applied mathematician or secondary mathematics teacher or planning to study mathematics on the graduate level.

Departmental Honors: The department faculty will determine whether a student is to be awarded departmental honors upon graduation. The sole criterion will be the student's ability to do quality independent work in mathematics. One or more of the following types of activities will be required in order for a student to be considered: (1) completion of Mathematics 595 Independent Study, (2) completion of independent study assignments in regular upper-division mathematics courses, (3) challenge by examination of upper-division mathematics courses; and (4) extracurricular independent study projects. Mathematics 595 Independent Study will be offered on demand. Majors planning to enroll should request department consent and
assignment of a project one term in advance of the term in which the course will be taken.

Requirements for a minor in mathematics: Natural Sciences 140 and Mathematics 200, 201, 202, 311 and 331.

100. THE IDEAS OF MATHEMATICS
Topics include inductive and deductive reasoning, mathematical patterns, methods of counting, basic concepts of probability and statistics.

101. PRE-CALCULUS MATHEMATICS
Inequalities; absolute value; algebraic, logarithmic, trigonometric and exponential functions; miscellaneous topics. Prerequisites: plane geometry and two semesters of high school advanced algebra or their equivalent.

110. INTRODUCTION TO COLLEGE MATHEMATICS
Set theory, inequalities, absolute value, algebraic functions, graphing, systems of equations, linear algebra.

150. ELEMENTARY STATISTICS
Basic principles of statistics with applications to the natural and behavioral sciences. Prerequisite: a year of high school advanced algebra or its equivalent.

200. BASIC CONCEPTS OF CALCULUS
An introduction to differentiation and integration of functions in one variable, with applications.

201. CALCULUS II
Transcendental functions, formal integration, differentials and the law of the mean, fundamental theorem of integral calculus, arc length and curvature, physical applications, improper integrals. Prerequisite: Mathematics 200 with a grade of C or better or consent of the department chairman.

202. CALCULUS III
Curve sketching, areas, arc lengths, and curvature in polar coordinates; solid analytic geometry and vector calculus; partial differentiation and multiple integration with applications to geometry and physics. Prerequisite: Mathematics 201 with a grade of C or better or consent of the department chairman.

203. CALCULUS IV
Sequences, infinite series and expansion of functions; the elements of ordinary differential equations including the general linear equation with constant coefficients; applications. Prerequisite: Mathematics 202 with a grade of C or better or consent of the department chairman.

301. MODERN ARITHMETIC
Various mathematical systems and their arithmetics. This course is designed for non-mathematics majors.

302. MODERN MATHEMATICS
Units of measurement, descriptive statistics, use of computers and other topics are integrated into a treatment of mathematical problem solving. May not be counted toward fulfilling requirements in the major.

311. INTRODUCTION TO ABSTRACT ALGEBRA I
Axiomatically defined real number system and its subsystems; mappings and relations; abstract systems. Prerequisite: consent of advisor.
312. INTRODUCTION TO ABSTRACT ALGEBRA II
Groups, rings and fields. Prerequisite: Mathematics 311 or consent of instructor.

331. LINEAR ALGEBRA
Vector spaces over a field, linear dependence, dimension; matrices and systems of linear
equations; special matrices and canonical forms; characteristic values and vectors;
diagonalization of quadratic and Hermitian forms; applications. Prerequisite:
Mathematics 203 or consent of instructor.

410. MATHEMATICAL MODELING
Applications in science, ecology, industry, business, medicine, education and libraries.
Trends in computer technology and their impact on society. Computer simulations using
models in demography, economics and ecology. Prerequisite: two years of high school
algebra. This course is designed for nonmathematics majors.

420. NUMERICAL METHODS
Introduction to numerical methods for finding solutions of non-linear equations, systems
of linear equations and ordinary differential equations. Discussion of errors and
numerical instabilities; numerical differentiation; numerical integration. Prerequisites:
Mathematics 203 and Natural Sciences 135 or equivalent.

444. PROBABILITY AND STATISTICS I
Mathematical theory of probability and statistics with application to the problems of
sampling and decision making. Axiomatic development of probability; discrete random
variables and their probability distributions with emphasis on the Bernoulli and Poisson
distributions; discrete stochastic processes. Prerequisites: Mathematics 203 and either
311, 331, or consent of instructor.

445. PROBABILITY AND STATISTICS II
Mathematical theory of probability and statistics with application to the problems of
sampling and decision making. Continuous random variables and their probability dis­
tributions; moment generating functions; the normal, t, chi-square, and F distributions
applied to testing hypotheses. Prerequisites: Mathematics 444 and consent of instructor.

499. METHODS AND MATERIALS IN THE TEACHING OF MATHEMATICS
May not be counted toward fulfilling requirements of courses in the major. Prerequisites:
Education 330; senior or graduate standing, and admission to the teacher credential
program.

539. GEOMETRY
Topics in affine and projective geometry with applications to Euclidean 2 and 3 space and
to modern algebra. Prerequisites: Mathematics 312 and 331 or consent of instructor.

551. ANALYSIS I
Continuous and differentiable functions; infinite series; Riemann and improper in­
tegrals. Prerequisites: Mathematics 203 and 311 or consent of instructor.

552. ANALYSIS II
Uniform convergence, computation with series, functions represented by integrals,
Fourier series, Lebesgue measure and integration. Prerequisite: Mathematics 551 or con­
sent of instructor.

556. ORDINARY DIFFERENTIAL EQUATIONS
First order equations, systems of first order equations, fundamental existence and
uniqueness theorems; linear equations, existence and uniqueness theorems for linear
equations; boundary value problems, oscillation theorems, special functions, stability
theory. Prerequisite: Mathematics 331 or consent of instructor.
561. FUNCTIONS OF A COMPLEX VARIABLE
Complex numbers, derivatives and integrals of analytic functions, the geometry of elementary functions, Cauchy's integral theorem and formula; Laurent expansions and evaluation of contour integrals by residues. Prerequisite: Mathematics 311 or consent of instructor.

568. NUMBER THEORY
Topics from the theory of numbers including congruences, Diophantine equations, and a study of prime numbers. Prerequisite: Mathematics 312 or consent of instructor.

572. MODERN ALGEBRA
Polynomials over integral domains, algebraic and transcendental extension of number fields, Galois theory. Prerequisite: Mathematics 312.

581. TOPOLOGY
An introduction to point set topology; general topological and metric spaces. Prerequisite: Mathematics 312.

595. INDEPENDENT STUDY
An independent study course for senior mathematics majors. A total of six units in Mathematics 595 may be applied toward graduation. Prerequisites: Mathematics 312, 331, 551 and consent of department and instructor. (Credit to be arranged: 1 to 6 units)
The contemporary musician has a potential access to more different kinds of music than ever before in history. The music curriculum — with courses in performance practice, world music, opera, electronic music, as well as historical studies, music education and an integrated theory program — is reflective of that diversity.

In order to avoid prescribed programs that would apply to all students, required courses for music majors have been kept at a minimum and prerequisites are relatively few. This allows the student to make most of the decisions that will ultimately affect his musical future, whether it be in performance, composition, music education, graduate study, or any of the other areas open to today's musician. Faculty advisors work to develop a successful program for each student.

Further information for music majors may be found in the department's student handbook.

Many of the course offerings will be of benefit to the general student, and all students are encouraged to participate in choral and instrumental organizations.

Requirements for the major: Music 111, 112, 113, 314, 315; seven additional courses (or 35 units, including a minimum of three units in upper-division applied music). Proficiency in piano is required and may be demonstrated by satisfactory completion of a placement examination or Music 222. A maximum of 15 units in applied music or courses listed under music education may be included in the total requirements for the major.

Students majoring in music are required to complete successfully six repertory listening examinations—a different one given at the end of each quarter—and are encouraged to participate in the department's informal tutorial reading program.

Requirements for a minor: Music 100; 180; at least one course in world music (Music 350, 351, 360); two other full-term music courses, one of which must be upper-division; Music 220; and the successful completion of three repertory listening examinations.

THEORY

The integrated music theory courses are the core of a program which seeks to develop in the student the ability to cope with any aural experience. The courses deal with the materials of music and how they combine to create musical structures, analysis of representative works and continued development of the musical ear and keyboard facility. Designed primarily for the music major and the liberal arts student with a serious interest in music.
100. BASIC MUSICIANSHIP.
Rudiments of music: pitch, rhythm, scales, melody; sight-singing, dictation and introductory keyboard activity. Course provides necessary background for enrollment in theory program; is a fundamental course for the general student. Credits may not be counted toward fulfilling requirements of the major.

111. THEORY I
Basic materials of music and how they combine to create musical structures, analysis of representative works and an attempt to develop both the musical ear and some keyboard facility. Prerequisite: Music 100 or equivalent or placement examination.

112. THEORY II
Continuation of Theory I. Prerequisite: Music 111 or equivalent or consent of instructor.

113. THEORY III
Continuation of Theory II. Prerequisite: Music 112 or equivalent or consent of instructor.

314. THEORY IV
Melody, harmony and texture as they relate to musical structures; extension of tonality and its eventual evolution into 20th century practice; analysis of representative compositions; continuation of ear and keyboard training. Prerequisite: Music 113 or equivalent or consent of instructor.

315. THEORY V
Continuation of Theory IV. Prerequisite: Music 314 or equivalent or consent of instructor.

542. STUDIES IN MUSICAL ORGANIZATION
Intensive study of one aspect of musical organization: tonal, melodic or rhythmic. Content will vary. May be repeated for credit. Prerequisite: satisfactory completion of Music 315 or equivalent.

HISTORY AND LITERATURE
These courses are concerned with musical ideas and styles, as well as social and aesthetic factors influencing sounds composers ultimately preferred and organized. Courses are not sequential.

180. STUDIES IN MUSIC
Exploration of the elements of music and the nature of meaning and musical style, with emphasis on listening and analysis.

320. TWENTIETH CENTURY MUSIC

321. MUSIC IN THE CLASSIC ERA

322. MEDIEVAL AND RENAISSANCE MUSIC

323. NINETEENTH CENTURY MUSIC

324. BAROQUE MUSIC

325. OPERA

400. STUDIES IN COMPOSERS
Intensive study into works of a particular composer. Content will vary. May be repeated for credit.
402. STUDIES IN FORMS
Intensive study into a particular form. Content will vary. May be repeated for credit.

405. SEMINAR IN CHORAL LITERATURE AND CONDUCTING
Prerequisite: completion of Music 113 or consent of instructor.

407. STUDIES IN ORCHESTRAL LITERATURE AND ORCHESTRATION
Prerequisite: completion of Music 113 or consent of instructor.

540. STUDIES IN MUSIC HISTORY
Content will vary. Prerequisite: completion of Music 315 or consent of instructor.

WORLD MUSIC
The following courses are concerned with music as it has developed and as it exists in various cultures of the world. Courses include background necessary to enable the student to understand the role of music in particular societies. Visiting faculty and guest musicians when possible. No prerequisites. Non-music majors encouraged to enroll.

350. MUSIC OF OTHER CULTURES
Offered either as a survey of world music or as an intensive study into the music of a particular country or region. May be repeated for credit.

351. MEXICAN AND CHICANO MUSIC
Musical cultural heritage of Mexico and its relation to the American community.

360. MUSIC IN THE UNITED STATES
Primarily concerned with music not directly related to Western European classical traditions: folk heritage and blues tradition.

COMPOSITION
Working creatively with sound in a relatively unstructured situation. Experimentation is encouraged, based on individual abilities and preferences. Composition courses may be repeated for credit with consent of instructor.

416. SEMINAR IN ELECTRONIC COMPOSITION

417. SEMINAR IN COMPOSITION
May be repeated for credit. Prerequisite: consent of instructor.

PERFORMANCE PRACTICE
Role of the performer in various periods; study of stylistic procedures, score interpretation, editing for performance; studies in ornamentation and improvisation.

450. PERFORMANCE PRACTICE
Prerequisite: consent of instructor.

INDEPENDENT STUDY

528. SPECIAL PROJECTS
Individual projects in orchestration, conducting and score reading, theory, history, composition, electronic music. Prerequisite: consent of instructor. (1 to 5 units)
MUSIC EDUCATION

The following courses are designed for the prospective elementary and secondary school teacher.

200. CLASS VOICE
Fundamentals of singing, voice production and diction. (2 units)

201. CLASS STRINGS
Beginning study on violin, viola, cello and bass. May be repeated for credit. (1 unit)

202. CLASS WOODWINDS
Beginning study on selected woodwinds. May be repeated for credit. (1 unit)

203. CLASS BRASS
Beginning study on selected brass instruments. May be repeated for credit. (1 unit)

204. CLASS PERCUSSION
Beginning study of percussion instruments. May be repeated for credit. (1 unit)

205. CLASS GUITAR AND FOLK MUSIC
Beginning guitar instruction designed for the prospective elementary school teacher. May be repeated for credit. (1 unit)

210. CONDUCTING
Introduction to basic conducting techniques. (2 units)

220. CLASS PIANO I
Basic keyboard techniques designed for the music major, the elementary school teacher and the liberal arts student without keyboard experience. Placement examinations are given at the beginning of each quarter. Prerequisite: approval of department chairman and consent of instructor. (1 unit)

221. CLASS PIANO II
Basic keyboard techniques designed for the music major, the elementary school teacher and the liberal arts student. Placement examinations are given at the beginning of each quarter. Prerequisites: approval of department chairman and consent of instructor. (1 unit)

222. CLASS PIANO III
Basic keyboard techniques designed for the music major, the elementary school teacher and the liberal arts student. Placement examinations are given at the beginning of each quarter. Prerequisites: approval of department chairman and consent of instructor. (1 unit)

301. MUSIC LITERATURE FOR CHILDREN
(2 units)

302. MUSIC THEATRE PRODUCTION
(2 units)

470. CREATING MUSIC
Social, classroom and electronic music created and performed by the student with conventional and imaginative sources of sound. (2 units)
499. METHODS AND MATERIALS IN THE TEACHING OF MUSIC
May not be counted toward fulfilling requirement of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.

531. MUSIC IN THE CLASSROOM
A correlated study of basic music theory, piano and vocal technique and classroom skills. Designed for the elementary teacher. Not open to majors in music.

APPLIED MUSIC
Music majors are required to take a minimum of three units of applied music at the upper-division level. Applied music units on the same instrument may not be taken concurrently. A maximum of fifteen units may be applied to the total requirements for the major. Permission to register in upper-division music courses can be granted only after a placement audition or by faculty recommendation. Applied music courses are available to undergraduate music majors only.

For students planning a career in music education, it is strongly recommended that, in addition to the three-unit requirement on a major instrument, three units of applied music study on a secondary instrument be included.

Students planning a career in performance are expected to study on their major instrument each quarter they are in residence. Students working in other areas may develop applied music programs consistent with their interest and goals.

The following music courses are available to undergraduate music majors only.

240. BEGINNING AND INTERMEDIATE VOICE
(1 unit)

241. BEGINNING AND INTERMEDIATE KEYBOARD INSTRUMENT
(1 unit)

242. BEGINNING AND INTERMEDIATE STRING INSTRUMENT
(1 unit)

243. BEGINNING AND INTERMEDIATE WIND INSTRUMENT
(1 unit)

244. BEGINNING AND INTERMEDIATE BRASS INSTRUMENT
(1 unit)

245. BEGINNING AND INTERMEDIATE PERCUSSION INSTRUMENT
(1 unit)

440. ADVANCED VOICE
Prerequisite: placement audition or consent of instructor. (1 unit)

441. ADVANCED KEYBOARD INSTRUMENT
Prerequisite: placement audition or consent of instructor. (1 unit)

442. ADVANCED STRING INSTRUMENT
Prerequisite: placement audition or consent of instructor. (1 unit)

443. ADVANCED WIND INSTRUMENT
Prerequisite: placement audition or consent of instructor. (1 unit)
444. ADVANCED BRASS INSTRUMENT
Prerequisite: placement audition or consent of instructor. (1 unit)

445. ADVANCED PERCUSSION INSTRUMENT
Prerequisite: placement audition or consent of instructor. (1 unit)

PERFORMANCE ORGANIZATIONS
Participation in performance organizations may be repeated for credit, but may not be counted toward fulfilling course requirements in the major.

380. CHAMBER ORCHESTRA
Prerequisite: consent of instructor. (1 unit)

381. BAND
Prerequisite: consent of instructor. (1 unit)

382. CHAMBER MUSIC
Prerequisite: consent of instructor. (1 unit)

385. CONCERT CHOIR
Prerequisite: consent of instructor. (1 unit)

386. CHAMBER SINGERS
Prerequisite: consent of instructor. (1 unit)

387. OPERA WORKSHOP
Prerequisite: consent of instructor. (1 unit)

398. PERFORMANCE
Special performance groups such as South Indian singing, Collegium Musicum and piano ensemble. Prerequisite: consent of instructor. (1 unit)
Students interested in the natural sciences normally major in biology, chemistry, mathematics and physics. The College does not offer a degree program in natural science. However, courses of a more general or interdisciplinary nature in the sciences are available under the natural sciences designation.

100. DESCRIPTIVE ASTRONOMY
A brief history of the development of astronomy followed by modern descriptions of our planetary system, stars, galaxies and models of the universe. Discussions of space exploration and other methods of extending knowledge of the universe. No previous background in natural sciences is required. Lecture and two hours of laboratory.

135. INTRODUCTION TO COMPUTERS AND BASIC
Introduces concepts of general interest to all programming languages with the use of the conversational-type language BASIC. No previous background is required. Appreciation and experience in the use of the time-sharing mode of a computer is gained by exercises from a wide variety of applications, many of them nonmathematical. (2½ units)

140. INTRODUCTION TO DIGITAL PROGRAMMING
An introduction to computer languages with emphasis on Fortran. Consideration will be given to basic operations and elements of a digital computer, mathematical notations, Boolean algebra, number representations, flow charts, logic and understanding of problems amenable to computer solutions. Prerequisite: Mathematics 101 or consent of instructor.

145. INTRODUCTION TO DATA PROCESSING
An introduction to data processing for students with no previous background in the area. This course stresses the fundamental principles and provides the necessary guides for successful application. Topics include computer programming (emphasizing COBOL), punched card processing, input/output and storage of data, and real and batch processing. Illustrative examples will be taken from the fields of administration, economics and other areas.

300. SCIENCE AND TECHNOLOGY
An examination of the relationship between science and technology —past, present and future — with case studies of the energy crisis, the technology of pollution control and recycling, automation, computers, technology assessment and other contemporary issues.

310. MAN AND HIS ENVIRONMENT
Effects of science and technology on the environment. Special attention will be given to pollution sources, effects and possible solutions.

340. ADVANCED DIGITAL COMPUTING
Topics selected from the following: digital computing systems, assembler programming, job control language and applied programming. Prerequisite: Natural Sciences 140 or equivalent, or consent of instructor.
350. NATURAL PHENOMENA
Physical principles underlying natural phenomena and illusions, such as earthquakes, continental drift, geomagnetism, tides, weather, rainbows, cosmic rays, auroras and mirages.

351. HEALTH AND HUMAN ECOLOGY
A survey of the impact of physical, social and biological environments on health related issues such as poor housing, drug abuse, juvenile delinquency, radiation and pesticide exposure, food quality, noise, air and water resources and their relation to human settlements.

406. THE LIMITATIONS OF SCIENCE
Scope and limitations of science, including discussions of the present attitudes of society toward science, the limitations inherent in the scientific method, the economic limitations of science and the limitations of science due to the nature of man. A seminar course open to students in all majors.

407. BIOLOGICAL BASIS OF SOCIAL BEHAVIOR
An inquiry into the kinds of animal groups and their significant characteristics. A wide variety of social traits and processes shared by animals and man will be examined. A seminar course open to students in all majors.

408. HUMAN VALUES IN A SCIENTIFIC AGE
Effect of science on human values; consideration of problems caused by the machine age and rapid scientific growth and possible solutions. A seminar course open to students in all majors.

410. HISTORY AND DEVELOPMENT OF SCIENTIFIC THOUGHT
History of major scientific developments in the natural sciences which have changed man's concept of himself and the universe. A seminar course open to students in all majors.

418. FRONTIERS IN SCIENCE
Ideas, concepts and discoveries of science currently unfolding. Major advances in several disciplines of science and their border areas, such as the molecular basis of heredity, evolution of the elements and the universe, and new chemical materials. A seminar course open to students in all majors.

421. DYNAMICS OF POPULATIONS
An inquiry into the components which characterize populations, stressing the importance of biological, chemical and sociological control of population growth; evaluation of the relationship of growth curves to natural resources. A seminar course open to students in all majors.

431. THE BIOLOGICAL SCIENCES AND PUBLIC POLICY
Complex social problems involving the biological sciences, such as environmental pollution, genetic control and possible responses, both public and private, to such problems. A seminar course open to students in all majors.

432. ENERGY AND ITS UTILIZATION BY MAN
Present and future energy sources, including fossil fuels, hydroelectric power, nuclear energy and solar energy. Emphasis is placed on scientific principles and technological requirements for developing energy sources, economic factors and environmental problems associated with energy production and consumption. A seminar course open to students in all majors.

498. STUDIES IN NATURAL SCIENCES
Selected topics in the natural sciences. May be repeated for credit as the topics change. (2 units)
The Department of Nursing offers a two-year upper-division major in nursing, designed to articulate with community college nursing programs. The nursing courses, together with other college requirements, provide intellectual and philosophical stimulation for individuals concerned with promoting optimum health in the community.

Students specialize in either episodic or distributive nursing in the senior year. This choice can assist them in qualifying for leadership positions in acute care institutions or for certification as public health nurses.

In addition to the requirements for admission to the College as a transfer student, the following criteria must be met prior to admission to the nursing program:

1. Lower-division requirements:
   a. Completion of an associate degree in nursing or its equivalent. (Four courses in nursing and certification by a community college of fulfillment of minimum lower-division general education requirements specified in Title V of California Administrative Code. Students may remove deficiencies in lower-division general education in accordance with college requirements stated on Page 55.)
   or
   b. For graduates of diploma nursing programs, certification by the college as having equivalent preparation through proficiency examinations and special assessment in nursing, together with completion of lower-division requirements in related fields and in general education.

2. Current California license as a registered nurse.

3. Junior standing.

Requirements for the major: Nursing 310, 330, 331, 340, 350, 360 or 361, 370 or 371, 380; Health Science 371, 451; Administration 301; Spanish 310; and 16 units of electives to be selected in consultation with the departmental advisor.

Departmental Honors: A graduating senior will be awarded departmental honors in nursing after meeting the following requirements: at least a 3.5 average in all nursing courses taken at California State College, San Bernardino, an overall undergraduate grade-point average of at least 3.0, and an A in Nursing 595 or another clear demonstration of ability to do independent work in nursing.

As a prerequisite to the clinical nursing courses (330, 331, 360, 361, 370 or 371), students are required to obtain professional liability insurance.
310. SCIENCE AND HUMAN PHENOMENA
Dynamic aspects of biology, chemistry and physics as they relate to the human body. Lecture and three hours of laboratory.

330. COMMUNITY HEALTH NURSING I
Theories related to the optimum health of people in all age groups, emphasizing nursing intervention in promoting optimum health for families. Laboratory experiences in community agencies such as industry, schools, clinics, doctors' offices and student health centers. Lecture and six hours of laboratory. (6 units)

331. COMMUNITY HEALTH NURSING II
A continuation of Nursing 330. Emphasis on the nurse's role as the patient's advocate and in motivating man to seek a higher level of well-being. Lecture and six hours of laboratory. Prerequisite: Nursing 330. (6 units)

340. ANALYSIS OF NURSING THOUGHT
Theories of group process, leadership, health continuum and the nursing process. Lecture only.

350. INDEPENDENT PRACTICE AND CHANGE AGENT
Legal, political and economic forces and structures affecting the practice of nursing and the delivery of health care; the political arena, the expanding role of the nurse practitioner in the health care delivery system and the dynamics of planned change. Lecture only.

360. EPISODIC NURSING I
Techniques and methods of assessing human responses; securing and recording health and developmental histories; translating research findings into nursing diagnoses and health care regimens. Emphasis on restorative aspects of nursing care of patients with acute or long-term health problems. Laboratory experience will include assessment of patients in different stages of illness, health problems and age groups. Lecture and six hours of laboratory. Prerequisite: Nursing 337. (6 units)

361. DISTRIBUTIVE NURSING I
Techniques and methods of assessing the health status and environment of individuals and families; community resources; case finding, and medical and social agency referrals. Emphasis on evaluating human responses, eliciting and recording health histories, making nursing diagnoses and prescribing modifications in health maintenance and environment in order to prevent disease. Laboratory experience will include assessments of individual and family problems, referrals and counseling of patients in private homes, ghetto areas, free or store-front clinics, community care centers and migrant farms. Lecture and six hours of laboratory. Prerequisite: Nursing 331. (6 units)

370. EPISODIC NURSING II
Techniques of designing immediate and long-term nursing care plans. Emphasis on the professional nurse's role in delegating nursing care to other nursing personnel. Laboratory experience will include evaluation of existing nursing care plans, formulation of new plans, determination of those best qualified for implementation and preparation of staff. Lecture and six hours of laboratory. Prerequisite: Nursing 360. (6 units)
371. DISTRIBUTIVE NURSING II
Techniques and methods in health, surveillance and health supervision of pregnant and post-partum women, well babies and children, and drug-dependent individuals. Emphasis on counseling, teaching and family planning. Laboratory experiences will include teaching the care of the newborn, family planning and counseling the drug-dependent individual. Experiences will be provided in health agencies, homes, schools and encounter groups. Lecture and six hours of laboratory. Prerequisite: Nursing 361. (6 units)

380. ANALYSIS OF CURRENT PROFESSIONAL PROBLEMS
Contemporary problems in nursing, such as continuing education, allied health profession and health legislation. Lecture only.

595. INDEPENDENT STUDY
A special project involving the literature, field research and/or experimental effort. A total of six units in Nursing 595 may be applied toward graduation. Prerequisites: senior standing and consent of department and instructor. (Credit to be arranged: 1 to 6 units)
Philosophy is humanity's oldest intellectual discipline. Philosophy's concerns range from questions fundamental to human understanding such as the nature of man, knowledge, truth, being, existence, right, freedom and the good life; to attempts to bring clarity, order and understanding to arguments dealing with pressing social problems such as the equitable distribution of society's goods, political violence, the right to privacy and governmental honesty.

Because at all its levels philosophy aims at the construction of sound arguments and clear concepts, it develops in the student high levels of skill in the analysis and organization of ideas. Acquisition of these basic intellectual skills is excellent preparation for further study and for entering a variety of career fields. Philosophy is a strongly recommended prelaw major and can provide solid background for careers in journalism, public service, government and politics among others.

Requirements for the major: ten courses, three of which may be lower division (e.g. Philosophy 105, 190, 200). The remaining seven courses must be upper division and include a core of two courses from the history sequence (Philosophy 301, 303, 305, 307) and one course from a systematic field (Philosophy 312, 350, 360, 370 or 380). The remaining four courses must be apportioned according to the requirements of emphasis area A (systematic philosophy) or emphasis B (philosophy and public affairs).

The requirements for Area A: one additional course from the history sequence (see above) plus Philosophy 312, 350 and 380.

The requirements for Area B: four courses chosen from Philosophy 340, 355, 362, 365, 465, 520.

A comprehensive examination, testing skills by applying them to a small set of philosophical works announced at the close of junior year, will be required for students wishing to qualify for graduation with departmental honors and is highly recommended for those planning graduate study in philosophy.

In order to meet entrance standards for most graduate departments of philosophy and to qualify for strong recommendations from this department, students planning to apply for graduate programs should also complete two additional upper-division elective philosophy courses, plus a minimum of four full-term courses, or equivalent proficiency, in one foreign language (preferably French, German, Latin or Greek), with attainment of demonstrable reading skill.

Requirements for the minor: six philosophy courses, no more than two of which may be lower-division; the six must include at least one from the sequence of readings in the history of philosophy: 300, 302, 304; and one systematic field chosen from 312, 350, 360, 370.
170 / Philosophy

105. ARGUMENT AND EVIDENCE
Analysis of various kinds of reasoning employed in everyday life and in more specialized contexts, to develop each student's skill in understanding and using carefully constructed arguments. Illustrations will include materials drawn from contemporary issues.

190. STUDIES IN PHILOSOPHY
Introduction to the analysis of philosophic problems centered on things done, things known and things made. Intensive group discussion is based on writings from Greek, medieval, early modern and contemporary philosophers.

200. STUDIES IN ONE GREAT PROBLEM
Concentration on a single important philosophic problem, e.g., what is justice?, what is beauty?, how are power and wisdom connected?, is there a God? Radically different works will serve to foster discovery of the multi-faceted structure of the problem and some solutions offered for it. May be taken for credit more than once, if the problem selected is different each time.

301. GREEK AND ROMAN PHILOSOPHY
Major philosophic movements from the Pre-Socratics and Plato to the Stoics, Epicureans, Sceptics and Mystics.

303. MEDIEVAL THOUGHT, EUROPEAN AND ARABIC
Significant philosophical doctrines from St. Augustine and Ibn Sina to Aquinas and Ibn Rushd.

305. MODERN PHILOSOPHY, SIXTEENTH-NINETEENTH CENTURIES
Roots of modern philosophy and science from Galileo and Descartes to Hegel and Marx.

307. CONTEMPORARY PHILOSOPHY
Recent directions in philosophy such as existentialism, phenomenology, positivism, pragmatism, ordinary language, structuralism, analysis and the like.

312. PHILOSOPHY OF LOGIC
Inquiry into diverse systems and conceptions of logic, ancient to modern.

316. DISCOVERY AND METHOD
Studies in the philosophy of the natural and social sciences treating questions such as the nature of creativity, proof, explanation, experiment and scientific revolutions.

320. PHILOSOPHY OF EDUCATION
An inquiry into some characteristic problems, through consideration of works by authors such as Plato, Rousseau, Newman and Dewey.

340. PHILOSOPHY OF MAN
Inquiry into traditional and contemporary views of the nature of man and their implications for human life.

350. ETHICS
Analysis of problems intrinsic to human action, through the study of alternative formulations offered by some great philosophers, present and past.

355. CONTEMPORARY ETHICAL ISSUES
Moral problems intensified by the rapid pace of social, economic and technological changes: genetic engineering, euthanasia, "the new sexual ethics," abortion, the right to privacy.
360. POLITICAL PHILOSOPHY
Some important ancient, medieval and modern works are examined systematically to illu­
minate issues concerning community action.

362. PHILOSOPHY AND DEMOCRACY
Philosophic problems of democracy from Socrates' debates with the Sophists to con­
temporary discussions. Emphasis on the ethical values and arguments involved in topics such
as participation, citizenship and responsible decision making.

365. POWER, AUTHORITY, FORCE AND VIOLENCE
Inquiry into the relations and conflicts between might and right, using philosophic and
historical documents. Focus is on the role of ethical justifications and reasoned
arguments in action.

370. PHILOSOPHY OF ART AND CRITICISM: AESTHETICS
Principles and problems of art are analyzed with the help of important writings that raise
questions of general theory and critical practice.

380. BEING, EXISTENCE AND KNOWING
Inquiry into first principles underlying reflection on the nature of the universe, man and
his attempts to achieve knowledge.

408. MARX AND MARXIST PHILOSOPHERS
An investigation of Karl Marx's philosophy, with systematic attention to the variations on
it contributed by Engels, Lenin, Stalin, Trotsky and Mao Tse-Tung.

450. MAN'S SEARCH FOR GOD OR GODS
A probing of some significant ideas about God and the philosophy of religion.

465. PHILOSOPHY OF LAW
Intensive study of the concept of law and its relation to power, command, reason, nature,
justice, prediction.
The primary objectives of the Physical Education and Recreation Department are to emphasize the benefits of active recreation for all adults and to offer minor programs in the fields of physical education and recreation.

The department seeks to achieve total student involvement in some phase of its program—classes, intramurals or recreation. With the variety of activities available, students can develop, improve and maintain optimum physical fitness; develop and practice useful sport skills; enjoy wholesome physical recreation or vigorous intramural competition; and acquire desirable life-long attitudes for healthful adult living.

Requirement for graduation: each student is required to complete three activity courses (6 quarter units of credit) in physical education. It is recommended that these courses be taken during the first year on campus. Activities such as badminton, basketball, handball, squash, tennis and volleyball are offered on the courts, and the playing fields provide for archery, golf, soccer, softball and other field sports. Other activities include aquatics, combatives, dance, gymnastics and weight training.

Students who are over 25 years of age are not required to take physical education classes but may substitute six credit hours of their choice. Students who need to meet a requirement in health in preparation for a teaching credential should consult the School of Education.

Classes are coeducational except where the nature of the activity deems it inappropriate.

Requirements for a minor in physical education: Physical Education 180, 200, 300, 340, 350 and a course in school health; two of the following: Physical Education 140, 150, 165, 250, 251 and 332; and three additional two-unit courses offered by the department.

Requirements for a minor in recreation: Physical Education 171, 180, 200, 271, 361 and 410; two of the following: Physical Education 140, 150, 165, 332; and three additional two-unit courses offered by the department.

For information on intramurals or recreational use of the physical education facilities by students, contact the Physical Education and Recreation Department office.

All two-unit physical education courses are graded credit/no credit.

100. INTRODUCTION TO PHYSICAL EDUCATION
Instruction in a variety of sports activities. (2 units)
110. INDIVIDUAL SPORTS (2 units)
A. Archery
B. Badminton
C. Bicycling
D. Bowling
E. Boating and canoeing
F. Golf
G. Handball
H. Horseshoes
I. Lawn bowling
J. Racquet (paddle) ball
K. Skiing
L. Squash racquets
M. Tennis

111. BODY CONDITIONING (2 units)
A. Circuit training
B. Jogging
C. Weight training
D. Yoga
E. Circuit training
F. Jogging

112. TRAMPOLINE AND STUNTS
Basic instruction in trampoline tumbling and gymnastics. (2 units)

113. COMBATIVES (2 units)
A. Boxing
B. Fencing
C. Karate
D. Wrestling

120. TEAM SPORTS (2 units)
A. Basketball
B. Field hockey
C. Soccer
D. Softball
E. Speedball
F. Touch (flag) football
G. Volleyball
H. Water Polo

130. SWIMMING AND DIVING
Beginning, intermediate, advanced. Instruction at all levels, includes springboard diving. (2 units)

131. LIFE SAVING
To meet the standards for Red Cross certification. (2 units)

134. AQUATIC GAMES AND ACTIVITIES
Includes experiences in organizing and playing games such as water basketball, water polo, water volleyball and water ballet. (2 units)

135. SKIN DIVING
Principles of underwater swimming with mask, snorkel and fins. Basic physiology of diving. Instruction in selection, use and care of equipment. (2 units)

136. SCUBA DIVING
Physiology, physics and principles of underwater swimming with and without underwater breathing apparatus. Instruction in selection, use and care of equipment. To meet requirements for NAUI certification, field trip is required. Prerequisites: doctor’s physical examination and either passing Physical Education 135 or consent of instructor. (2 units)
A. Beginning
B. Intermediate
C. Advanced

140. DANCE (2 units)
A. Ballet
B. Folk
C. Modern
D. Round
E. Square
F. Jazz
G. Social

150. SPORTS OFFICIATING
Techniques for sports officials and referees and experience working in intramural sports program. (2 units)
160. OUTING SKILLS
Basic outing skills including selection and care of a campsite, planning and preparation of meals and erecting of an adequate shelter. (2 units)
A. Backpacking
B. Mountaineering
C. Camp cooking

165. OUTDOOR EDUCATION AND CAMP LEADERSHIP
Knowledge, concepts and techniques for the administration and organization of camps and for working with people in the out-of-doors. Opportunities for supervised leadership and field trips to observe camp facilities, programs and sources. (2 units)

171. INTRODUCTION TO RECREATION
Orientation to recreation as a profession. Meaning, content, history, philosophy and scope of the field of recreation.

180. SPORTS SUPERVISION
Organization and supervision of recreational sports for school or community participation. (2 units)

200. FIRST AID
Prevention of injuries and the emergency care and treatment of illnesses or injuries. To meet the requirements for standard and advanced Red Cross certification. (2 units)

250. ADAPTIVE PHYSICAL EDUCATION
Organizing and supervising programs for the handicapped. (2 units)

251. SPORT IN CONTEMPORARY SOCIETY
Examination of the role of sport in today's society. (21/2 units)

271. RECREATION LEADERSHIP
Organization, supervision and administration of recreation programs and practical experience in recreational activity situations in which leadership skills can be developed. Prerequisite: Physical Education 171 or consent of instructor.

300. SCHOOL GAMES AND RHYTHMS
Experiences in developing a physical education program for elementary school children. (2 units)

332. WATER SAFETY INSTRUCTION
Materials and methods in organizing school, community and camp aquatic programs. Supervised practice in teaching aquatics. To meet standards for Red Cross certification for teaching all levels of swimming, life saving and small craft safety. Prerequisite: current senior life-saving certificate. (2 units)

340. ORGANIZATION AND CONDUCT OF PHYSICAL EDUCATION
History, philosophy, organization, administration and methods of teaching physical education.

350. FIELD WORK IN PHYSICAL EDUCATION
Supervised leadership experience in school physical education class or intramural program. Prerequisite: Physical Education 340.

361. RECREATION PROGRAMMING
Materials and methods used in planning and conducting programs in recreation, such as social recreation, dramatics, art, sports. Prerequisite: Physical Education 171.

410. FIELD WORK IN RECREATION
Supervised leadership experience in a recreation agency. Prerequisites: Physical Education 271 and 361.
Traditionally physics graduates either have gone on to graduate work in physics or have found employment in industrial or governmental laboratories. Other opportunities which have recently become interesting for physics graduates include atmospheric physics (including air pollution studies), geophysics, radiation safety, oceanography, astrophysics, technical administration, biophysics, computer science and medical instrumentation development.

The program for a bachelor of arts degree in physics provides basic knowledge in the main subject areas of physics as well as an opportunity for students to elect a considerable number of courses in other disciplines. The bachelor of science program includes additional course work in physics and related fields which further prepares a student for employment or graduate work. A candidate for the B.S. degree may also take several courses selected from any of the offerings of the college.

Requirements for the bachelor of arts degree: Physics 211, 212, 213, and twenty-five additional upper-division units in physics; Chemistry 215 or equivalent; and completion of a lower-division calculus sequence (Mathematics 200-203 or equivalent).

Requirements for the bachelor of science degree: Physics 211, 212, 213, and forty units selected from the following: 311, 312, 313, 405, 411, 413, 430 and 440; Chemistry 215 or equivalent; completion of a lower-division calculus sequence (Mathematics 200-203 or equivalent); and four additional courses from the offerings of the School of Natural Sciences, to be selected with the approval of the Physics Department.

Completion of the calculus sequence is prerequisite for most upper-division courses leading to a major in physics. A comprehensive examination covering the major field of study is required in the senior year.

Requirements for a minor in physics: Physics 211, 212 and 213; 10 units of upper-division physics; and 15 units of a lower-division calculus sequence (Mathematics 200, 201, and 202 or 203).

100. A SURVEY OF PHYSICS
Advances in physics which have influenced man's visualization of the universe. This course is intended for students with little background in science and mathematics. Lecture and two hours of laboratory.

111. BASIC CONCEPTS OF PHYSICS I
The first course of a two-course sequence surveying the basic concepts of physics, primarily for students entering fields relating to the biological sciences. Topics include waves, optics and mechanics. Lecture and six hours of laboratory. Prerequisite: two years of high school algebra or equivalent. (6 units)
112. BASIC CONCEPTS IN PHYSICS II
Continuation of Physics 111. Topics include electricity, electric circuits, magnetism and modern physics. Lecture and six hours of laboratory. Prerequisite: Physics 111 with a grade of C or better. (6 units)

211. CLASSICAL MECHANICS
The first course of a three-course sequence surveying physics. For students with a strong background in mathematics and the sciences. Lecture and six hours of laboratory. Prerequisite: Mathematics 200 with a grade of C or better. Prerequisite or corequisite: Mathematics 201. (6 units)

212. STATIC AND DYNAMIC ELECTRICITY
Lecture and six hours of laboratory. Prerequisites: Physics 211 and Mathematics 201 both with a grade of C or better. (6 units)

213. WAVES AND MODERN PHYSICS
Lecture and three hours of laboratory. Prerequisite: Physics 212 with a grade of C or better.

300. ELECTRONICS FOR SCIENTISTS
Electrical measurement techniques and basic electronics. Lecture and six hours of laboratory. Recommended preparation: some background in laboratory work.

311. CIRCUIT THEORY AND VECTOR ANALYSIS
Vector analysis and electrical circuit theory are presented and applied to a wide range of problems in physics. Lecture and three hours of laboratory. Prerequisites: Physics 212 with a grade of C or better and Mathematics 203.

312. RELATIVITY
Lecture only. Prerequisite: Physics 212.

313. ELECTRODYNAMICS
Derivation and applications of Maxwell's equations. Lecture only. Prerequisite: Physics 311.

405. INTERMEDIATE CLASSICAL MECHANICS
A continuing and more thorough study of the material introduced in Physics 211; statics and dynamics including rotational motion of rigid bodies and an introduction to advanced formulations of mechanics. Lecture only. Prerequisite: Physics 212 and Mathematics 203.

411. MODERN PHYSICS
Topics of modern physics with an introduction to the concepts of quantum mechanics. Lecture only. Prerequisites: Physics 213, 312 and Mathematics 203, each with a grade of C or better.

413. THERMAL AND STATISTICAL PHYSICS
Statistical behavior of systems of large numbers of particles, with applications. Thermodynamics is shown to be derivable from first principles by application of statistical methods. Prerequisites: Physics 213 and Mathematics 202.

430. ADVANCED PHYSICS LABORATORY
Selected advanced experiments appropriate to a student's previous preparation. May be repeated for credit. Prerequisite: Physics 212. (2 1/2 units)

440. SEMINAR: TOPICS IN CONTEMPORARY PHYSICS
Papers on various topics are prepared by the students and presented during class sessions. May be repeated once for credit. Prerequisite: consent of instructor. (2 1/2 units)
499. METHODS AND MATERIALS IN THE TEACHING OF PHYSICS
May not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.

595. INDEPENDENT STUDY
Research in physics conducted under the direction of a faculty member. A total of six units in Physics 595 may be applied toward graduation. Prerequisites: consent of department and instructor. (Credit to be arranged: 1 to 6 units)
The major in political science is designed for students who desire a liberal arts program with an emphasis on politics, government and public policy; plan a career in government service or public administration; seek training for positions in foreign service agencies of the United States government, international organizations or corporations; intend to study law; wish to prepare for teaching in the public schools; or intend to work for advanced degrees in political science in preparation for college or university teaching or for government service.

The department offers courses in the following fields: American government and politics, comparative politics, political behavior, international relations, political theory, and public policy and administration. Using combinations of these fields, students can tailor-make their study programs by creating tracks such as public policy, legal training or international relations.

In many political science courses students are afforded the opportunity to assume the roles of politicians, bureaucrats and judges in computer-simulated international conflict, in legislative and administrative hearings and in moot court proceedings. Also, they may work as interns in city and county government or in the offices of lawyers and judges, or they may complete independent study projects approved by the department.

Requirements for the major: a minimum of ten courses in political science including Political Science 200, 202, and eight upper-division courses. With the approval of the department chairman, up to two courses in related fields may be counted toward the upper-division course requirement in political science.

The major also requires at least one course from each of the following fields: American government and politics (320, 326, 328, 330, 380, 410, 411, 426, 428, 430, 550 and 570); comparative politics (300, 304, and 306); international relations (325, 400, 500, 510 and 590); political behavior (440, 446, 450 and 540); and political theory (310, 312 and 314). In addition, majors are strongly urged to take Social Sciences 210 or Mathematics 150.

Requirements for a minor in political science: six courses including Political Science 200 and 202, and at least four upper-division political science courses chosen in consultation with an advisor.

Departmental Honors: Students majoring in political science are eligible to receive honors in political science at graduation when they meet the following requirements: 3.5 grade-point average in all political science courses attempted, at least half of all work in political
science completed at this college, and recommendation for departmental honors by political science faculty.

200. INTRODUCTION TO POLITICAL SCIENCE
Introduction to the scope of the discipline, to its basic philosophical concepts, methods, and to political action in various cultural contexts.

202. AMERICAN GOVERNMENT
Political structure and processes of the American governmental system. This course will satisfy the State Code requirement in United States History, Constitution and American ideals and in California state and local government.

300. WESTERN POLITICAL SYSTEMS
Major Western political systems.

304. COMMUNIST POLITICAL SYSTEMS
Examination of the relationships among communist political systems.

306. DEVELOPING POLITICAL SYSTEMS
Developing systems with an emphasis on newly independent nations.

310. GREEK, ROMAN AND MEDIEVAL POLITICAL THOUGHT
Political ideas from the time of the Greeks to the rise of the sovereign state in the 16th century and the ideas of Thomas Hobbes.

312. ANALYSIS OF WESTERN POLITICAL THOUGHT
Major political ideas from Hobbes to Marx, emphasizing the European theorists.

314. AMERICAN POLITICAL THOUGHT
American political ideas from the colonial period to the present.

320. THE LEGISLATIVE PROCESS
Law-making processes in the United States and/or other selected political systems.

325. AMERICAN FOREIGN POLICY
Political analysis of American foreign policy with emphasis on foreign policy making in the nuclear age.

326. POLITICAL PARTIES AND INTEREST GROUPS
Organization, objectives, and activities of political parties and political interest groups and their functions in modern political systems.

328. JUDICIAL PROCESS
Process of judicial decision-making with emphasis on factors influencing that process and concepts of judicial roles.

330. STATE AND LOCAL POLITICS
Comparison of state and local political systems within the American Federal System. This course meets the State Code requirement in California state and local government.

340. SEX AND POLITICS
Emphasis will be on sex roles in traditional and modern political systems, sex stereotypes in politics; effects of changing technology on conventional male and female roles; dynamics of change affecting the woman’s place in the political world.
342. THE POLITICS OF ENVIRONMENT
Environmental problems in their political context, including air, water, thermal and noise pollution, solid waste, population growth, resource management, and the political costs and benefits of environmental protection.

350. POLITICS OF BLACK AMERICA
Black liberation ideologies and attempts at their implementation within the American political system.

351. THE CHICANO AND POLITICS
Political factors affecting the contemporary Mexican-American community; involvement, organization and role of the individual in the political process.

380. SURVEY OF PUBLIC ADMINISTRATION
An introduction to the study of public administration, including a survey of the major functions, structures, behaviors, processes and problems. (Also offered as Administration 380)

400. INTERNATIONAL POLITICS
Selected theories and evolving patterns of international politics as developed within the nation-state system.

410. AMERICAN CONSTITUTIONAL LAW
Principles of the American Constitution as announced by the Supreme Court in selected cases. Judicial review, separation of powers, presidential power, federalism, and commerce are included.

411. THE BILL OF RIGHTS
Limitation on federal and state power arising out of the provisions of the first eight and the 14th Amendments to the Constitution. Modern developments are stressed.

426. POLITICS OF PUBLIC ADMINISTRATION
Political aspects of public administration including the interaction of bureaucracies and administrators in a political environment and the policy-making functions of administrators.

428. FORMULATION OF PUBLIC POLICY
Basic approaches to public policy analysis, emphasizing interaction between substance and process in policy development.

430. THE MODERN POLITICAL EXECUTIVE
The office and institution of the modern political executive in the United States and/or other countries.

440. VOTING BEHAVIOR
Factors related to voting behavior and other forms of political involvement, including analysis and interpretation of electoral decisions.

446. POLITICAL BEHAVIOR
Research methods and approaches to research problems used in the analysis of political behavior. Includes: logic of inquiry, collection of data, analysis of data, and the interaction between theory and method.

450. POLITICAL ATTITUDES AND ORIENTATIONS OF CHILDREN
Application of political theory and research to the political education and socialization of children. Major attention devoted to the problems of children’s political orientations, their sources and formation.
500. INTERNATIONAL LAW
Historical basis and present trends in the development of international law.

510. INTERNATIONAL ORGANIZATION
History, structure, and dynamics of the United Nations and other multi-national organizations.

540. POLITICAL COMMUNICATION
Channels of influence and political opinion formation within contemporary political systems.

550. COMMUNITY POLITICS
Comparative analysis of local politics with emphasis on community structures, processes, and policies.

560. INTERGOVERNMENTAL RELATIONS
Administrative and political dynamics of relationships among national, state and local units of government. Prerequisite: senior standing.

570. THE NATIONAL GOVERNMENT AND THE NATIONAL ECONOMY
Interaction of political and economic power illustrated through a review of major contemporary issues and activities in national affairs.

575. INTERNSHIP IN POLITICAL SCIENCE
Supervised work and study in public and private organizations. May be repeated once for credit. Prerequisites: consent of instructor and department.

580. SEMINAR IN PUBLIC POLICY
Political aspects of administrative systems with emphasis on public policy process in advanced and less developed countries.

590. SEMINAR IN INTERNATIONAL RELATIONS
Intensive study of some phase of foreign policy-making or international relations to be developed by the instructor with his class. May be repeated for credit, with the consent of the instructor.

592. SEMINAR IN GOVERNMENT
An intensive study of some phase of government to be developed by the instructor with his class. May be repeated for credit, with the consent of the instructor.

595. INDEPENDENT STUDY
Special topics involving library and/or field research. Prerequisites: departmental approval of written proposal of project and consent of instructor. (Credit to be arranged: 2 to 5 units)
The general objectives of the psychology program are to present the scientific and professional aspects of psychology to the undergraduate majoring in this field and to provide service courses as electives to the entire student population. The department also offers course work leading to the Master of Arts in Psychology. Students intending to enroll in this program or another graduate school will find that the undergraduate program provides an excellent base for entry into graduate training. Other majors may plan a paraprofessional career in counseling or related fields where graduate training may not be necessary.

Courses offered by the department range from the basic scientific courses such as experimental psychology, learning, perception and motivation to such applied courses as counseling, industrial and behavioral technology. Laboratory and training facilities complement a wide variety of courses.

Requirements for the major: Psychology 100, 200; a minimum of eight upper-division courses in psychology, including 300, 311, 498; and one of the following: Psychology 451, 460, 465, 475, 485. Also required is either Mathematics 150 or Social Sciences 210. The department offers alternatives for fulfilling some requirements with non-classroom study; see the departmental secretary for details.

Requirements for a minor in psychology: Psychology 100, 200, and at least four electives in psychology, three of which must be upper-division courses.

Departmental Honors. Departmental honors will be awarded upon graduation to students majoring in psychology who have earned a 3.8 or higher grade-point average in all psychology course work. Psychology majors who earn at least a 3.5 grade-point average in upper-division psychology course work may earn consideration for departmental graduation honors by fulfilling one of the following requirements: (1) author, or contribute significantly to the authorship of, an article accepted for publication in a major psychological journal, (2) score at or above the 90th percentile on the advanced psychology area test of the Graduate Record Examination, or (3) complete an acceptable undergraduate thesis. Satisfactory completion of requirements for departmental honors must be certified by the department chairman. Students must initiate the application for honors.

Master of Arts Degree: Applicants interested in the M.A. program in psychology should write to the department for the most current program description.
100. INTRODUCTION TO PSYCHOLOGY
A survey of the field of modern psychology.

200. ADVANCED GENERAL PSYCHOLOGY
Scientific study of behavior emphasizing the systematic development of principles. Prerequisite: Psychology 100.

300. METHODS OF PSYCHOLOGICAL INQUIRY
Introduction to those aspects of philosophy of science and methods of inquiry (introspection, naturalistic observation, case studies, laboratory experiments) as applied to procedures for obtaining and evaluating data in psychology. Prerequisite: Psychology 200.

311. INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY
Design and execution of psychological research. Lecture and six hours laboratory. Prerequisites: Psychology 300 and Mathematics 150 or Social Science 210. (6 units)

313. FRONTIERS OF PSYCHOLOGICAL RESEARCH
Problems and trends in frontier areas of psychological research: cognitive and unconscious determinants, extrasensory perception, clinical and experimental hypnosis, intrinsic motivation. Prerequisite: Psychology 200 or consent of instructor.

325. PSYCHOLOGY OF INFANCY
Development of perception, learning, motivation and personality in the first four years of human development. Psychophysiological, affective and cognitive processes in early childhood. Prerequisite: Psychology 100 or equivalent.

326. PSYCHOLOGY OF CHILDHOOD
Development of perception, learning, motivation and personality in the child from approximately four to twelve years of age. Contributions of heredity, maturation and environment on the learning of simple and complex behavior. Prerequisite: Psychology 100 or equivalent.

327. PSYCHOLOGY OF ADOLESCENCE AND AGING
Development of perception, learning, motivation and personality from puberty through old age. Adjustments to puberty, crisis periods in middle life, senescence and dying. Prerequisite: Psychology 100 or equivalent.

331. THE PSYCHOLOGY OF WOMEN
A critical study of theory and data on the psychological development of females; their attitudes, behaviors, psychopathologies, abilities and self-images. Prerequisite: Psychology 100.

336. BLACK RAGE
Psychological make-up of the Black man in America. Special attention is given psychological effect of repressing anger.

337. PSYCHOLOGICAL DEVELOPMENT OF THE BLACK AMERICAN
Cognitive and affective development of the individual Black American. Includes survey of research which relates the total psychological functioning of the Black person to culturally distinct developmental patterns.

347. PSYCHOLOGICAL DEVELOPMENT OF THE CHICANO
Diverse psychological forces that affect the development of the individual Chicano. Includes survey of research which identifies specific aspects of psychological functioning, especially as psychological development relates to cultural differences.
349. HOMOSEXUALITY
Psychological factors that influence development and consequences of a homosexual orientation in both men and women. Prerequisite: Psychology 100 or equivalent.

350. BEHAVIORAL TECHNOLOGY
Application of principles and techniques derived from experimental analysis of behavior to problems of behavior management in education, industry and the clinic. Prerequisite: Psychology 100 or consent of instructor.

355. INDUSTRIAL PSYCHOLOGY
Practices of modern industrial and personnel psychology. Includes selection, placement, training, motivation, job analysis, evaluation and human factors. Prerequisite: Psychology 100 or consent of instructor.

360. COGNITIVE PSYCHOLOGY
Empirical study of complex human and animal behavior such as memory, problem solving and decision making. Prerequisite: Psychology 200.

365. COMPARATIVE PSYCHOBIOLOGY
An introduction to the study of animal behavior from a biological-psychological viewpoint. Particular emphasis will be placed on differentiating physiological, environmental and evolutionary determinants of behavior. Prerequisite: Psychology 200 or consent of instructor.

377. TESTS AND MEASUREMENTS
Administration of psychological tests and scales; interpretation and use of the data which they yield. Prerequisites: Psychology 200, and Mathematics 150 or Social Sciences 210.

385. PERSONALITY
Survey of the major theories of personality. Prerequisite: Psychology 100 or consent of instructor.

387. COMMUNITY PSYCHOLOGY
Comprehensive study of the discipline of community psychology which emphasizes the relationship of community resources to individual mental health needs. Prerequisite: Psychology 100 or equivalent.

388. SPECIAL COMPREHENSIVE EXAMINATION IN PSYCHOLOGY
CORE CURRICULUM
Independent study, without required classroom meetings, of the subject matter appropriate to three courses required for the major. Psychology 100, 200 and 300. Prerequisite: consent of instructor. (15 units)

390. ABNORMAL PSYCHOLOGY
An introduction to psychopathology, emphasizing the major interpretations and treatments of emotional and behavioral disorders. Prerequisite: Psychology 385 or equivalent.

426. EXPERIMENTAL PSYCHOLOGY: DEVELOPMENTAL
Selected research areas in the field of developmental psychology. Includes review of current literature and experimental techniques in developmental research. Lecture and laboratory. Prerequisite: Psychology 311 or consent of instructor.

451. EXPERIMENTAL PSYCHOLOGY: LEARNING AND MOTIVATION
Selected theories and research in areas of learning and motivation. Includes literature review and experimental analysis. Lecture and laboratory. Prerequisite: Psychology 311.
456. PSYCHOLOGY OF HUMAN RESOURCES
Review of research in application of psychology to selection, evaluation and training of human resources. Topics include fair employment legislation, job analysis methodologies, merit evaluation, interviewing techniques and psychometric methods. Prerequisites: Social Sciences 210 or Mathematics 150 and Psychology 355. (Also offered as Administration 456)

460. EXPERIMENTAL PSYCHOLOGY: PERCEPTION
Selected research areas in the fields of sensory and perceptual processes. Includes literature review and experimental analysis. Lecture and laboratory. Prerequisite: Psychology 311.

465. EXPERIMENTAL PSYCHOLOGY: PHYSIOLOGICAL
An introduction to the neural and endocrine processes underlying brain function and behavior. Lecture and laboratory. Prerequisite: Psychology 311 or consent of instructor.

475. EXPERIMENTAL PSYCHOLOGY: SOCIAL
Methods, theories and empirical results of experimental social psychology in selected areas such as group dynamics, social perception, communication and attitudes. Lecture and laboratory. Prerequisite: Psychology 311 or Sociology 305.

485. EXPERIMENTAL PSYCHOLOGY: PERSONALITY
Empirical study of personality theories and the relationship of personality to behavior. Lecture and laboratory. Prerequisites: Psychology 311, 377 and 385.

490. COUNSELING PSYCHOLOGY
Presentation of basic concepts, methods, and procedures pertaining to diagnostic and therapeutic activities of the counselor. Prerequisites: Psychology 377, 390 and senior standing.

498. HISTORY AND SYSTEMS OF PSYCHOLOGY
A senior-level course intended to provide students with a historical framework for integrating basic orientations in contemporary psychology. Prerequisites: Psychology 311 and senior standing.

519. SEMINAR IN APPLIED PSYCHOLOGY
Student-faculty participation in review and presentation of current areas in applied psychology. May be repeated for credit with consent of instructor. Prerequisites: senior or graduate standing and consent of instructor.

520. SEMINAR IN EXPERIMENTAL PSYCHOLOGY
Student-faculty participation in review and presentation of advanced research areas. May be repeated for credit with consent of instructor. Prerequisites: senior or graduate standing and consent of instructor.

526. MENTAL RETARDATION
Mental retardation with emphasis on underlying problems in diagnosis, parental counseling and educational programming. Prerequisites: Psychology 325, 326 and senior or graduate standing.

570. STATISTICAL ANALYSIS IN PSYCHOLOGICAL RESEARCH
Applications of statistical theory including regression analysis and nonparametric techniques to hypothesis testing in psychological research. Prerequisite: Social Sciences 210 or Mathematics 150, or consent of instructor.

577. PRACTICUM IN INDIVIDUAL INTELLIGENCE TESTING
Administration and interpretation of individually administered intelligence tests. Lectures and supervised field training. Prerequisite: Psychology 377.
585. GROUP COUNSELING
Introduction to group counseling based on theories and methods derived from personality theory and social psychology. Includes study of theory and application of methods for facilitating group counseling. Prerequisites: Psychology 490, senior standing and advanced written consent of instructor.

590. PRACTICUM IN COUNSELING PSYCHOLOGY
Advanced study in counseling and personality evaluation based upon supervised work experience. Prerequisites: Psychology 490, senior or graduate standing and consent of instructor.

595. INDEPENDENT STUDY
Special topics involving literature and/or experimental effort. Prerequisites: departmental approval of written proposal of project and consent of instructor. (Credit to be arranged: 2 to 5 units)

610. ADVANCED METHODS IN PSYCHOLOGICAL RESEARCH
Various experimental designs used in psychological research and their relation to selected statistical procedures such as analysis of variance. Prerequisites: graduate standing, Psychology 570 or equivalent or consent of instructor.

611. ADVANCED INDEPENDENT STUDY
Advanced research on a specific topic selected by the student with the approval of the student's committee. May be repeated up to two times for credit with approval of the student's committee and the department chairman. Prerequisites: Psychology 570 or Psychology 610 and classified status. (Credit to be arranged: 2 to 5 units)

Each of the following courses (Psychology 625 through 690) deals with current theories and empirical research in the area specified. Students will be expected to read the technical literature in the area as found in scholarly journals, textbooks, handbooks and papers presented at scientific meetings. The course will normally follow a seminar format with students and professor making presentations to the group for critical discussion. Each is a 5-unit course and requires at least unclassified graduate standing as a prerequisite.

625. ADVANCED STUDIES IN DEVELOPMENTAL PSYCHOLOGY

650. ADVANCED STUDIES IN LEARNING

655. ADVANCED STUDIES IN INDUSTRIAL PSYCHOLOGY

660. ADVANCED STUDIES IN PERCEPTION

665. ADVANCED STUDIES IN PHYSIOLOGICAL PSYCHOLOGY

675. ADVANCED STUDIES IN SOCIAL PSYCHOLOGY

685. ADVANCED STUDIES IN PERSONALITY

690. ADVANCED STUDIES IN COUNSELING AND PSYCHOTHERAPY

691. COUNSELING PRACTICUM I
Supervised training in psychological assessment, emphasizing the methods of interviewing and vocational personality testing. Theory and research underlying these methods and practical, supervised experiences employing them. Prerequisites: classified status and consent of instructor. Corequisite: concurrent enrollment in Psychology 692.
692. GROUP PSYCHOTHERAPY I
The beginning counselor is provided with an opportunity for enhanced self-awareness and for personal growth, experiences which have proved to be invaluable for training in counseling. Must be taken concurrently with Psychology 691. (2 units)

693. COUNSELING PRACTICUM II
Supervised training in individual counseling, emphasizing the development of a variety of therapeutic techniques. Theory and research background of counseling and practical, supervised experience in developing these skills. Prerequisites: advancement to candidacy, Psychology 691 and consent of instructor. Corequisite: concurrent enrollment in Psychology 694.

694. GROUP PSYCHOTHERAPY II
Continuation of Psychology 692. Must be taken concurrently with Psychology 693. (2 units)

695. COUNSELING PRACTICUM III
Continuation of Psychology 693. Advanced supervised training in individual counseling in a clinical setting. Supervised training in group counseling is also provided. Prerequisites: Psychology 693 and consent of instructor. Corequisite: concurrent enrollment in Psychology 696.

696. GROUP PSYCHOTHERAPY III
Continuation of Psychology 694. Must be taken concurrently with Psychology 695. (2 units)

698. EXTENDED ENROLLMENT
Independent study leading to completion of requirements (other than course work) for the master's degree. Students enrolled in this course have full use of College facilities. Prerequisites: advancement to candidacy and consent of department. (0 units)

699. THESIS
Prerequisites: Psychology 570 and/or 610; Psychology 611; advancement to candidacy.
SOCIAL SCIENCES

Requirements for the major: a minimum of seven courses in one of the following fields, plus three courses each in two others: administration, anthropology, economics, geography, history, political science, psychology and sociology. Social Sciences 210 and/or 340 may be chosen as part of the requirements for the principal field of concentration. A minimum of seven courses must be taken at the upper-division level.

In addition to the above listed fields, a student may choose an ethnic studies group of three courses as a supporting field. The courses must be selected from those listed as ethnic studies courses and which have a social sciences number or a number from a department within the School of Social Sciences. No course may be used in a supporting field which has been used in any other part of the social sciences major.

Upon enrolling as a social sciences major, the student will be assigned an advisor from the department of his concentration, at which time a program of study will be agreed upon by the student and his advisor. No more than seven courses may be selected from any one department. The program is filed in the student’s permanent folder in the Admissions Office but is subject to revision by mutual consent. Each department participating in this program has a list of its courses suitable for students choosing this curriculum.

No more than one 15-unit special comprehensive examination may be applied to any field, either core or support field, and not more than two of these examinations may be used to meet the requirements of this major.

140. WORLD CIVILIZATIONS I, THE RISE OF CIVILIZATION
Activities of man from the beginning through the rise and diffusion of civilization in the era of Middle Eastern dominance to about 500 B.C.

142. WORLD CIVILIZATIONS II, THE CIVILIZATIONS OF THE EAST AND WEST
Major achievements of the great civilizations from the flowering of Greek culture to the close of the Middle Ages in Europe.

144. WORLD CIVILIZATIONS III, THE EXPANSION OF EUROPE
Rise to dominance of the European states and their impact throughout the world, 1500 A.D. to the present.

146. AMERICAN CIVILIZATION
History of the United States as it emerged from colonial status to the present time. This course meets the State Code requirement in United States History, Constitution, and American ideals.
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150. CONTEMPORARY CIVILIZATION I
Political and economic systems and institutions of modern society and the issues confronting them. This course meets the State Code requirement in California state and local government.

155. MINORITY GROUPS IN AMERICA
Black, Mexican-American and other minority groups as approached from the perspectives of history and the social sciences.

160. CONTEMPORARY CIVILIZATION II
Interpretation of contemporary society in the light of the knowledge and theories of sociology, anthropology and psychology.

210. STATISTICS FOR THE SOCIAL SCIENCES
An introduction to statistical methods as applied to the social and behavioral sciences. Includes both descriptive and inferential statistics.

220. INTRODUCTION TO CHICANO STUDIES
Life of the Mexican-American: his culture, history, socio-economics, politics, education, social stratification and family life.

250. INTRODUCTION TO BLACK STUDIES
Black studies in a variety of contexts: the historic pilgrimage of the Black man from Africa to America, the contemporary struggle of the Black man in America, the future of the Black man in America.

300. NONWESTERN WORLD
Historical, political, social, geographic and economic aspects of nonwestern societies.

304. CONTEMPORARY LATIN AMERICA
Social, economic and political conditions and institutions in contemporary Latin America.

312. CHRISTIANITY IN HISTORY AND SOCIETY
Origins of Christianity, the development of its doctrine and its impact on culture and society.

315. CULTURAL ADAPTATION: THE QUEST FOR SURVIVAL
An interdisciplinary inquiry into diverse cultural solutions to universal human problems. Topics include alternative cultural provisions for satisfying economic, social, political and religious needs.

321. URBANIZATION AND THE URBAN ENVIRONMENT
Patterns and processes of urban growth. Major emphasis on reasons for growth of cities; economic, social, political and structural changes in urban areas which accompany urbanization; and a cross-cultural analysis of urban problems.

412. PEASANT CULTURES IN THE MODERN WORLD
Village life in the developing countries, with special reference to their increasing involvement in the “revolution of rising expectations” and the new national, social, political and economic movements. A seminar course open to students in all majors.

415. RESEARCH METHODS IN BLACK STUDIES
Philosophy, methods and materials necessary for producing a scholarly paper in Black studies. Presentation of a research paper in the student's major field.
434.  MASS COMMUNICATION AND THE AMERICAN MIND
A critical appraisal of the impact of mass communications on the character of American life from an interdisciplinary approach. The historical roots of popular culture, which is now transmitted by mass media, will be explored, along with the technical, legal and economic constraints governing current media use. Emphasis will also be placed on the controversy over the social, psychological and political effects of mass communication. A seminar course open to students in all majors.

498.  STUDIES IN SOCIAL SCIENCES
Application of social science methods to crucial issues in society.

499.  METHODS AND MATERIALS IN THE TEACHING OF THE SOCIAL SCIENCES
May not be counted toward fulfilling requirements of courses in the major. Prerequisites: Education 330, senior or graduate standing and admission to the teacher credential program.
SOCIOMETRY

The courses of the major are designed for those who wish to study the scope and methods of sociology. The major presents a balanced program for students who are interested either in graduate work or in the practical application of sociology. It also provides a broad educational background for understanding the structure and functioning of modern society.

As important adjuncts to the curriculum, there are two student organizations for sociology majors, each represented at department faculty meetings. The Sociology Club has a varied program of social, community service and academically oriented activities. In addition to general sociology majors, students in criminal justice and social work actively participate in the club. A chapter of Alpha Kappa Delta, the sociology honor society, is open to junior sociology majors with a 3.5 GPA and to seniors and graduate students with a 3.0 GPA.

Requirements for the major: Social Sciences 210 or equivalent; Sociology 100, 305, 310, 312, and six additional sociology courses, five of which must be upper-division. With the consent of the departmental advisor, two upper-division courses in related fields may be applied to course requirements for the major.

For those students interested in pursuing a career in social work, the department advises a second track in the sociology major incorporating the following courses: Social Sciences 210 or equivalent; Sociology 100, 305, 310, 312, 434, 436, 484 and three additional sociology courses. It is recommended that one of the three additional courses be Sociology 318.

Offered within the sociology major is an optional program in ethnic studies, with emphasis in Black studies or Mexican-American studies. The ethnic studies option requires Social Sciences 210 or equivalent; Sociology 100, 305, 310, 312; four courses in either Mexican-American studies or Black studies, at least two of which must be in sociology; and two additional sociology courses which fulfill requirements for the major as listed above.

Requirements for the minor: six courses in sociology selected with the consent of a departmental advisor. Two of these may be at the lower-division level.

Departmental Honors: Students majoring in sociology are eligible to receive honors in sociology at graduation if they have met the following: 3.5 grade-point average in all sociology courses attempted, at least half of all work attempted in sociology completed at this College, and recommendation for departmental honors by the sociology faculty.
100. THE STUDY OF SOCIETY
Survey of the basic characteristics and dynamics of society and culture from the sociological perspective.

200. SOCIAL PROBLEMS
Social problems in modern industrial societies. Discussion of sociological research and theoretical propositions dealing with such problems as drug addiction, mental illness, war, abortion and sexual perversions.

Prerequisite for upper-division courses is Sociology 100, or equivalent, or consent of instructor.

305. SOCIOLOGICAL RESEARCH AND ANALYSIS
Principles of research design, methods of data collection and analysis. Prerequisite: Mathematics 150 or Social Sciences 210.

306. SOCIOLOGICAL RESEARCH: SELECTED TOPICS
Supervised observation and study of selected populations, institutions and agencies as on-going social processes. May be repeated once for credit. Prerequisite: consent of instructor. Recommended: prior completion of Sociology 305.

310. HISTORY OF SOCIOLOGICAL THEORY

312. CONTEMPORARY SOCIOLOGICAL THEORY
Contemporary sociological theory, including an examination of origins, trends, schools and areas of controversy. Prerequisite: Sociology 310.

318. SOCIAL WELFARE POLICIES AND SERVICES
Historic and current social welfare policies and services. A comparative evaluation of the United States and other world programs, policy and expectations with emphasis on philosophy, values and ethics.

322. SOCIOLOGY OF THE GHETTO
Existing theories relating to ghetto life styles; the relationship of these to American society as a whole.

330. SOCIAL GERONTOLOGY
Age-status and age-roles in American society, with cross-cultural comparisons including intergenerational conflict and other age-related behaviors.

339. SOCIALIZATION
Theories, goals and processes of childhood socialization and, to a lesser extent, adult socialization. Emphasis on organized social roles as they are mediated through the norms and patterned interactions of institutions; that is, the family, peer groups and the schools.

340. SOCIOLOGY OF THE FAMILY
A systematic and comparative analysis of family structure and change: marriage, reproduction, child-rearing, marital problems.

341. MARRIAGE AND FAMILY AMONG BLACKS
Forces affecting the Black family, with emphasis on the roles assigned to individual members.

342. THE CHICANO FAMILY
Consideration of the traditional and changing Mexican-American family patterns. Regional and social class variations. Influence of the family on Mexican-American personality development from a social-psychological perspective.
350. CRIMINOLOGY
Causes of crime with emphasis on sociological factors.

352. JUVENILE OFFENDER
Causes of juvenile delinquency, types of juvenile offenders, the juvenile court, legal aspects of delinquency and methods of rehabilitation.

354. DEVIANT BEHAVIOR
Deviant modes of human adjustment to modern society; processes of personal-social interaction in development of individual and group deviation.

355. MEDICAL SOCIOLOGY
Patient’s self concept from the pre-patient stage to the post-patient state and the relationship to the social system. Developmental stages of the “sick role” in contemporary society are emphasized.

356. SOCIOLOGY OF MENTAL ILLNESS
Cultural variations in definitions of mental health and illness; social processes involved in defining, labeling and treating mental illness; stigmatizing effects of being labeled mentally ill; relationship of the incidence and treatment of mental illness to class, ethnicity and other sociological categories.

357. SOCIOLOGY OF LAW ENFORCEMENT AND JUDICIAL DECISION MAKING
Sociological analysis of law enforcement systems and court systems, consideration of police discretion, differential implementation of the criminal law, negotiation in criminal justice decisions, the interrelationships and interdependence of law enforcement and the courts.

358. SOCIOLOGY OF PUNISHMENT AND CORRECTIONS
History and theories of punishment and treatment in dealing with criminals, sociological analysis of institutional systems and community based systems, work release programs and pre-release guidance centers.

359. SOCIOLOGY OF LAW
Social and cultural factors underlying the development, maintenance and change of law, legal structures and legal processes; comparative analysis of legal systems; and sociological consideration of the nature of justice.

360. SOCIAL PSYCHOLOGY
Interpersonal relations and communication with special reference to development of self, role behavior, attitudes, values and social norms.

363. SOCIOLOGY OF COMMUNICATION
Symbolic and organizational aspects of human communication systems including linguistic and non-linguistic means of communicating. Special attention will be devoted to attitudes and beliefs as influenced by interpersonal interaction and the mass media.

364. PUBLIC OPINION AND PROPAGANDA
Nature and bases of public opinion; the social context of propaganda, its bases, its social psychological functions and the techniques of propagandists.

366. COLLECTIVE BEHAVIOR AND SOCIAL MOVEMENTS
Social psychological bases of crowd behavior, rumor, panic, riots, disasters and social movements; with a special emphasis on social movements.
368. SOCIOLOGY OF WORK AND THE PROFESSIONS
Development of occupational roles, with emphasis on specialization and mobility; impact of occupations on social institutions; special focus on the development of the professions.

380. SOCIOLOGY OF RELIGION
Theoretical analysis of religion as a social institution in complex societies. Structure and functioning of religious organizations, roles and role relationships; types of religious organizations and leadership; relationships of religion to other social institutions; religion and social change.

388. SPECIAL COMPREHENSIVE EXAMINATION IN SOCIOLOGY CORE CURRICULUM
Independent study, without required classroom meetings, of the subject matter appropriate to three courses required for the major: Sociology 310, 312 and 400. Prerequisite: consent of instructor. (15 units)

400. SOCIAL CHANGE
Sources of change in societies; theories of social change, social conflict and the interpretation of social trends; social change and related problems in less-developed countries; processes and problems of planned change.

401. SOCIAL ORGANIZATION
Concepts and theories for analysis of social systems, for example, family, work group, community and bureaucracy; structural features of social systems, their interdependence and the relationship of the individual to social systems.

410. RACIAL AND CULTURAL MINORITIES
Minority group status in contemporary American society.

420. POPULATION PROBLEMS
Social causes and consequences of population trends.

430. URBAN SOCIOLOGY
Nature, causes and consequences of urbanization; metropolitan areas; location and types of cities; social and demographic characteristics of urban populations.

432. POLITICAL SOCIOLOGY
Examination of political process from the perspective of sociology, exploring in depth the nature, distribution and exercise of power, and related areas of interest.

434. COMMUNITY ORGANIZATION
Programs of action, operative and proposed, for the organization of the community and the solution of its problems.

435. THE SOCIOLOGY OF SMALL GROUPS
Sociological analysis of the structure and processes of small groups, including the analysis of roles, interpersonal relations, group characteristics, and intergroup relations; examination of field and laboratory research on small groups.

436. GROUP DYNAMICS
Dynamics and principles involved in social group work, including psychotherapy groups.

437. COMPLEX ORGANIZATIONS
Sociological analysis of formal organizations (industrial, governmental, welfare, military, medical, educational, correctional) as systems of social interaction. Includes such topics as formal vs. informal structures, authority, decision-making, organizational innovation and development, role conflicts, communications and morale.
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438. INDUSTRIAL SOCIOLOGY
Human relations in industry, both formal and informal, with special attention to problems of morale, productivity, decision-making and bureaucratic structure.

439. MILITARY SOCIOLOGY
The military institution—it's functions and role in the modern state; socialization of its officers and men.

440. SOCIAL STRATIFICATION
Class, caste and other systems of social stratification with particular reference to the United States.

441. BLACK SOCIAL STRATIFICATION
Caste in America, comparison of Black and white stratification, Black social mobility.

442. CHICANO SOCIAL STRATIFICATION
Variables affecting the social status of the Mexican-American in society, Mexican-American social mobility, social class differences in Mexican-American communities.

472. SOCIAL ROLES AND SOCIAL INTERACTION
The nature of face-to-face contact and role behavior among persons in social interaction in everyday life. The relations between the social self, social roles and communication in the day-to-day activities of persons in informal groups, closed establishments and in public places.

473. INTERVIEWING IN SOCIAL WORK
Basic interviewing methodology and techniques utilized by social workers in communicating with people who are experiencing adjustment problems.

480. HUMAN GROWTH AND SOCIAL ENVIRONMENT
Ways in which societies lighten the conflicts of childhood with a promise of some security, identity and integrity.

482. FIELDS OF SOCIAL WORK
Components of the broad field of social work. Includes social work practice with all its specializations.

484. SOCIAL CASEWORK
Process of problem solving used by social work agencies to help individuals to cope more effectively with their problems in social functioning.

488. SPECIAL COMPREHENSIVE EXAMINATION IN SOCIOLOGY ELECTIVES
Independent study, without required classroom meetings, of the subject matter appropriate to these three elective courses: Sociology 363, 364 and 366. Prerequisite: consent of instructor. (15 units)

555. INDEPENDENT STUDY
Special topics involving library and/or field research. Prerequisites: senior or graduate standing and consent of instructor.

575. INTERNSHIP IN SOCIOLOGY AND SOCIAL WORK
Supervised work and study in private or public organizations. May be repeated once for credit. Prerequisites: consent of instructor and department.

590. SEMINAR IN SOCIOLOGY
An intensive study of some phase of sociology to be developed by the instructor with his class. May be repeated for credit with consent of instructor.
Occasionally, a student with special educational or vocational objectives may find that the existing degree programs of the College are inadequate and that a carefully structured, multidisciplinary program of study, drawn from the regular offerings of two or more departments, is more appropriate to his needs. The special major is designed to meet these needs.

The special major cannot be used simply to achieve breadth in an educational program, to substitute for a recognized degree program which the College is not authorized to offer, to bypass normal graduation requirements, nor as an alternative to completion of the degree requirements for a program in which the student is in academic difficulty.

In order to be admitted to the special major program, a student must submit a written request for approval to the Coordinator of Interdisciplinary Studies, stating his academic and professional reasons and outlining his proposed plan of study. In addition, the following regulations apply:

1. To be admitted to the special major program, the student must have more than one full year of academic work (45 quarter units) to complete to meet the minimum degree requirements for a bachelor's degree.

2. The plan of study must include at least 36 quarter units of upper-division course work.

3. No courses that are applied to the general education requirement of the College are applicable toward minimum requirements of the special major.

For information concerning the Master of Arts degree with a special major, contact the Associate Dean of Graduate Studies.
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5565 Tesla Road, Livermore 94550

W. O. Weissich, 1977
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Gene M. Benedetti, 1978
8990 Poplar Avenue, Cotati 94952

Robert F. Beaver, 1976
254 East 27th St., Los Angeles 90011

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

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

Frank P. Adams, 1981
235 Montgomery Street
San Francisco 94104

Richard A. Garcia, 1979
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Dean S. Lesher, 1981
P.O. Box 5166, Walnut Creek 94596

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Dean of Academic Planning: Ralph H. Petrucci, Ph.D.
   Associate Dean of Academic Planning: Kent M. Schofield, Ph.D.
   Associate Dean of Academic Planning for Graduate Studies: Lee H. Kalbus, Ph.D.
Dean of Continuing Education: Stephen A. Bowles, Ph.D.
   Extension Program Coordinator: C. Ronald Jones, Ph.D.
Dean, School of Administration: H. Arthur Hoverland, Ph.D.
Dean, School of Education: Ronald G. Petrie, Ed.D.
Dean, School of Humanities: P. Richard Switzer, Ph.D.
Dean, School of Natural Sciences: James D. Crum, Ph.D.
Dean, School of Social Sciences: Freeman J. Wright, Ph.D.
Chairman, Department of Physical Education and Recreation: C. Michael O'Gara, M.S.
Director of Library: Arthur Nelson, M.A.L.S.
   Head, Library Operations: Marty Bloomberg, M.A.
   Head, External Operations: John Tibbals, M.S.L.S.
Director of Audiovisual Services: Robert A. Senour, Ph.D.
Director of Institutional Research: Robert A. Schwabe, Ph.D.

Vice President for Administration: Joseph K. Thomas, Ed.D.
Building Coordinator: James H. Urata, M.A.
Director of Public Affairs: Edna Steinman, B.J.
Chief, Plant Operations: Andre Maurel
Editorial Aide, College Relations: Barbara Nolte, A.A.

Dean of Students: Kenton L. Monroe, Ph.D.
   Assistant Dean of Students: D. Gaye Perry, M.Ed.
Associate Dean, Activities and Housing: Russell J. DeRemer, Ph.D.
   Activities Advisor: Richard J. Bennecke, M.A.
Activities Advisor: Lorraine A. Smith, M.A.
Housing Coordinator: L. Theron Pace, Ph.D.
Head Resident: Laraine Turk, M.Ed.
Associate Dean of Admissions and Records: H. Stephen Prouty, M.S.
Admissions Officer: Jack E. Acker, M.B.A.
Registrar: Jo Ann Von Wald, B.A.
Relations with Schools Officer: Michael M. Rose, M.A.
Assistant Relations with Schools Officer: Jody Royal, B.A.
Associate Dean, Counseling and Testing: John M. Hatton, Ph.D.
Counselor and Test Officer: Donald C. Woods, Ph.D.
Psychometrist: Dianne Irwin, M.A.
Associate Dean, Educational Opportunity Program: Tom M. Rivera, Ed.D.
   Director, Educational Opportunity Program Supportive Services: Rudolph A. Johnson, Jr., M.S.W.
Director of Upward Bound: Walter Hawkins, M.S.W.
Associate Dean, Placement and Financial Aid: Doyle J. Stansel, M.A.
Financial Aid Advisor: Theodore Krug, M.A.
Financial Aid Advisor: Nicholas Pencoff, Jr., B.A.
Placement Officer: Jesse D. Moses, Th.D.
Placement Advisor: Jan Hinkley, B.A.
Director, Student Health Service: Samuel M. Plaut, M.D.
   Nurse: N. Vivian McEachern, R.N.
Director, College Police: Walter S. Kadyk, B.A.
   Sergeant: Michael A. Gomez, A.A.

Business Manager: Leonard B. Farwell, M.B.A.
Accounting Officer: Donald E. Sapronetti, B.A.
Budget Officer: Jim G. Martinez, B.A.
Business Services Officer: R. Joy Robertson, A.A.
Personnel Officer: Oscar Jackson, B.A.
William V. Ackerman, 1972
Assistant Professor of Geography

Richard T. Ackley, 1974
Assistant Professor of Political Science; Associate Dean of Academic Administration
B.A. 1950, University of Southern California; M.A. 1969, University of Hawaii; Ph.D. 1973, University of Southern California.

Melvin William Aussieker, 1974
Assistant Professor of Administration

Elliott R. Barkan, 1968
Associate Professor of History

Ronald E. Barnes, Jr., 1965
Professor of Drama; Chairman, Department of Drama
B.S.Ed. 1951, University of Minnesota; Ph.D. 1963, Stanford University.

Joe Bas, 1968
Professor of Spanish

Frances F. Berdan, 1973
Assistant Professor of Anthropology

Anand R. Bhatia, 1972
Assistant Professor of Administration

Robert A. Blackey, 1968
Associate Professor of History

Marty Bloomberg, 1966
Librarian

Sheldon E. Bockman, 1973
Assistant Professor of Administration
Joel Ruth Bollinger, 1974
Lecturer in Spanish

Stephen A. Bowles, 1974
Associate Professor of Education: Dean of Continuing Education
B.A. 1960, University of Denver; M.A. 1964, University of Connecticut; Ph.D. 1972, University of California, Santa Barbara.

Peter M. Briscoe, 1973
Librarian III

Dominic M. Bulgarella, 1969
Associate Professor of Sociology

Michael R. Burgess, 1970
Librarian II
A.B. 1969, Gonzaga University; M.S. in L.S. 1970, University of Southern California.

Donald F. Caetano, 1973
Assistant Professor of Sociology

Frederick F. Campbell, 1970
Assistant Professor of History
B.A. 1965, St. Lawrence University; M.A. 1967, Ph.D. 1972, Ohio State University.

Lawrence W. Cappel, 1974
Assistant Professor of Health Science
A.B. 1970, M.A. 1971, California State University, Humboldt; Ph.D. 1974, University of Utah.

John S. Chaney, 1972
Assistant Professor of Administration
B.S. 1966, University of Southwestern Louisiana; M.B.A. 1968, Ph.D. 1971, University of Texas.

C. Charles Christie, Jr., 1972
Assistant Professor of Administration

Stella Clark, 1971
Assistant Professor of Spanish
B.A. 1964, University of Mississippi; M.A. 1966, Ph.D. 1971, University of Kansas.

Wallace T. Cleaves, 1971
Associate Professor of Psychology
B.A. 1963, California State College, Hayward; M.A. 1966, California State College, Los Angeles; Ph.D. 1971, University of California, Riverside.
Gloria A. Cowan, 1973
Associate Professor of Psychology
B.A. 1959, University of Pennsylvania; M.S. 1961, Ph.D. 1964, Rutgers University.

John H. Craig, 1971
Assistant Professor of Chemistry
B.S. 1964, George Washington University; Ph.D. 1969, Georgetown University.

James D. Crum, 1966
Professor of Chemistry; Dean, School of Natural Sciences
B.Sc. 1952, Ohio State University; M.Sc. 1953, Marshall University; Ph.D. 1958, Ohio State University.

Henry L. Custer, 1974
Associate Professor of Administration

David L. Decker, 1971
Assistant Professor of Sociology

Rene F. Dennemeyer, 1966
Professor of Mathematics
A.B. 1948, M.A. 1949, Ph.D. 1956, University of California, Los Angeles.

Russell J. DeRemer, 1965
Associate Professor of Physics; Associate Dean, Activities and Housing

G. Keith Dolan, 1967
Professor of Education

Leo G. Doyle, 1971
Assistant Professor of Art

A. Mac Eaton, 1969
Associate Professor of Psychology

Alfred S. Egge, 1966
Professor of Biology
B.A. 1957, California State College, Long Beach; M.S. 1959, Ph.D. 1962, University of Arizona.

Amer El-Ahraf, 1973
Associate Professor of Health Science, Chairman, Department of Health Science
D.V.M. 1962, Cairo University; M.P.H. 1965, D.P.H. 1971, University of California, Los Angeles.
Stuart R. Elfins, 1973
   Assistant Professor of Psychology

Loren H. Filbeck, 1972
   Assistant Professor of Music

John S. Fine, 1970
   Assistant Professor of Sociology

James J. Finley, 1973
   Professor of Administration

Ernest F. Garcia, 1968
   Professor of Education
   B.A. 1955, University of California, Riverside; M.A. 1960, University of Redlands; Ed.D. 1966, University of California, Los Angeles.

Eugene Carver, 1974
   Assistant Professor of Philosophy

Bruce Golden, 1965
   Associate Professor of English

Richard E. Goodman, 1967
   Associate Professor of Biology
   A.B. 1960, Ph.D. 1965, University of California, Los Angeles.

Carol F. Goss, 1971
   Assistant Professor of Political Science

Joseph W. Gray, 1969
   Assistant Professor of Education

John E. Hafstrom, 1965
   Professor of Mathematics
   B.S. 1936, North Dakota State University; M.A. 1949, Ph.D. 1954, University of Minnesota.

Dalton Harrington, 1969
   Associate Professor of Biology; Chairman, Department of Biology
   B.A. 1961, University of Omaha; M.S. 1965, University of Missouri, Kansas City; Ph.D. 1969, University of Nebraska.
Arlo D. Harris, 1967
Associate Professor of Chemistry
B.S. 1961, University of Dayton; Ph.D. 1964, Tulane University.

Charles V. Hartung, 1969
Associate Professor of English
A.B. 1938, M.A. 1947, University of California, Berkeley; Ph.D. 1953, Stanford University.

John M. Hatton, 1967
Associate Professor of Psychology; Associate Dean, Counseling and Testing
B.A. 1961, University of Minnesota; Ph.D. 1965, Stanford University.

Melvin G. Hawkins, 1972
Associate Professor of Sociology
B.A. 1959, Morehouse College; M.S.W. 1963, Atlanta University.

John W. Heeren, 1971
Assistant Professor of Sociology

Philip L. Herold, 1970
Associate Professor of Psychology

Charles D. Hoffman, 1974
Assistant Professor of Psychology
B.S. 1967, Ph.D. 1972, Adelphi University.

H. Arthur Hoverland, 1972
Professor of Administration, Dean, School of Administration
B.S. 1951, Miami University; M.S. 1954, University of Illinois; Ph.D. 1963, University of Michigan.

Dennis L. Ikenberry, 1965
Associate Professor of Physics

Jorun B. Johns, 1965
Associate Professor of German
Ph.D. 1956, University of Vienna.

Paul J. Johnson, 1966
Associate Professor of Philosophy; Chairman, Department of Philosophy

Lee H. Kalbus, 1965
Professor of Chemistry; Associate Dean of Academic Planning for Graduate Studies
B.S.Ed. 1950, Wisconsin State University; Ph.D. 1954, University of Wisconsin.
Cynthia J. Kayer, 1974
Assistant Professor of Nursing
B.S. 1969, University of California, Los Angeles; M.S. 1972, Ohio State University.

Charles F. Kellers, 1968
Professor of Physics; Chairman, Department of Physics
B.A. 1953, Swarthmore College; Ph.D. 1960, Duke University.

Brij B. Khare, 1968
Associate Professor of Political Science; Chairman, Department of Political Science
B.S. 1953, Agra, India; M.S. 1959, University of Toronto; M.A. 1963, Ph.D. 1968, University of Missouri, Columbia.

Nikolai E. Khokhlov, 1968
Associate Professor of Psychology

Helene W. Keen, 1970
Associate Professor of English; Chairman, Department of English
B.F.A. 1946, University of Iowa; M.A. 1948, Pasadena Playhouse; M.A. 1965, Immaculate Heart College; Ph.D. 1969, University of California, Los Angeles.

Larry L. Kramer, 1968
Associate Professor of English

Philip G. Kraushar, Jr., 1974
Lecturer in Mathematics

Robert A. Lee, 1968
Professor of English, Associate Dean of Academic Affairs
B.A. 1961, University of California, Riverside; Ph.D. 1966, University of Oregon.

Margaret Lenz, 1970
Associate Professor of Education; Coordinator, Elementary Education
B.A. 1951, M.Ed. 1957, University of California, Los Angeles; Ph.D. 1972, Claremont Graduate School.

Denis R. Lichtman, 1969
Associate Professor of Mathematics; Chairman, Department of Mathematics

Donald B. Lindsey, 1973
Assistant Professor of Sociology; Coordinator, Criminal Justice

Roger P. Lintault, 1969
Associate Professor of Art; Chairman, Department of Art

Fook Fah Liu, 1970
Associate Professor of Physics
B.Sc. 1956, Presidency College, India; Ph.D. 1962, Purdue University.
Ward M. McAfee, 1965
  Professor of History

John F. McDonnell, 1969
  Associate Professor of Administration
  B.S. 1955, Bowling Green State University; M.B.E. 1967, Ph.D. 1974, Claremont Graduate School.

Roy I. Madsen, Jr., 1973
  Lecturer in French

Sarojam Mankau, 1968
  Associate Professor of Biology
  B.A. 1949, Women's Christian College, India; M.S. 1952, Ph.D. 1956, University of Illinois.

Kenneth A. Mantel, 1968
  Associate Professor of Chemistry; Chairman, Department of Chemistry
  A.B. 1962, Pomona College; Ph.D. 1967, Indiana University.

Carolyn A. Martin, 1974
  Lecturer in Physical Education
  B.S. 1968, Lincoln University; M.A. 1974, California State Polytechnic University, Pomona.

Joe L. Martinez, Jr., 1972
  Assistant Professor of Psychology
  B.A. 1966, University of San Diego; M.S. 1968, New Mexico Highlands University; Ph.D. 1971, University of Delaware.

Michael B. Maskin, 1973
  Assistant Professor of Psychology

E. Clark Mayo, 1967
  Associate Professor of English

Linda D. Miller, 1974
  Assistant Librarian

Leonard M. Moite, 1969
  Assistant Professor of Economics
  B.A. 1963, Queens College; M.A. 1965, City University of New York.

Kenton L. Monroe, 1965
  Professor of Psychology; Dean of Students
  B.A. 1959, University of Oregon; M.S. 1963, Ph.D. 1964, Purdue University.
Arthur Moorefield, 1973  
Associate Professor of Music; Chairman, Department of Music  
B.M. 1950, Cincinnati Conservatory; M.A. 1958, New York University; Ph.D. 1965, University of California, Los Angeles.

Joseph R. Moran, 1972  
Assistant Professor of Art  
B.A. 1970, University of California, Riverside; M.F.A. 1972, Claremont Graduate School.

Stephen F. Morin, 1971  
Assistant Professor of Psychology  
B.A. 1967, University of Massachusetts; M.A. 1969, Ph.D. 1971, Ohio State University.

Bernhardt L. Mortensen, 1968  
Associate Professor of Sociology  
A.B. 1937, University of California, Los Angeles; M.A. 1962, California State College, Los Angeles; Ph.D. 1970, University of California, Los Angeles.

Richard L. Moss, 1973  
Assistant Professor of Economics  

Florence B. Mote, 1967  
Professor of Education; Coordinator, Early Childhood Education  

James L. Murphy, 1970  
Associate Professor of Mathematics  

Arthur Nelson, 1963  
Director of Library  
B.A. 1950, St. Thomas College; M.A. 1951, M.A.L.S. 1956, University of Minnesota.

C. Michael O'Gara, 1964  
Professor of Physical Education; Chairman, Department of Physical Education and Recreation  
B.S. 1944, M.S. 1952, University of California, Los Angeles.

Walter C. Oliver, 1969  
Associate Professor of Spanish; Chairman, Department of Foreign Languages and Literature  
B.A. 1963, New Mexico State University; M.A. 1966, Ph.D. 1970, University of New Mexico.

Esteban L. Olmedo, 1973  
Assistant Professor of Psychology  

Ruthann Olsen, 1968  
Lecturer in Physical Education  
B.S. 1963, LaCrosse State University.
George Patail, 1974
Assistant Librarian

Clifford T. Paynton, 1968
Professor of Sociology; Chairman, Department of Sociology

Dennis M. Pederson, 1970
Associate Professor of Chemistry
B.S. 1962, University of Puget Sound; Ph.D. 1968, Purdue University.

Stuart M. Persell, 1967
Associate Professor of History

Ronald G. Petrie, 1974
Professor of Education; Dean, School of Education

Ralph H. Petrucci, 1964
Professor of Chemistry; Dean of Academic Planning
B.S. 1950, Union College; Ph.D. 1954, University of Wisconsin.

John M. Pfau, 1962
Professor of History; President

James C. Pierson, 1971
Assistant Professor of Anthropology

Gregory L. Price, 1971
Assistant Professor of Physical Education
B.S. 1969, Fort Hays Kansas State College; M.S. 1972, California State College, Long Beach.

H. Stephen Prouty, Jr., 1964
Associate Dean, Admissions and Records
B.S. 1957, M.S. 1960, Kansas State University, Manhattan.

Johnnie Ann Ralph, 1971
Senior Assistant Librarian

Gary R. Ray, 1974
Assistant Professor of Administration
B.A. 1965, M.A. 1972, University of California, Santa Barbara.
John R. Reilich, 1973
Assistant Professor of Administration
B.E.E. 1964, City University of New York; M.P.A. 1971, University of Southern California.

Tom M. Rivera, 1972
Assistant Professor of Education; Associate Dean, Educational Opportunity Program

Robert R. Roberts, 1963
Professor of History; Chairman, Department of History

J. Cordell Robinson, 1971
Assistant Professor of History

James L. Robinson, Jr., 1973
Assistant Professor of Political Science
B.A. 1969, California State College, Los Angeles; M.A. 1971, University of California, Los Angeles.

James G. Rogers, 1974
Associate Professor of Administration

George E. Roth, 1972
Assistant Professor of Anthropology
B.A. 1962, Reed College; M.A. 1966, University of Chicago.

Amanda Sue Rudisill, 1969
Associate Professor of Drama
B.S. 1964, Millersville State College; M.A. 1966, Pennsylvania State University; Ph.D. 1972, Northwestern University.

Mireille G. Rydell, 1968
Professor of French
Licence 1950, University of Bordeaux; M.A. 1958, Ph.D. 1968, University of Minnesota.

Judith Ann Rymer, 1970
Associate Professor of Education
B.S. in Ed. 1961, Miami University; M.A. 1966, University of Kansas; Ph.D. 1970, Ohio State University.

Richard S. Saylor, 1968
Professor of Music

Gerald M. Scherba, 1962
Professor of Biology; Vice President for Academic Affairs
B.S. 1950, M.S. 1952, Ph.D. 1955, University of Chicago.
Kent M. Schofield, 1966
Associate Professor of History; Associate Dean of Academic Planning
B.A. 1961, University of California, Riverside; M.A. 1962, Claremont Graduate School; Ph.D. 1966, University of California, Riverside.

Peter R. Schroeder, 1967
Associate Professor of English

Robert A. Schwabe, 1969
Director of Institutional Research
B.A. 1953, Denison University; M.A. 1958, Syracuse University; Ph.D. 1969, University of California, Riverside.

Cuthbert L. Scott, III, 1973
Assistant Professor of Administration

Maria N. Senour, 1973
Assistant Professor of Education
B.A. 1964, Marygrove College; M.Ed. 1968, University of Toledo; Ph.D. 1972, Wayne State University.

Robert A. Senour, 1970
Associate Professor of Education; Director of Audiovisual Services
B.A. 1957, Ohio State University; M.Ed. 1966, Ph.D. 1970, Wayne State University.

Michael Simmons, 1971
Assistant Professor of Anthropology; Chairman, Department of Anthropology

William L. Slout, 1968
Associate Professor of Drama
B.A. 1949, Michigan State University; M.S. 1950, Utah State University; Ph.D. 1970, University of California, Los Angeles.

Robert A. Smith, 1965
Professor of History; Coordinator of Interdisciplinary Programs
B.Ed. 1941, Southern Illinois University; M.A. 1946, Ph.D. 1950, University of Illinois.

Alexander Sokoloff, 1965
Professor of Biology
A.B. 1948, University of California, Los Angeles; Ph.D. 1954, University of Chicago.

Peter H. Spader, 1974
Lecturer in Philosophy
B.A. 1962, Alfred University; Ph.D. 1969, Columbia University.

Neville Spencer, 1968
Assistant Professor of Mathematics
B.A. 1962, University of Texas; M.A. 1965, University of Southern California; Ph.D. 1972, University of California, Riverside.
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Gordon E. Stanton, 1968
Professor of Education; Coordinator, Secondary Education

Robert G. Stein, 1967
Assistant Professor of Mathematics

P. Richard Switzer, 1970
Professor of French; Dean, School of Humanities
A.B. 1947, A.M. 1948, University of Chicago; Ph.D. 1955, University of California, Berkeley.

Kaoru Takata, 1971
Assistant Professor of Economics; Coordinator, Department of Economics
B.S. 1958, Arizona State University.

Ellen L. Taylor, 1974
Assistant Professor of Biology
B.A. 1963, University of Vermont; Ph.D. 1969, University of Pennsylvania.

James D. Thomas, 1968
Professor of Political Science; Dean of Academic Administration

Joseph K. Thomas, 1965
Professor of Education; Vice President for Administration
B.S. 1943, Washington State University; M.S. 1949, University of Southern California; Ed.D. 1957, University of Missouri, Columbia.

Elton N. Thompson, 1968
Professor of Education

John Tibbals, 1968
Librarian IV
B.A. 1965, University of California, Santa Barbara; M.S. in L.S. 1966, University of Southern California.

Lynn R. Vogel, 1974
Associate Professor of Nursing

Dale E. Wagner, 1972
Assistant Professor of Political Science
B.A. 1964, Drake University; M.A. 1968, The American University.

Carl P. Wagoner, 1969
Associate Professor of Sociology
B.S. 1960, Ball State University; M.A. 1964, Ph.D. 1971, Indiana University.
William Warehall, 1973

Assistant Professor of Art

Lynda W. Warren, 1973

Assistant Professor of Psychology; Chairman, Department of Psychology
B.A. 1964, College of William and Mary; Ph.D. 1970, University of Minnesota.

George A. Wehny, 1967

Professor of Physical Education
B.A. 1957, Iowa Wesleyan College; M.A. 1962, State University of Iowa.

Florence Weiser, 1974

Lecturer in Chemistry; Assistant Dean of Academic Administration
B.A. 1946, Brooklyn College; M.A. 1948, Indiana University.

Robert L. West, 1966

Professor of Education

Edward M. White, 1965

Professor of English

Alice K. Wilson, 1969

Librarian II
A.B. 1937, University of Dubuque; M.L.S. 1968, University of California, Los Angeles.

Ruth C. Wilson, 1971

Assistant Professor of Biology

Don Woodford, 1972

Associate Professor of Art

Donald C. Woods, 1968

Counselor and Test Officer
B.A. 1943, University of California, Los Angeles; B.D. 1948, Garrett Theological Seminary; M.A. 1951, Ph.D. 1956, University of Chicago.

Dolores A. Wozniak, 1973

Professor of Nursing; Chairman, Department of Nursing

Freeman J. Wright, 1974

Professor of Political Science; Dean, School of Social Sciences
B.S. 1955, M.S./1960, Montana State University; Ph.D. 1964, Johns Hopkins University.

Walter O. Zoecklein, 1969

Associate Professor of Philosophy
A.B. 1940, University of Cincinnati; M.A. 1960, University of Puget Sound; Ph.D. 1969, University of California, San Diego.
EMERITUS FACULTY

Robert G. Fisk, Emeritus Professor of Education, 1973
Robert R. Harrison, Emeritus Professor of Art, 1972

SPECIAL APPOINTMENTS

Bruce F. Anderson, 1972
  Studio Music Instructor
  B.M. 1972, University of Redlands.

Marie Astor, 1967
  Studio Music Instructor

Gail Barnes, 1971
  Studio Music Instructor

John R. Barrett, 1970
  Studio Music Instructor

Edward P. Casem, 1967
  Studio Music Instructor
  B.A. 1967, California State College, Fullerton.

Dan Delahoyde, 1972
  Studio Music Instructor
  B.A. 1969, University of Redlands.

Betty Jackson, 1967
  Studio Music Instructor

Victoria Shapiro, 1967
  Studio Music Instructor
  Diploma 1947, B.S. in Viola 1949, Julliard School of Music.
DETERMINATION OF RESIDENCE

New and returning students of The California State University and Colleges are classified for the purpose of determining the residence of each student for nonresident tuition purposes. The residence questionnaire and, if necessary, other evidence furnished by the student are used in making these determinations. A student may not register and enroll in classes until his residence questionnaire has been received by the Admissions Office.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The laws governing residence determination for tuition purposes by The California State University and Colleges are found in Education Code Sections 22800-22865, 23763.1, 23754-23754.4, 23758.2 and 23752, and in Title 5 of the California Administrative Code, Article 4 (commencing with Section 41901) of Subchapter 5 of Chapter 1, Part V. A copy of the statutes and regulations is available for inspection at the campus Admissions Office.

Legal residence may be established by an adult who is physically present in the state while, at the same time, intending to make California his permanent home. Steps must be taken at least one year prior to residence determination date to evidence the intent to make California the permanent home with concurrent relinquishment of the prior legal residence. Some of the relevant indicia of an intention to establish and maintain California residence are registering to vote and voting in elections in California; satisfying resident California state income tax obligations on total income; ownership of residential property or continuous occupancy or letting of an apartment on a lease basis where one’s permanent belongings are kept; maintaining active resident memberships in California professional or social organizations; maintaining California vehicle plates and operator’s license; maintaining active savings and checking accounts in California banks; maintaining permanent military address and home of record in California if one is in the military service.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of his stay in California.

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

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

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes.

Residence determinations dates for academic terms commencing with the fall of 1975 and continuing thereafter are:

<table>
<thead>
<tr>
<th>Quarter term campuses</th>
<th>Semester term campuses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Fall</td>
</tr>
<tr>
<td>September 20</td>
<td>September 20</td>
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<tr>
<td>Winter</td>
<td>Winter*</td>
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<tr>
<td>January 5</td>
<td>January 5</td>
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<tr>
<td>Spring</td>
<td>Spring</td>
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<tr>
<td>April 1</td>
<td>January 25</td>
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<tr>
<td>Summer</td>
<td></td>
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<tr>
<td>July 1</td>
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</tbody>
</table>

*Applies only to winter term in Stanislaus experimental calendar.
There are several exceptions for nonresident tuition. Some of them provide for:

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

2. Persons below the age of 19 who have been present in California for more than a year before the residence determination date and have been entirely self-supporting for that period of time.

3. Persons below the age of 19 who have lived with and have been under the continuous direct care and control of an adult, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year.

4. Dependent children and spouses of persons in active military service stationed in California on the residence determination date. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year. The exception, once attained, is not affected by transfer of the military persons directly to a post outside the 50 states and District of Columbia.

5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.

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

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

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


10. Children of deceased public law enforcement or fire suppression employees, who were California residents, and who were killed in the course of law enforcement or fire suppression duties.

11. A person in continuous full-time attendance at an institution who had resident classification on May 1, 1973, shall not lose such classification as a result of adoption of the uniform student residency law on which this statement is based, until the attainment of the degree for which currently enrolled.
Any student, following a final decision about his residence classification by the campus, may make written appeal to:

The California State University and Colleges
Office of General Counsel
5670 Wilshire Boulevard
Suite 1260
Los Angeles, CA 90036

within 120 calendar days of notification of the final decision on campus of his classification. The Office of General Counsel may make a decision on the issue, or it may send the matter back to the institution with instructions for a further review on campus. Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subject to discipline pursuant to Section 41301 of Title 5 of the California Administrative Code. Resident students who become nonresidents, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions Office. Applications for a change in classification with respect to a previous term are not accepted.

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made in the rate of nonresident tuition, in the statutes and in the regulations between the time this catalog is published and the relevant residence determination date.
The following chart is used in determining the eligibility of graduates of California high schools (or California legal residents) for freshman admission to a State University or College. Grade-point averages are based on work completed in the last three years of high school, exclusive of physical education and military science. Scores shown are the SAT total and the ACT composite. Students with a given GPA must present the corresponding test score. Conversely, students with a given ACT or SAT score must present the corresponding GPA in order to be eligible.

The minimum eligibility index is: SAT = 3072 and ACT = 741. The index is computed either by multiplying the grade-point average by 800 and adding it to the total SAT score, or multiplying the grade-point average by 200 and adding it to 10 times the composite ACT score.

<table>
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<tr>
<th>CPA Score</th>
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*Students earning grade-point averages above 3.20 are eligible for admission.

*Students earning grade-point averages below 2.0 are not eligible for admission.
STUDENT CONDUCT CODE

Expulsion, Suspension and Probation of Students

Violation of Sections 41301 and 41302 in Article 1, Subchapter 3, Chapter 5, Title 5 of the California Administrative Code can result in disciplinary action on campus.

41301. Expulsion, Suspension and Probation of Students. Following procedures consonant with due process established for the campus of which he is a student, any student of a campus may be expelled, suspended, placed on probation or given a lesser sanction for one or more of the following causes which must be campus related:

(a) Cheating or plagiarism in connection with an academic program at a campus.

(b) Forgery, alteration or misuse of campus documents, records, or identification or knowingly furnishing false information to a campus.

(c) Misrepresentation of oneself or of an organization to be an agent of a campus.

(d) Obstruction or disruption, on or off campus property, of the campus educational process, administrative process, or other campus function.

(e) Physical abuse on or off campus property of the person or property of any member of the campus community or of members of his family or the threat of such physical abuse.

(f) Theft of, or non-accidental damage to, campus property, or property in the possession of, or owned by, a member of the campus community.

(g) Unauthorized entry into, unauthorized use of, or misuse of campus property.

(h) On campus property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes, except when lawfully prescribed pursuant to medical or dental care, or when lawfully permitted for the purpose of research, instruction or analysis.

(i) Knowing possession or use of explosives, dangerous chemicals or deadly weapons on campus property or at a college campus function without prior authorization of the campus president.

(j) Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function.

(k) Abusive behavior directed toward, or hazing of, a member of the campus community.

(l) Violation of any order of a campus president, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.

(m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or probation pursuant to this Section.
For purposes of this Article, the following terms are defined:

1. The term "member of the campus community" is defined as meaning California State University and Colleges Trustees, academic, non-academic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.

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

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

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

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

6. This Section is not adopted pursuant to Education Code Section 23604.1.

7. The provisions of this Section as hereinabove set forth shall only apply to acts and omissions occurring subsequent to its effective date. Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immediately prior to such effective date.

41302. Expulsion, Suspension or Probation of Students; Fees and Notification. The President of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such students for the semester, quarter or summer session in which he is suspended or expelled shall be refunded. If the student is readmitted before the close of the semester, quarter, or summer session in which he is suspended, no additional tuition or fees shall be required of the student on account of his suspension. In the event that a student who has not reached his eighteenth birthday is suspended or expelled, the President shall notify his parent or guardian of the action by registered mail to the last known address, return receipt requested.

During periods of campus emergency, as determined by the President of the individual campus, the President may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the President or his designated representative, enter any campus of the California State University and Colleges other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.
41303. Conduct by Applicants for Admission. Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Section 41301 or 41302. Admission or readmission may be qualified or denied to any person who, while a student, commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

Pursuant to Sections 41301 and 41302 in Article I, Subchapter 3, Chapter 5, Title 5 of the California Administrative Code, President John M. Pfau hereby declares that any sit-in or other form of demonstration within a building at California State College, San Bernardino will be considered a violation of this code.

Board of Trustees Policy Relating to Conduct on State College Campuses

The following restatement of policy of the Board of Trustees of the California State Colleges is extracted from a resolution approved by the Board in November 1968.

RESOLVED, By the Board of Trustees of California State Colleges, that this Board recognizes the need for a clear understanding of those types of behavior considered wholly unacceptable within the College Community; and be it further

RESOLVED, That this Board wishes to indicate to staff, students, and visitors alike that any of the following violations of orderly conduct are to be considered cause for prompt and diligent corrective action on the part of appropriate officials, including college disciplinary proceedings and the bringing of criminal charges where appropriate:

1. Obstruction or disruption of any unauthorized state college activity, including those of auxiliary organizations, whether on state college property or at any location then controlled by a state college.
2. Obstruction of either pedestrian or vehicular traffic on state college owned or controlled property.
3. Physical abuse or detention of any member of the college community at any location or of any other person while that person is a visitor on state college owned or controlled property.
4. Theft of or damage to state college property or property of any person while that property is on state college owned or controlled property.
5. Conduct which endangers the health or safety of any person while on state college owned or controlled property or at any college sponsored or supervised function.
6. Unauthorized entry to or use of any state college facilities, including buildings, grounds and equipment.
7. Failure to comply with directions of college police and any other law enforcement officers while they are acting in the performance of their duties.
8. Illegal possession or use of firearms, explosives, dangerous chemicals or other weapons on state college owned or controlled property.
9. Failure to comply with directions of a State College President or his authorized designee(s) while acting in the performance of his(her) duties.
10. Disorderly conduct, breach of the peace, and aiding, abetting or procuring another to breach the peace on state college owned or controlled property or at any state college sponsored or supervised function; and be it further

RESOLVED, That this resolution is not to be construed as superseding any additional violations as specified by law, the administrative code, the resolutions of this Board, or the rules of any particular college.
AVERAGE ANNUAL COSTS AND SOURCES OF FUNDS

The 19 campuses of The California State University and Colleges are financed primarily through funding provided by the taxpayers of California. For the 1974-75 year, the total cost of operation was $603 million, which provides continuing support for 231,295 full-time equivalent (FTE*) students. This results in an average cost per FTE student of $2,608 per year. Of this amount, the average student pays $254. Included in this average student payment is the amount paid by nonresident students. The remaining $2,354 in costs is funded by state and federal taxes.

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

1974-75 PROJECTION OF TOTAL COSTS OF CAMPUS OPERATION

<table>
<thead>
<tr>
<th>Enrollment: 231,295 FTE</th>
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<tr>
<td><strong>State appropriation (support)</strong></td>
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<td><strong>State funding (capital outlay)</strong></td>
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<td><strong>Student charges</strong></td>
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<td><strong>Federal (financial aids)</strong></td>
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<tr>
<td><strong>Total</strong></td>
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*For budgetary purposes, full-time equivalent (FTE) translates total head count into total academic student load. The term assumes that a full-time student in The California State University and Colleges is enrolled for 15 units of academic credit. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

**The system's more than 14,000 acres of land and the wide range of facilities and equipment on the 19 campuses are currently valued at approximately $1.2 billion. Amortized over a 40-year period, they are valued at $125 per FTE student.

***The average costs paid by a student include the student services fee, health facilities fee, college union fee, student body fee and the nonresident tuition. This amount is derived by taking the total of all student fees and dividing by the total full-time equivalent student enrollment. Individual students may pay more or less than $254 depending on whether they are part-time, full-time, resident or nonresident students.
THE STUDENT SERVICES FEE

The student services fee for 1975-76 was recently established by the trustees of The California State University and Colleges in lieu of the material and services fee; however, the fee level was maintained at $144 (for 12 or more units for the academic year). It is intended that this new fee will provide financing for the following student service programs not covered by state funding:

1. Social and cultural development activities: provides for the coordination of various student activities, student organizations, student government and cultural programs.

2. Counseling: includes the cost of counselor's salaries and clerical support plus operating expenses and equipment.

3. Testing: covers the cost of test officers, psychometrists, clerical support, operating expenses and equipment.

4. Placement: provides career information to students and faculty for academic program planning and employment information to graduates and students.

5. Financial aids administration: includes the cost of the counseling and business services provided in connection with the financial aid programs.

6. Health services: provides health services to students and covers the cost of salaries of medical officers and nurses plus related clerical and technical personnel as well as operating expenses and equipment.

7. Housing: includes the cost of personnel providing housing information and monitoring housing services provided to students.

8. Student services administration: covers 50% of the cost of the Dean of Students Office which has responsibility for the overall administration of student services.

Prior to 1975-76 the student services fee was known as the materials and service fee and not only covered the above expenditures but covered the cost of instructional and audio-visual supplies and contractual services. A task force recommended that responsibility for financing these expenditures be transferred to the state and that the basis for this fee be more adequately communicated to students and campus staff. It should be noted that the 1975-76 student services fee is subject to change by future Board of Trustees action made necessary by budget actions of the executive and legislative branches of government.
FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT 1974

All student records of The California State University and Colleges, including the California State College, San Bernardino are kept in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974.

Students may request access to those campus records which personally identify the students; the student may challenge the accuracy of the record or the appropriateness of its retention in the campus records. Student consent is needed for the release of records covered by the Act to outside parties (e.g. prospective employers) except for those agencies entitled to access under the provisions of the Act (e.g. campus officials, other schools, federal officers and requests in connection with the application or receipt of financial aid). These provisions apply to records received and used after November 19, 1974.

A student may request a copy of a record which the student has requested or consented to be released. Copies of the full text of the Family Educational Rights and Privacy Act of 1974 are available in the Office of the Dean of Students. Particular questions with respect to a student’s prerogatives under the Act should be directed to the Office of the Dean of Students.

NOTICE

The Board of Trustees of The California State University and Colleges, in Section 43800 of Title 5 of the California Administrative Code, has reserved the right to add, amend, or repeal any of its regulations, rules, resolutions, standing orders and rules of procedure, in whole or in part, at such time as it may choose. None shall be construed, operate as, or have the effect of an abridgement or limitation of any rights, powers or privileges of the trustees. The chancellor reserves the right to add, amend or repeal any of his Executive Orders, at such time as he may choose, and the President of California State College, San Bernardino reserves the right to add, amend or repeal provisions of this catalog and rules of the College, including handbooks, at such time as he may choose. No executive order shall be construed, operate as, or have the effect of an abridgement or limitation of any rights, powers or privileges of the chancellor nor shall any catalog provision or rule of the College be construed, operate as, or have the effect of an abridgement or limitation of any rights, powers or privileges of the president.

Every effort has been made to assure the accuracy of the information in this catalog. Students are advised, however, that such information is subject to change without notice. Therefore, they should consult the appropriate instructional departments, schools or administrative offices for current information.
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